
Thesis for Master of Fine Arts Degree

Rochester Institute of Technology

College of Imaging Arts and Sciences School of Design

Computer Graphics Design

Character Design and Marketing – Designer Toys

By Yen-Fu Chen

October 01 2007

Thesis Proposal for Master of Fine Arts Degree

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CONTENT

PART A - DOCUMENTATION: THESIS PROJECT	P.01 ~ P.44
1. PROFILE	P.03
About Me	
2. INTRODUCTION	P.03
2.1 Background	
2.2 Design + Marketing	
3. PROJECT DESCRIPTION	P.04
3.1 Objective	
3.2 Case: M&M's world	
3.3 Thesis Project	
4. CHARACTER	P.05 ~ P.12
4.1- 4.7 Character: Profile, Introduction and Design	
5. SCENE	P.13 ~ P.16
5.1 Ideas	
5.2 3D Interaction	
6. PRODUCT DESIGN	P.17 ~ P.27
6.1 Designer Toys	
6.2 Toy Company	
6.3 Toy Design	
7. MULTIMEDIA	P.28 ~ P.33
7.1 Computer Design	
7.2 Cell Phone Design	
8. WEB DESIGN	P.34 ~ P.38
8.1 Design	
8.2 Database: PHP + MySQL	
9. THE LITERATURE SURVEY	P.39 ~ P.41
Publication	
10. CONCLUSION	P.42
11. CREDIT AND DEDICATION	P.43 ~ P.44
11.1 Credit	
11.2 Dedication	
PART B - THESIS PROPOSAL	P.45 ~ P.54
PART C - PRESENTATION: THESIS PROPOSAL	P.55 ~ P.60

PART A

THESIS PROJECT DOCUMENT

**Documentation: Thesis Project for Master of Fine Arts Degree
Character Design and Marketing – Designer Toy**

**Rochester Institute of Technology
College of Imaging Arts and Sciences School of Design
Computer Graphics Design**

Character Design and Marketing – Designer Toys
By Yen-Fu Chen

October 01 2007

1. PROFILE

Name: Yen-Fu Chen (Rusty)

Degree: Bachelor of Business Administration 2005 (Marketing) + Master of Fine Art 2007 (Computer Graphic Design)

Web: [Http://rustychen.com](http://rustychen.com) Email: alfu1215@yahoo.com.tw

2. INTRODUCTION

2.1 Background

When I was in college, I was sitting in the marketing class and listening to a professor explaining how to promote products by some economic models and marketing strategies. At that moment I noticed that it seems good in theory, but it does not work in practice. Therefore, in this century people not only look for nice products, but also “desirable designs” for the products. I came out with a new format for marketing – Great Sales = Effective Marketing + Fascinating Design.

2.2 Design + Marketing

“The new unique selling proposition in the Indian market is design. With consumers becoming design conscious, brands are increasingly getting focused on right-look factor to sell more. Motorola, Puma and Samsung have tasted success, globally and in India, by reinventing their brand around better visual appeal. Globally, Sony Vaio notebooks, Apple iPods and iMacs, Ikea and Bang & Olufsen have also used design as their selling point.

Example of a drab to fab story is that of the \$2.05-bn German sportswear company, Puma. It faced financial difficulties and a lurking bankruptcy till it reinvented itself by re-branding and hiring world famous fashion designers such as Alexander Philippe Starck, Christy Turlington and Jil Sander to give its brand an edgy look. Puma has entered the Indian market as a 100per cent subsidiary recently as we feel this is the best time to make its presence felt here.”

SAMIDHA SHARMA TIMES NEWS NETWORK [FRIDAY, MARCH 31, 2006 12:00:52 AM]

Design and marketing are like french fries and ketchup. French fires are tasteless without ketchup’s sweet and sour flavors; ketchup is too sharp unless you go with the French fires’ potato flavor. One fine product needs the right design and media to highlight its value. Nice designs can grab people’s eyes and attention because they are the product’s seasonings.

At the present age, design-led marketing is undoubtedly catching up with brands across product categories. Therefore putting marketing aspects and design elements together to give customers one complete design package is my thesis goal.

“Character Design and Marketing” is my thesis title.

3. PROJECT DESCRIPTION

3.1 Objective

The project includes three topics – product design, multimedia design and marketing. The first step is to figure out what kind of product is workable. How to make ideas from a concept to a reality is the second step. Toys are the main product; icons, wallpapers, a series of themed games and other accessory products are created to make the main products more impressive for audiences. The final section is to design a website including all details about design process and a shopping cart function, allowing customers to purchase the products online.

3.2 Case: M&M's World

It is always interesting to see how candy companies find ways to promote their products. Usually they come in the form of contests, toys or games to attract customer's attention. In Times Square now, one of the most noticeable landmarks is M&M's World, where you can pick up chocolates, chocolate-themed toys and more chocolates. The store features more than one million milk chocolate and peanut M&M's, a Blue character posed dancing to Saturday Night Fever, a 21-foot-tall Miss Green M&M's version of the Statue of Liberty and an M&M's color mood analyzer that determines which candy color best suits visitors' daily moods.

Today's marketers are combining brands with entertainment. They are not just stores that sell stuff. People go there to be entertained. One of their successful ideas is that they have a huge selection of fascinating M&M's-themed stuff. What these colorful chocolates bring to people is not just an amusement for their mouth. Through these themed products, they will enhance the brand impression. Everyone loves M&M's chocolate! Even, everyone loves these themed products!

3.3 Thesis Project

I have had a strong passion for toys since I was a kid. That is why I have so much feeling about M&M's-themed stuff. Toys are no longer for children only; they are the heart of a new movement being spurred on by graphic artists, graffiti stylists, illustrators, and painters from Hong Kong to New York. In this thesis project, I will create a series of toys and have a whole themed package for toys. And last I will simulate marketing these toys through e-commerce.

The thesis project will display the whole process from product design to product marketing,

01. Product Design – From paper sketch to 2d illustration and to 3d models, it records every step I designed for these toys.

Design works include packages, posters, mugs and t-shirts...

02. Multimedia Design – PC (icons, wallpapers and games) and cell phone (interface design, game, and wallpaper)

downloads. Customers can have a whole complete set of toy design; moreover, they can download toy – themed stuff such as wallpaper and games to the computer and cell phone from my website.

03. Marketing Design – A website presents all the details and designs about toys and has a member system and a shopping cart function to “e-market” the products.

4. CHARACTER

4.1 Chris

Profile

Name: Chris

Color: Red (FF0000)

Icon: Dragon

Face Feature: Snaggletooth

Weapon: Fire dragon sword

Personality: Idealism and disciplined

Love Food: Pizza

Special Skill: Highly skilled in Chinese Kong Fu





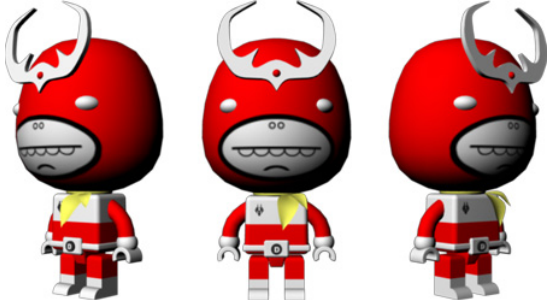
CHRIS



Introduction

He is the captain of Rustic Force. He has a very strong sense of honor and justice. Chris is the oldest in the team and other members see him as a big brother. His snaggletooth is not only his personal identity but also a secret weapon. Chris can snap anything in two by his powerful snaggletooth. He tries to keep his members in line and often has the leading role in the characters' adventures.

Design

COLOR	ICON	FACE FEATURE	HEAD
			
RED (FF0000)	DRAGON	SNAGGLETOOTH	CROWN
3D MODEL			
			
THE VIEW OF 180 DEGREE			

4.2 Dan

Profile

Name: Dan

Color: Blue (0000FF)

Icon: Bat

Face Feature: Holding a cigarette

Weapon: Night Bow

Personality: Aggressive, rebellious and sullen

Love Food: Fried chicken

Special Skill: Highly with speed

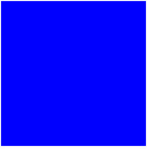



DAN



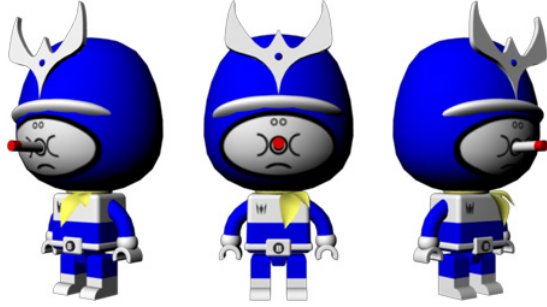
Introduction

Dan is generally the most likely to experience extremes of emotion. He likes to be alone and rarely talks with other team members. He used to be an Olympic archery contest champion. He has excellent eyesight and he shoots the target accurately from 100 miles away. Dan loves to smoke, so his cigarette is always used as a secret weapon to burn enemies.

Design

COLOR	ICON	FACE FEATURE	HEAD
			
BLUE (0000FF)	BAT	HOLDING A CIGARETTE	CROWN

3D MODEL



THE VIEW OF 180 DEGREE

4.3 MARLA

Profile

Name: Marla

Color: Pink (FF32C8)

Icon: Phoenix

Face Feature: Red hot kiss

Weapon: Cheer Baton

Personality: Romantic, sensitive and passionate

Love Food: Hot pepper

Special Skill: Expert in high technology





MARLA




Introduction

Although Marla is the only girl in Rustic Force, she is the only one who is familiar with high technology. Most of her job in Rustic Force is to handle some high-tech machines. She is a smart girl. Marla used to be a cheerleader. Her mouth is her secret weapon. No one can resist her red hot kiss. Sometimes Marla acts a little befuddled, and that is why she looks so cute and attractive.

Design

COLOR	ICON	FACE FEATURE	HEAD
			
PINK (FF32C8)	PHOENIX	RED HOT KISS	CROWN

3D MODEL



THE VIEW OF 180 DEGREE

4.4 JIM

Profile

Name: Jim

Color: Yellow (FFFF00)

Icon: Tiger

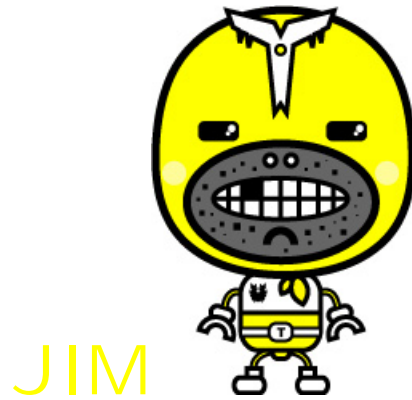
Face Feature: Beard and one lost tooth

Weapon: Thunder Spear

Personality: Optical, and fun-loving

Love Food: Sashimi

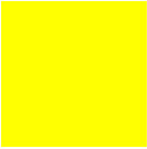

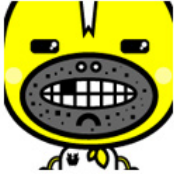

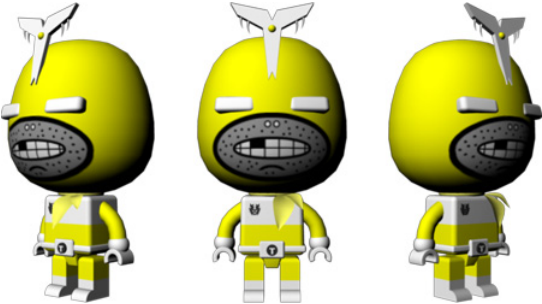
Special Skill: Possess a great strength



Introduction

He is the youngest and most energetic in Rustic Force. From his beard and one lost tooth, Jim is a funny guy and looks more fun-loving. Also he is the most light-hearted and relaxed member in Rustic Force. His secret weapon is his beard. He can shoot out his beard to attack enemies. Jim's extraordinary power is that he owns huge strength to move one big truck. He has great muscles.

Design

COLOR	ICON	FACE FEATURE	HEAD
 YELLOW (FFFF00)	 TIGER	 BEARD,A LOST TOOTH	 CROWN
3D MODEL			
			
THE VIEW OF 180 DEGREE			

4.5 MAX

Profile

Name: Max

Color: Olive green (646400)

Icon: Evil skeleton

Face Feature: Black teeth

Arm: Skeleton wand

Personality: Arrogant and vicious

Love Food: Human brain

Special Weapon: Tail which can stretch out to choke people






MAX



Introduction

Max is the general of Evil Force. Building a devil empire is his ambition. He had been transformed from a crafty mouse. He owns the dark magic power. His skeleton wand can shoot out laser light to burn out anything and he can stretch out his tail to asphyxiate counterparts. Evil Force under his evil power is coming to destroy the world...

Design

COLOR	ICON	FACE FEATURE	HEAD
			
OLIVE GREEN (646400)	EVIL SKELETON	BLACK TEETH	HORNS
3D MODEL			
			
THE VIEW OF 180 DEGREE			

4.6 BILL

Profile

Name: Bill

Color: Violet (640064)

Icon: Evil skeleton

Face Feature: Bunny teeth

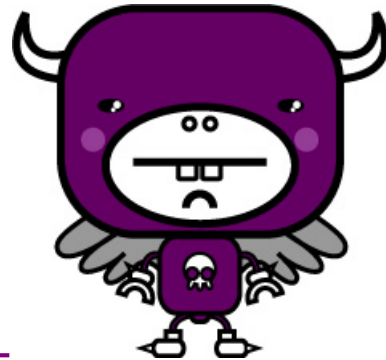
Arm: Stone hammer

Personality: Violent and reckless

Love Food: Human eyeball

Special Weapon: Bump his head against anything






BILL



Introduction

Bill is a mutant converted from a wild bull. His strength is huge and his head is as hard as steel. Bill can hit a rock with his head and without any injuries. Although he is so powerful, he still has some weaknesses. He has a little bit of amnesia; he forgets things easily. His blindness always brings him a lot of trouble.

Design

COLOR	ICON	FACE FEATURE	HEAD
			
VIOLET (640064)	EVIL SKELETON	BUNNY TEETH	HORNS
3D MODEL			
			
THE VIEW OF 180 DEGREE			

4.7 ROY

Profile

Name: Rhino

Color: Navy (006464)

Icon: Evil skeleton

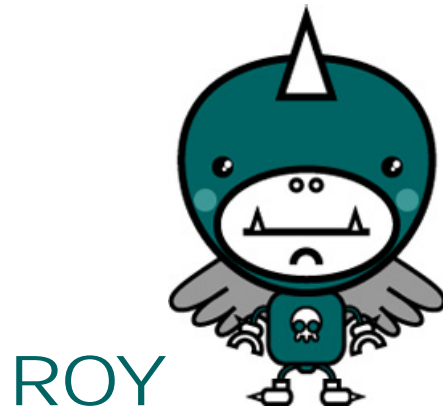
Face Feature: Sharp teeth

Arm: Bloody sai

Personality: Cold and unsociable

Love Food: Human fingers





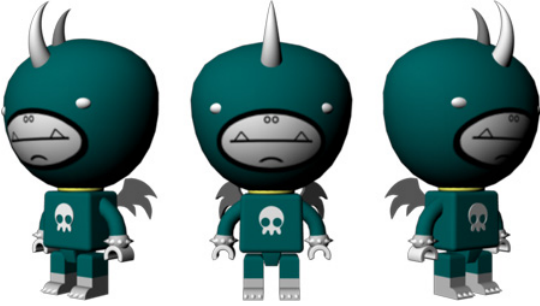
Special Weapon: Horn which can pierce anything



Introduction

Roy is a rhino mutant. Before he became a member of Evil Force, he had been detained in a cage in a zoo for a long time. Because of this factor his personality seems kind of crazy and unsociable. But in his deep heart, he is eager to make new friends. At present the only friend he has is his buddy, Bill. They both are not very smart and always do something funny and stupid. They always bring Max a lot of trouble.

Design

COLOR	ICON	FACE FEATURE	HEAD
			
NAVY (006464)	EVIL SKELETON	SHARP TEETH	HORN
3D MODEL			
			
THE VIEW OF 180 DEGREE			

4.8 PEE

Profile

Name: Pee

Color: Dark gray (646464)

Icon: Evil skeleton

Face Feature: Poison teeth

Arm: Sticky web

Personality: Insidious and crafty

Love Food: Human blood

Special Weapon: Duplication from one spider to a million





PEE



Introduction

Pee is one mutant spider with three eyes. Because he is Max's lovely pet, he snitches a lot about Bill and Roy's stupid mistakes all the time. His butt can shoot out a sticky web to trap objects and he uses his poison teeth to bite them, eat them. Pee can duplicate himself from one spider to a million to form one big army, so this tiny creature always gives Rustic Force a headache.

Design

COLOR	ICON	FACE FEATURE	
			
DARK GRAY (646464)	EVIL SKELETON	POISON TEETH	
3D MODEL			
			
THE VIEW OF 180 DEGREE			

5. SCENE

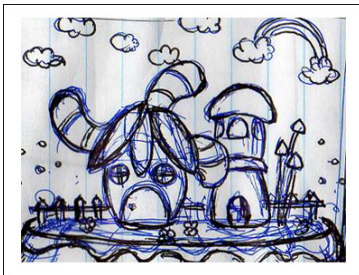
5.1 Ideas

Happy Village

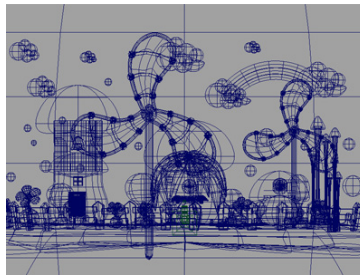
The small village has been built for Rustic Force. Mushroom houses, a rainbow, bubble clouds, candy windmills, and colorful little flowers are designed to generate a joyful atmosphere in the village. I chose bright and vivid colors to make the scene look lively. This is one paradise for Rustic Force.



HAPPY VILLAGE



SKETCH



WIREFRAME



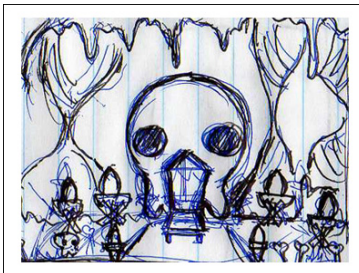
3D MODEL

Evil Altar

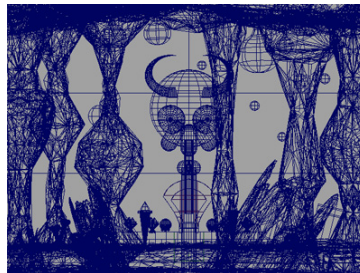
Evil Force's headquarters where the evil altar is situated is in hell. Melting lava, unpredictable rocks, a big skeleton head, tombs, bones and steam coming from the underground are created to produce evil feelings. I am trying to make a contrast between the colorful happy village and the dark evil altar.



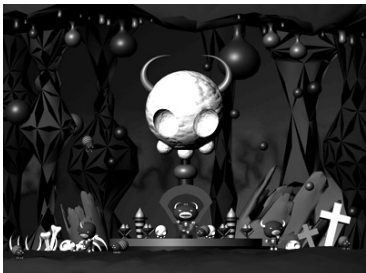
EVIL ALTAR



SKETCH



WIREFRAME



3D MODEL

5.2 3D Interaction

I started by sketching the rough outline of the scene. After paper sketches I scanned them as references for building 3D scene for which I used 3D software (Alias Maya). After finishing the 3D models, the next step is image adjustment employing 2D application (Adobe Photoshop). Eventually I imported these images into multimedia software (Macromedia Flash) and used ActionScript to program the project, allowing users to navigate the 3D environment by using their keyboard and mouse.

01. Alias Maya: Maya is a high-end 3D computer graphics and 3D modeling software package. Maya is used in the film and TV industry, as well as for computer and video games. "Polygons" and "NURBS" are used for creating different models in the scenes. The skills of applying colors and textures are employed in different color shaders and UVmaps. Every object in the scenes will be rendered out as an individual image of .tiff image format as final step in Maya.

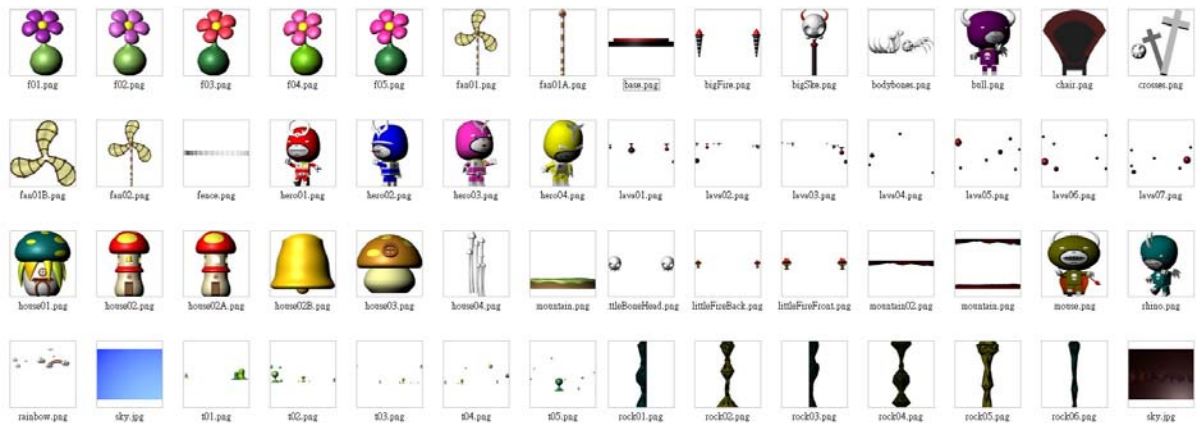


3D MODELING - HAPPY VILLAGE



3D MODELING - EVIL ALTAR

02. Adobe Photoshop: Adobe Photoshop is for color corrections and image adjustments. Because I rendered out these images as TIFF format, I can remove the backgrounds easily by using alpha channels. Eventually these images without the background image were converted to PNG format, and later they would be imported into Flash.



PNG IMAGE FORMAT

03. Macromedia Flash: I imported these PNG images into Flash and used ActionScript program to create an interactive user interface. Users can pan the 3D image horizontally with their mouse and zoom in and out of the 3D environment with their keyboard. Flash provides a different experience of virtual reality.

Although designers can create 3D objects in 3D applications, these 3D images are still presented by 2D monitors. By means of Flash, users can move their position in the 3D environment with their mouse and keyboard on 2D monitor. It gives users more interactive feelings.

ActionScript, coding example:

Create a viewer object.

```
1 //create a viewer object that has variables for its x,y,z position
2 viewer = {x:0, y:0, z:-200}
3 // set the viewer parameters
4 var d:Number = 650; // distance from viewer to picture plane
5 var viewerSpeed:Number = 10; // viewspeed used with arrow keys
6 var tooClose:Number = 300; // the too close distance
7 // create the picture plane: a movie clip named scene3D
8 // and position it in the center of the Stage
9 this.createEmptyMovieClip("scene3D", 0)
10 scene3D._x = Stage.width/2;
11 scene3D._y = Stage.height/2;
```

Add objects to the scene in 3D space.

```
13 // add objects to the scene in 3D space (where z is relative to the viewer)
14 scene3D.attachMovie("sky", "layer0", 0, { x:0, y:100, z:3000 });
15 scene3D.attachMovie("rainbow", "layer1", 1, { x:0, y:100, z:2500 });
16
17 scene3D.attachMovie("mountain", "layer2", 2, { x:0, y:-450, z:500 });
18 scene3D.attachMovie("t01", "layer10", 10, { x:150, y:-140, z:500 });
19 scene3D.attachMovie("t02", "layer11", 11, { x:-200, y:-190, z:630 });
20 scene3D.attachMovie("t03", "layer12", 12, { x:120, y:-200, z:710 });
21 scene3D.attachMovie("t04", "layer13", 13, { x:-150, y:-200, z:660 });
22 scene3D.attachMovie("t05", "layer14", 14, { x:130, y:-200, z:680 });
23
24 scene3D.attachMovie("f01", "layer15", 15, { x:-280, y:-180, z:550 });
25 scene3D.attachMovie("f02", "layer16", 16, { x:600, y:-150, z:600 });
26 scene3D.attachMovie("f03", "layer17", 17, { x:200, y:-200, z:650 });
27 scene3D.attachMovie("f04", "layer18", 18, { x:-150, y:-200, z:700 });
28 scene3D.attachMovie("f05", "layer19", 19, { x:-780, y:-200, z:740 });
29
30 scene3D.attachMovie("house01", "layer3", 3, { x:0, y:-270, z:900 });
31 scene3D.attachMovie("house02", "layer4", 4, { x:-550, y:-210, z:750 });
32 scene3D.attachMovie("house03", "layer5", 5, { x:450, y:-220, z:800 });
33 scene3D.attachMovie("house04", "layer6", 6, { x:700, y:-300, z:1000 });
34
35 scene3D.attachMovie("h01", "layer22", 22, { x:-60, y:-150, z:530 });
36 scene3D.attachMovie("h02", "layer23", 23, { x:500, y:-150, z:570 });
37 scene3D.attachMovie("h03", "layer24", 24, { x:120, y:-170, z:620 });
38 scene3D.attachMovie("h04", "layer25", 25, { x:-500, y:-170, z:610 });
39
40 scene3D.attachMovie("fan01", "layer7", 7, { x:-400, y:-450, z:1500 });
41 scene3D.attachMovie("fan02", "layer8", 8, { x:300, y:-350, z:1200 });
42
43 scene3D.attachMovie("fence", "layer9", 9, { x:0, y:-445, z:1800 });
44
45 scene3D.attachMovie("firefly", "layer20", 20, { x:0, y:0, z:755 });
46 scene3D.attachMovie("firefly2", "layer21", 21, { x:-600, y:0, z:455 });
```

Set the keyboard and mouse controls.

```
88 this.onEnterFrame = function() {
89     // check for arrow keys
90     if (Key.isDown(Key.RIGHT)) { viewer.x += 10; }
91     else if (Key.isDown(Key.LEFT)) { viewer.x -= 10; }
92     else if (Key.isDown(Key.UP)) { viewer.z += 10; }
93     else if (Key.isDown(Key.DOWN)) { viewer.z -= 10; }
94
95     // check the cursor position
96     if (this._ymouse < Stage.height/2) { viewer.y += 2; }
97     else { viewer.y -= 2; }
98
99     // display the objects
100    for(var i:Number = 0; i <= 25; i++){
101        displayObj(scene3D["layer"+i]);
102    }
103 }
```

Display the 3d objects.

```
48 // display the 3d objects in the picture plane
49 function displayObj(thisObj)
50 {
51     // restrict the viewer x-movement
52     if (viewer.x < -380 ) { viewer.x = -380 }
53     if (viewer.x > 380 ) { viewer.x = 380 }
54
55     // restrict the viewer y-movement
56     if (viewer.y < 0 ) { viewer.y = 0 }
57     if (viewer.y > 100 ) { viewer.y = 100 }
58
59     // restrict the viewer z-movement
60     if (viewer.z < -600 ) { viewer.z = -600 }
61     if (viewer.z > 0 ) { viewer.z = 0 }
62
63     // calculate the relative translation
64     tx = thisObj.x - viewer.x; // the object's x,y,z are in world coordinates,
65     ty = thisObj.y - viewer.y; // so we must instead find tx,ty,tz which are
66     tz = thisObj.z - viewer.z; // the object's coordinates relative to the viewer
67
68     // check if the object is too close to the viewer
69     if ( tz <= tooClose) { thisObj._visible = false; }
70     else
71     {
72         thisObj._visible = true;
73
74         // calculate the perspective ratio
75         pr = d/tz;
76
77         // apply the perspective ratio to the location and size
78         thisObj._x = tx*pr;
79         thisObj._y = -ty*pr; // need minus sign for Flash coords
80         thisObj._xscale = thisObj._yscale = 100*pr;
81
82         // set the object depth based on its z-location so that
83         // closer objects are on top of farther objects
84         thisObj.swapDepths(-thisObj.z);
85     }
86 }
```

Initialize sound effect.

```
107 // initialize sound
108 mySound = new Sound();
109 mySound.attachSound("music02");
110 mySound.setVolume(50);
111 mySound.start();
112 mySound.onSoundComplete = function(){ mySound.start(); }
```

6. PRODUCT DESIGN

6.1 Designer Toys

What is Designer Toy?

“Designer toys” is a term used to describe toys and other collectables that are produced in limited editions and created by artists and designers. Designer toys employ a variety of materials; plastic and vinyl are most common, although wood and metal are occasionally used. The term also encompasses plush, cloth dolls and latex. Creators of designer toys usually have backgrounds in graphic design, illustration or self-described low-brow art. Designer toys first appeared in the 1990s and are a flourishing industry.

My First Vinyl Toy

In 2002 I was handed a 6-inch vinyl toy named Smery on my birthday. This little stinker is Devilrobots' latest addition to their Tofu Empire. Inspired by the unusual Taiwanese delicacy of fermented bean curd, Smery is a rotten little blockhead that can't even handle his own stink. This poor guy is my first vinyl toy and my favorite one.

Because designer toys have interesting and lively expressions, I have become a lover of designer toys. I always have dreamed of designing my own vinyl toys. Thanks to this opportunity for a thesis project, I can make my dream come true to design my own vinyl toys.



MY FIRST VINYL TOY – SMERY

6.2 Toy Company

Turn Your Idea

The budget for making my dream come true is limited. For this reason, finding a company which could take my job and accept my budget is not an easy task. Fortunately, I found one company named “Turn Your Idea” in Taiwan. They have helped lots of people make their designs come alive. They are toy makers.

“Turn Your Idea” is also a dream maker. There are so many amusing characters lying on someone's notebooks, sitting in

someone's computers or hiding in someone's mind. They provide characters life and energy. They can personalize customers' requests to match different appetites. From designers' crazy ideas to makers' hands, "Turn Your Idea" brings people surprise and joy over and over again.



LOGO - TURN YOUR IDEA

Production Process

Step01 – Privacy Policy

First customers need to know exactly each production process and information about payment and delivery.

Step02 – References

1-3 sketches or photos are required. More specific details will be good for making more precise toys.

Step03 – Online Quote

MSN quote: gppy@hotmail.com; Mail quote: turnidea@turnidea.tw; Phone quote: 1-886-0921657328

Step04 – How to Pay (ATM)

Bank Code: 053; Name: Jia-Fang Cai; Account: 026200176467

Step05 – Production

According to images or photos, Turn Your Idea's professionals will do their best to complete customers' jobs.

Step06 – Delivery

It will take roughlyly 7-9 days to make toys and 2 days to deliver them to your home.

More Information:

Website: <http://www.turnidea.tw> ; E-mail: turnidea@turnidea.tw



GALLERY - TURN YOUR IDEA

6.3 Toy Design



01. Sketch:

I used pencil or marker to sketch my ideas on paper at the very beginning. Logos, face expressions, weapons and different views of a character's front, side and perspective sides were drawn on paper sketches. In addition, text information presented next to graphics would give toy makers a more detailed explanation. Providing as specific as possible on paper sketches would let makers become familiar with your characters and then produce more accurate products.

02. Computer Graphics:

After paper sketches, I changed my tools from markers to a mouse. Because these toys are hand-made, computer graphics with accurate height, width and size could give toy company ideas to make these toys match the correct size. Adobe Photoshop and Illustrator were employed to create 2D computer graphics and Alias Maya were used to generate 3D computer graphics. Eventually, I gave the toy company 2D and 3D computer graphics as references to make toys. Especially, 3D models can present all the angles of the character and give them the specific proportion, size and details.

03. Production Process:

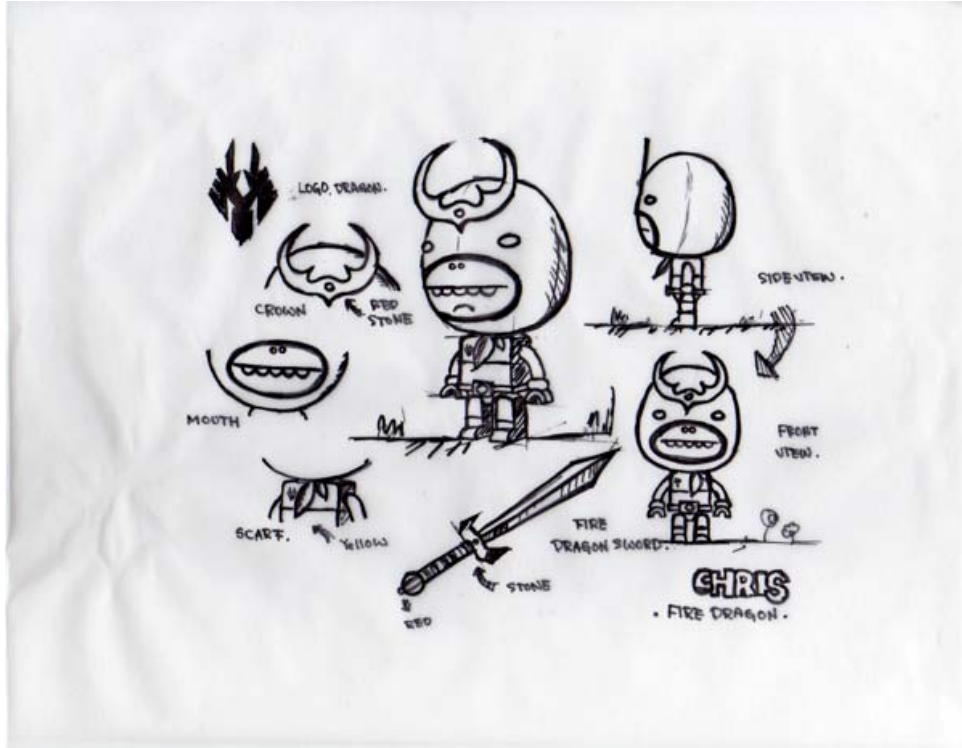
These toys' heads, bodies, arms and feet can be taken apart and rotated from my design concept. The problem is that if the toy company makes this kind of assembly toy, it will be beyond my budget. After several weeks' brainstorming, we figured out how to solve the problem and how to make this happen. We came up with an idea using magnets as joints for each connection part. And users can consequently rotate every part of the toy just like an assembly toy.

04. Toys

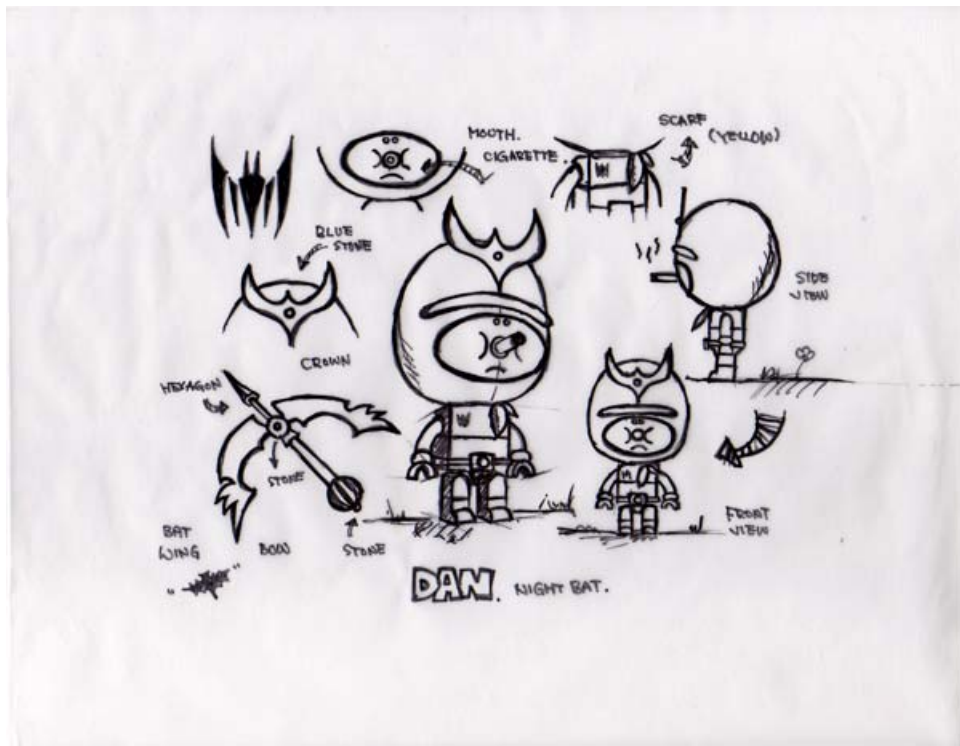
Almost two months later I finally saw these toys. They turned out nice! Although these toys are not 100% accurate as my sketches, Turn Your Idea tried their best to complete this project. Designers can feel their designs with their hands instead of a cold monitor. That is amazing and totally different. You put so much effort into them, and now they are standing in front of you. I feel like giving a birth to a baby!

05. Affiliated Designs

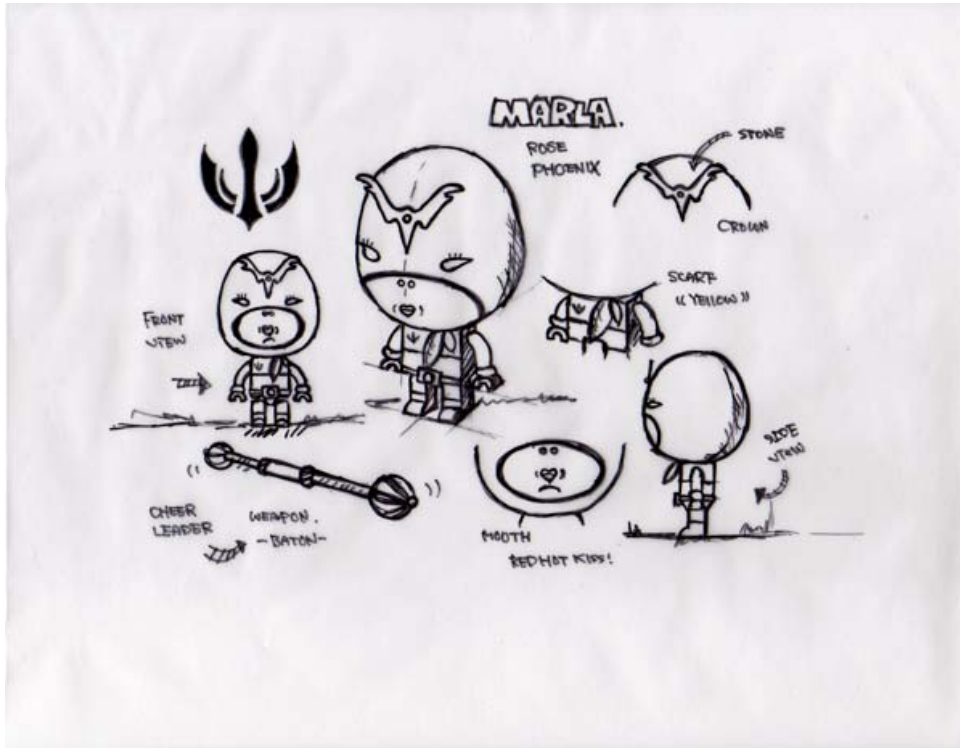
When I was in M&M's World, I was so surprised and excited about their marketing strategy. M&M has many relative designs, such as M&M's mugs, clocks, pens and clothes... They implant their brand by these themed products into the customers' mind. I have a series of affiliated products to market these toys. Each character has a set of his or her own relative design products such as posters, boxes, t-shirts or mugs... One whole package design makes the product more complete and attractive.



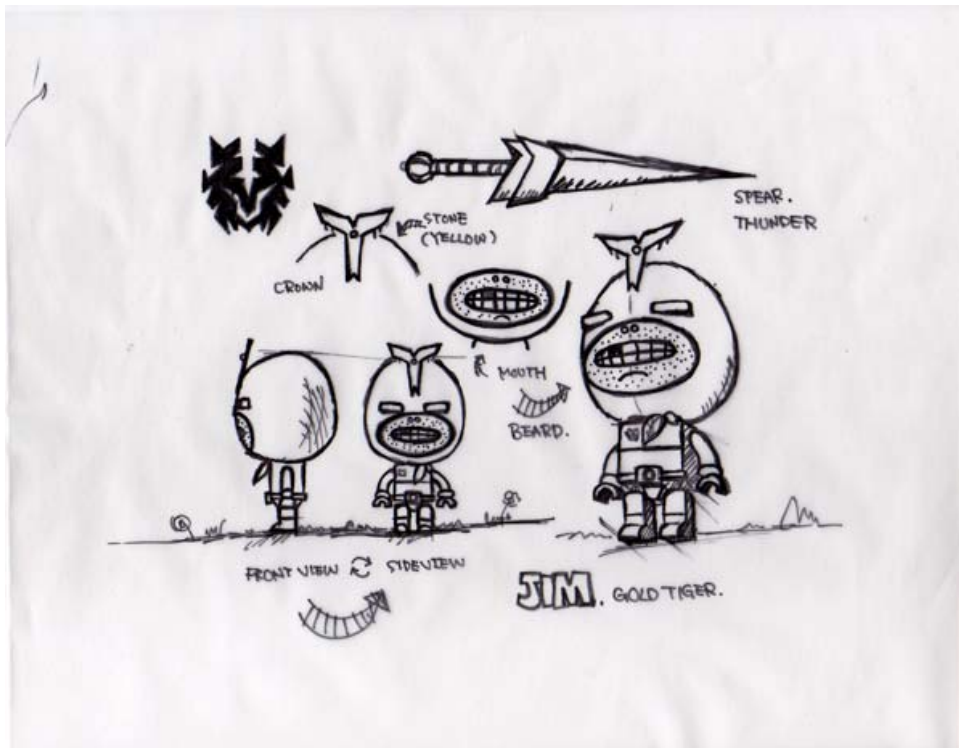
SKETCH - CHRIS



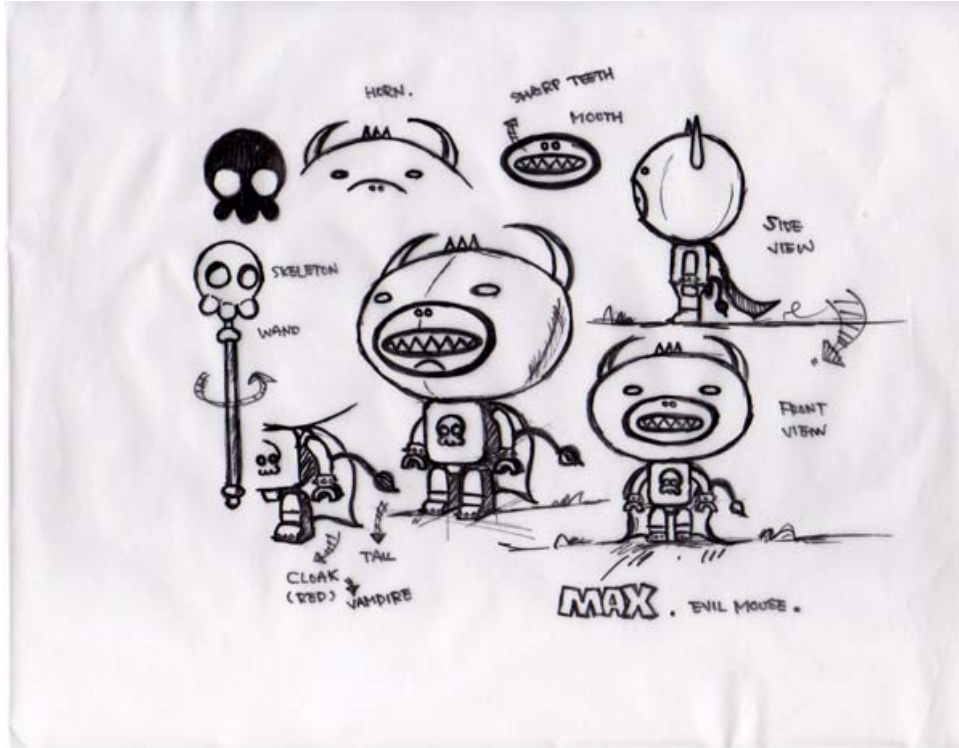
SKETCH - DAN



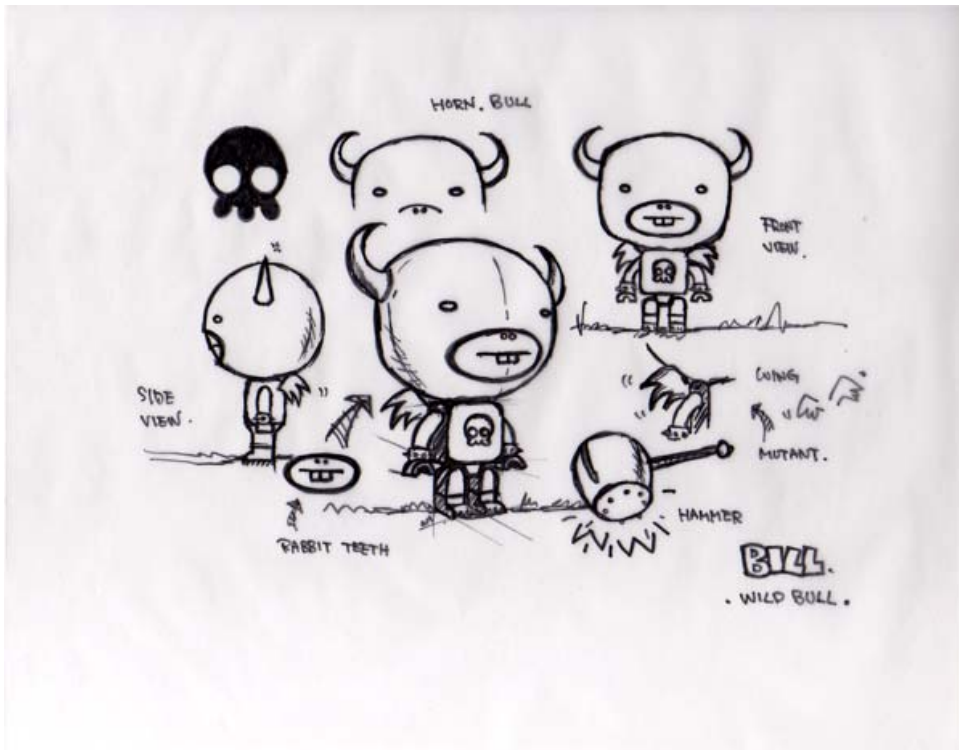
SKETCH - MARLA



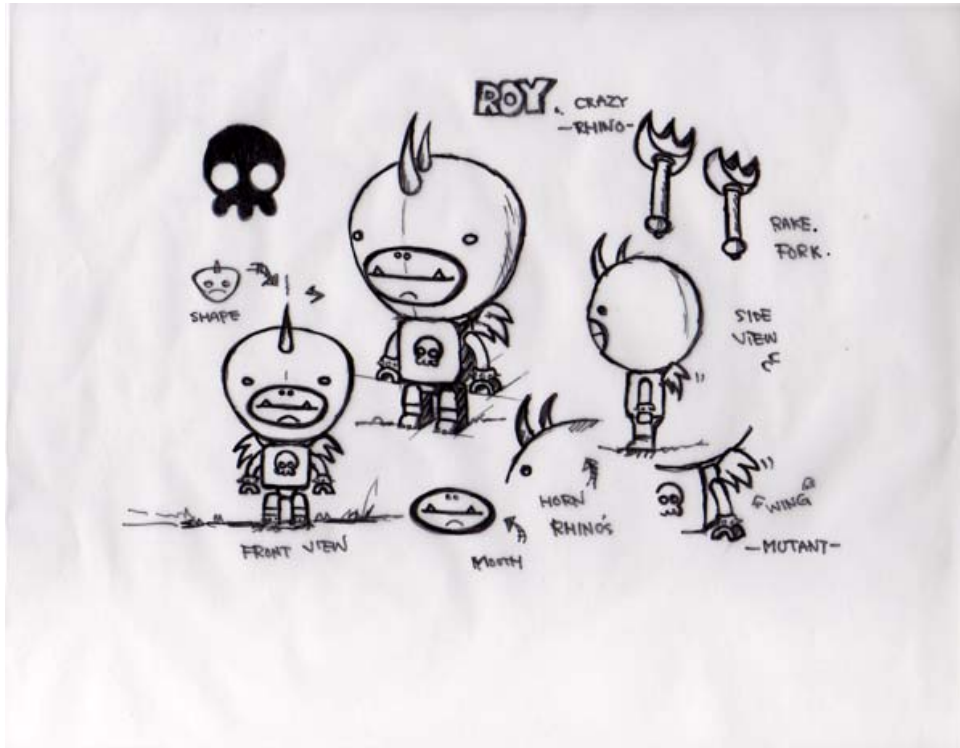
SKETCH - JIM



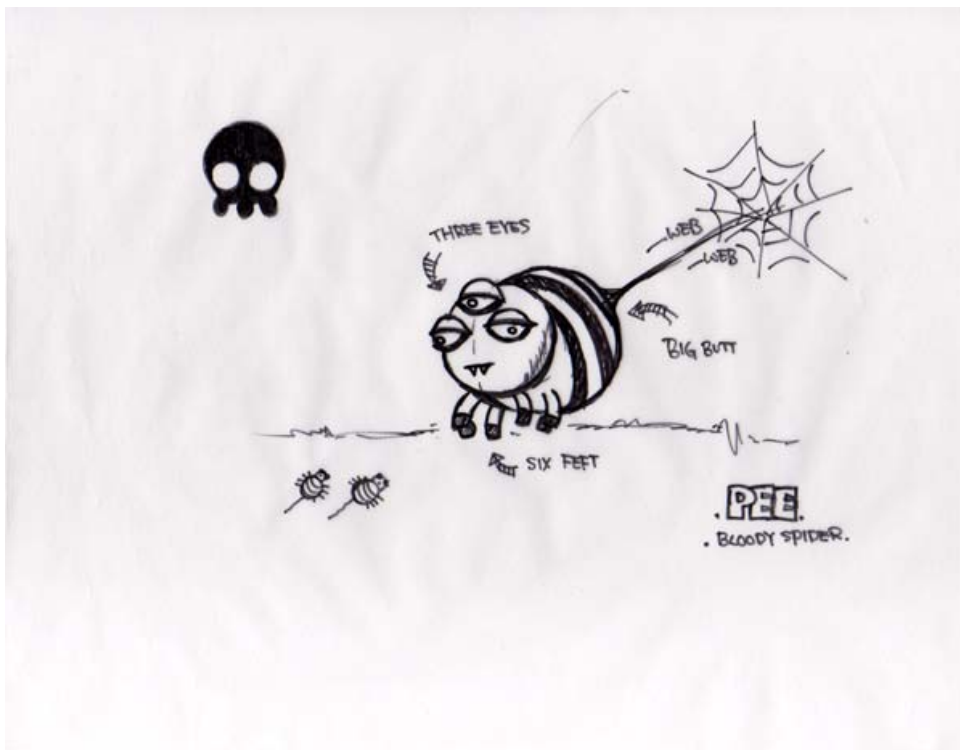
SKETCH - MAX



SKETCH - BILL



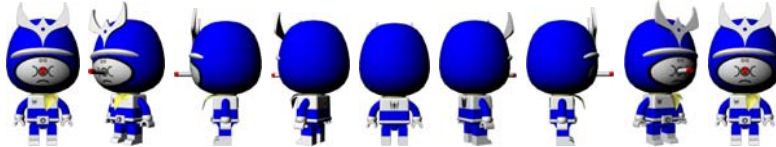
SKETCH - ROY



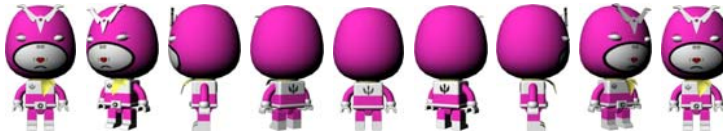
SKETCH - PEE



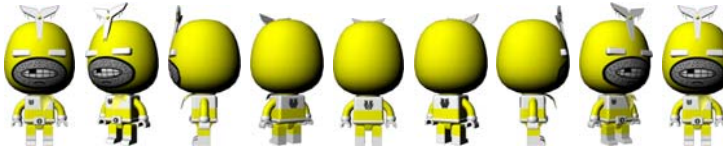
COMPUTER GRAPHIC – CHIRS (360 DEGREE VIEW)



COMPUTER GRAPHIC – DAN (360 DEGREE VIEW)



COMPUTER GRAPHIC – DMARLA (360 DEGREE VIEW)



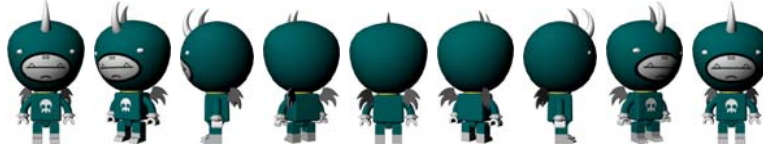
COMPUTER GRAPHIC – JIM (360 DEGREE VIEW)



COMPUTER GRAPHIC – MAX (360 DEGREE VIEW)



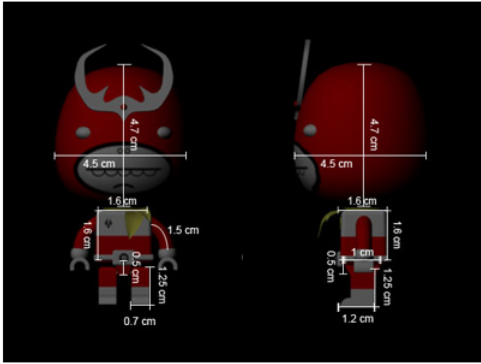
COMPUTER GRAPHIC – BILL (360 DEGREE VIEW)



COMPUTER GRAPHIC – ROY (360 DEGREE VIEW)



COMPUTER GRAPHIC – PEE (360 DEGREE VIEW)



REFERENCE - PROPORTION IMAGE



FIRST VERSION MODEL



PRODUCTION - CHRIS



PRODUCTION - JIM



PRODUCTION - MAX



PRODUCTION 04 - BILL



PRODUCTION - ROY



PRODUCTION 06 - PEE



TOY - CHRIS



TOY - DAN



TOY - MARLA



TOY - JIM



TOY - MAX



TOY - BILL



TOY - ROY



TOY - PEE



POSTER DESIGNS



BOX DESIGN (WHITE)



T-SHIRT DESIGN (WHITE)



BOX DESIGN (BLACK)



T-SHIRT DESIGN (BLACK)



MUG DESIGNS

7. MULTIMEDIA

7.1 Computer Design

As the World Wide Web and Internet browsers became more sophisticated, browser games started to be thriving and become popular. During early periods, simple single player games were made to be played by using a web browser via HTML scripting technologies. Later on, the development of web-based graphics technologies such as Flash allowed browser games to become more complex. These games, also known by their related technology as "Flash games," became increasingly popular.

"Many games originally released in the 1980s, such as Pac-Man and Frogger, were recreated as games that could be played using the Flash plug-in, Flash Player, on a webpage. The Flash Player is a client application available in most common web browsers. It features support for vector and raster graphics, a scripting language called ActionScript and bi-directional streaming of audio and video. There are also versions of the Flash Player for mobile phones and other non-PC devices."

(Wikipedia: http://en.wikipedia.org/wiki/Flash_game)

(Adobe: <http://www.adobe.com/products/flash/features/>)

Flash is commonly used to create animation, advertisements, and various web-page components to integrate video into web pages, and more recently, to develop rich Internet applications. Flash technology has become the most popular method for adding animation and interactivity to web pages

There are two topics in the multimedia design section of this thesis project. The first topic is Flash games for computers where I would design a RPG game, a Puzzle game and a Search game, and the second topic is for cell phones from which users can watch an advertisement of my products and also play themed games.

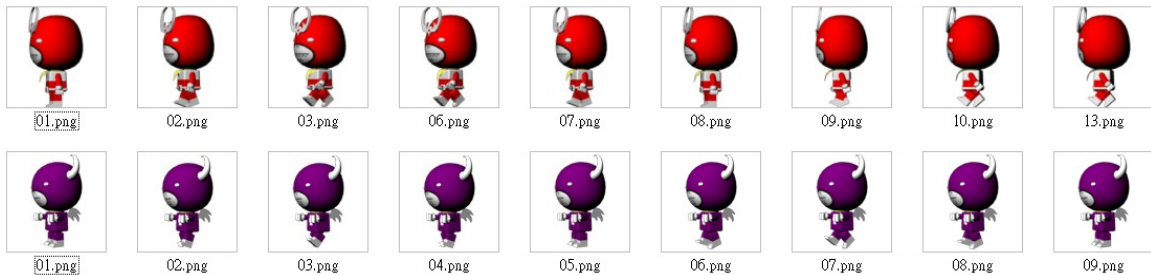
One complete Flash game needs creative ideas, nice graphics and effective programs. Using only the Flash application to create one complete game with nice graphics and interesting sound effects is not enough. Graphic applications are very important factors to make the game look more perfect and professional. Usually Photoshop, Illustrator or Maya will be needed for doing graphics jobs and later these graphics will be imported into Flash. The last step is the programmer will use ActionScript to finish the game.

Designing Flash games which are related to my characters is the multimedia marketing strategy. Not only can users enjoy the game, but also they can recognize my characters behind the story of the game. The purpose of multimedia marketing strategy is to send product information from computers or even cell phones to give customers a deep impression about the products.

RPG Game

RPG, a Role-Playing Game, is a type of game in which the participants assume the roles of fictional characters and collaboratively create or follow stories. Participants determine the actions of their characters based on their characterization, and the actions succeed or fail according to a formal system of rules and guidelines.

01. Alias Maya: A sequence of 3D images of the character's walking and jumping postures would be rendered out in Maya because the character controlled by the users' mouse and keyboard would walk around and jump to avoid obstacles in the game.



SEQUENCES IMAGES

02. Adobe Photoshop and Illustrator: The mission of the game is that Rustic Force need to enter Evil Force's headquarters in hell and fight with them. So the main tone in the game would focus on dark colors in order to generate an atmosphere of terror in Evil Force's headquarters. Photoshop and Illustrator are applications for creating most graphics.

03. Macromedia Flash: After all the images are finished, they will be imported into Flash and use ActionScript to program the game. The users can control the character's movements by their keyboard and mouse.

(Detailed codes will be listed in CD-ROM)



OPENING



INSTRUCTION



GAME PROCESS



GAME OVER

Puzzle Game

Computer puzzle games are a genre of computer games that emphasize puzzle solving. The types of puzzles involved can involve logic, strategy, pattern recognition, sequence solving, word completion or, in some cases, just pure luck.

01. Alias Maya: Puzzle game's background, happy village, is created by 3D application, Alias Maya.



3D ENVIRONMENT – HAPPY VILLAGE

02. Adobe Photoshop and Illustrator: From the opening, the instruction page, and eventually to game process, the graphics in the whole game are composites in Photoshop.

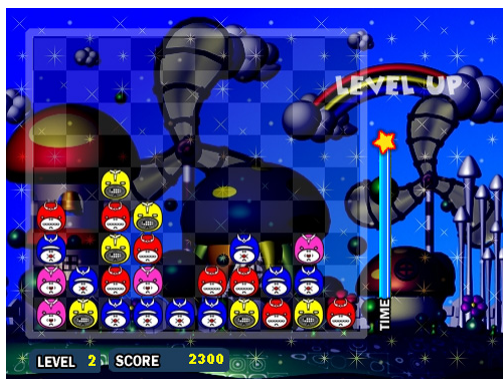
03. Macromedia Flash: Most of the codes come from Nick (kouvaraki@yahoo.gr). I used his code as references and added new variables and changed parameters to complete this game. (Detailed codes will be listed in CD-ROM)



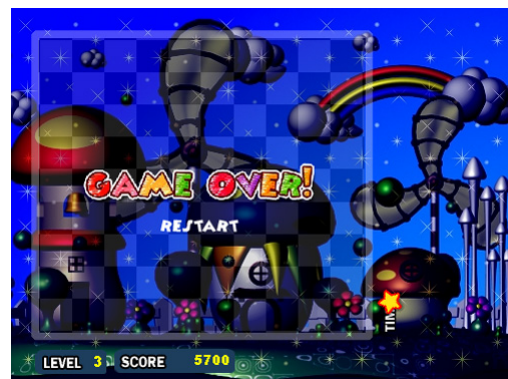
OPENING



INSTRUCTION



GAME PROCESS



GAME OVER

Search Game

01. Adobe Photoshop: The rule of the game is to compare two similar images and find out where the 5 differences between them are within limited time. Sketches, toys and posters of my characters are the sources for designing these images.



CONTRAST IMAGES

02. Macromedia Flash: After all the images are created, I imported them into Flash and used ActionScript to program the game. Users will become acquainted with my characters by playing the game. (Detailed codes will be listed in CD-ROM)



OPENING



INSTRUCTION



GAME PROCESS



GAME OVER

7.2 Cell Phone Design

Using Flash technology on a mobile phone provides the same advantages as using Flash on the desktop. You can create rich, interactive, compelling user experiences that have a consistent display across a range of platforms. Developing applications with Flash Lite can also result in a quicker time to market and lower developer costs than using other complicated program like Java.

“Flash Lite is simplifying the development of mobile phone applications and opening up a huge potential market to existing Flash developers. Recent deals with Samsung and Nokia have proved that there is a commitment by the manufacturers to support the platform so it's only a matter of time before Flash Lite enabled handsets become readily available.

Flash Lite 1.0 was launched in February 2003 for NTT DoCoMo 505i handsets in Japan and provided an easy way to put Flash content on to mass market mobile phones for the first time. Today Flash Lite adoption in the world has been hugely successful with Flash Lite pre-installed on more than 100 different handset models.”

(Adobe: <http://www.adobe.com/products/flashlite/>)

One of the major strengths of the Flash platform on the desktop is the one million-plus developer community that has years of experience designing and developing user interfaces, games, animations and e-learning applications. This kind of content is also required for the mobile market so if you are a Flash developer or designer, you can use your same skill set to develop content for this brand new market.

The functions of cell phones have become more and more diverse. Users can take pictures, listen to MP3, watch videos, surf internet and play games with their cell phone. It is easy to imagine that some day a cell phone will replace a computer. Because of the improvements of cell phone technology, this storm of marketing strategies using cell phones is coming to us. Users from all over the world can receive the product information through cell phones; they can watch commercials, download themed wall papers and play cell phone games. Those clever little gadgets are becoming part of our lives and replace a camera, MP3, computers and even televisions.

Cell Phone Advertisement

Advertisements are everywhere: websites, television and videogames, not to mention coffee coasters, airplane seatback covers, and even umbrellas. Soon, ads on your mobile phone will be as commonplace as Web pop-up ads.

In today's world, with more educated and discerning consumers who have a wider range of entertainment and media options than ever, it is extremely difficult for many companies' advertisements to reach the targeted markets. Cell phone advertising is the perfect way to get the message out on the streets and to the consumers.

An advertisement for the cell phone would be part of my thesis project to market these toys. I would set another perform

stage for Rustic Force from computer monitors to cell phone screens.

(CNN: http://money.cnn.com/2007/05/29/magazines/business2/ads_mobile.biz2/index.htm)

Interface Design and Match Game

Adobe Photoshop and Illustrator: Designing an interface for a cell phone is totally different from a computer. Font choice and text size, use of vector or bitmap images, simultaneous tweens, and use of alpha effects need to be considered.

Flash: Flash Lite offers the same timeline based features that users would expect to find with a Flash based platform. As this version has been designed for use on mobile devices that have much less processing power and memory than desktop computers, it has a reduced feature set when compared to its big brother Flash.

I used Flash Lite to design an interface and one game for cell phone users to promote my characters.

Program: Flash Lite

ActionScript (Flash Lite) (Detailed codes will be listed in CD-ROM)



NAVIGATION



INTERFACE



MATCH GAME



WALL PAPER 01



WALL PAPER 02



INTRO



NAVIGATION



INTERFACE



MATCH GAME



GAME OVER

8. WEB DESIGN

Electronic Commerce is exactly analogous to a marketplace on the Internet. Electronic Commerce consists primarily of the distributing, buying, selling, marketing and servicing of products or services over electronic systems such as the Internet and other computer networks.

8.1 Design

Program

“HTML: HTML, short for Hypertext Markup Language, is the predominant markup language for the creation of web pages. It provides a means to describe the structure of text-based information in a document — by denoting certain text as headings, paragraphs, lists, and so on — and to supplement that text with interactive forms, embedded images, and other objects.

CSS: CSS is used by both the authors and readers of web pages to define colors, fonts, layout, and other aspects of document presentation. This separation can improve content accessibility, provide more flexibility and control in the specification of presentational characteristics, and reduce complexity and repetition in the structural content.

ACTIONSCRIPT: ActionScript is the scripting language Flash uses to control its movies and the objects within those movies. If you want to do anything interactive in Flash, you'll need to use ActionScript. It allows you to execute different actions in a movie depending on what a user does or on what frame of the movie is being played.

PHP: PHP generally runs on a web server, taking PHP code as its input and creating Web pages as output, however it can also be used for command-line scripting and client-side GUI applications. PHP can be deployed on most web servers and on almost every operating system and platform free of charge. The PHP Group also provides the complete source code for users to build, customize and extend for their own use.”

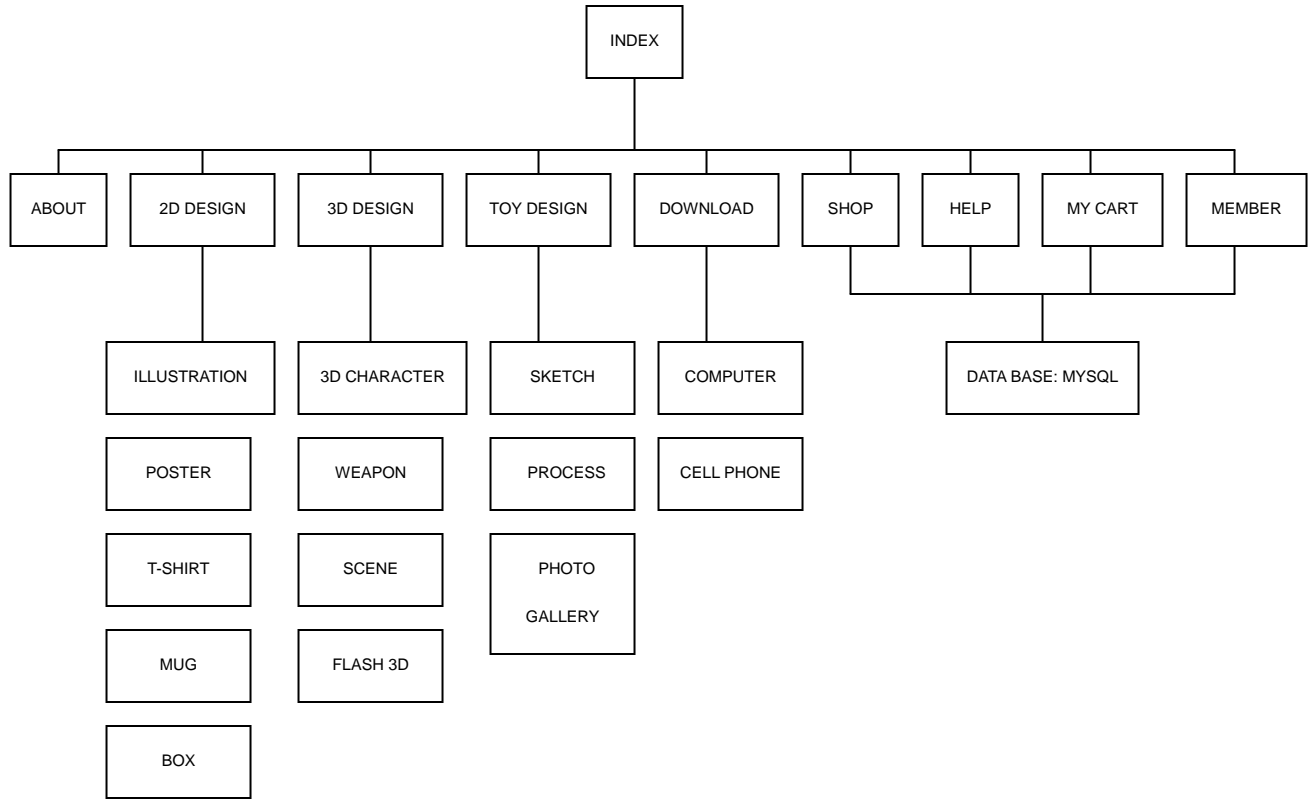
(Wikipedia: <http://en.wikipedia.org/>)

HTML and CSS are used to set up the appearances of the font and the styles of the layout page. Because the website has a member system and a shopping cart function employed with PHP and MySQL, it would have a database to store members' personal information and to keep tracking the users' status; in addition to letting users do purchasing. The elements of Flash icons, navigations and animations were used to bring out more interesting and interactive user interface.

Building a dynamic website is one of the most important parts in the project. Through the website, users can take a look at every process about how I designed these characters, animations, 3D environment and games; moreover users can view the toy designs and other relative products in the shopping section and even shop online.

Organization Chart

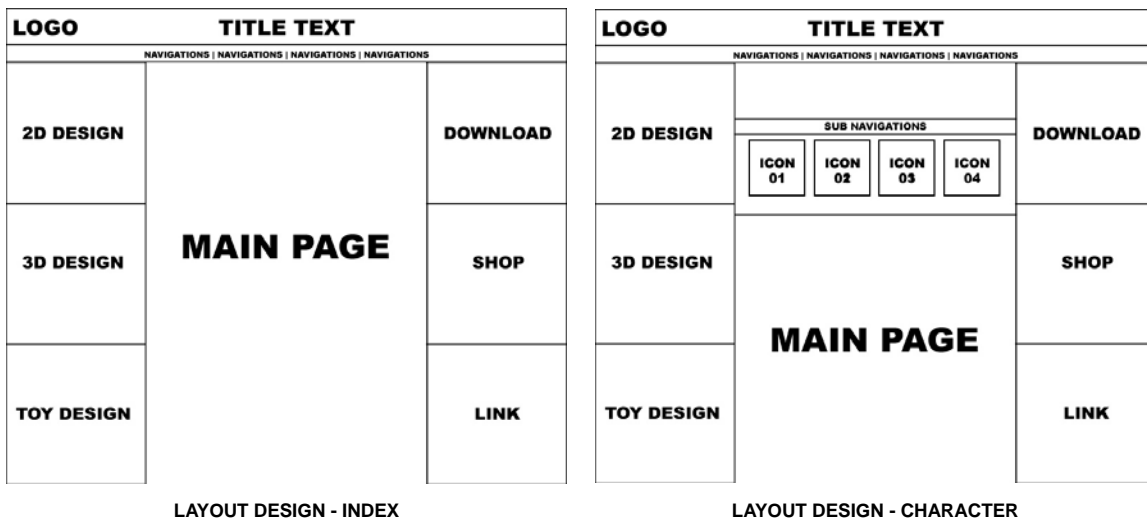
This chart shows the structure of the whole site.



SITE MAP

Layout

These are the layout sketches. Text descriptions and blocks show where the contents and images will be located.



LOGO	TITLE TEXT			
NAVIGATIONS NAVIGATIONS NAVIGATIONS NAVIGATIONS				
2D DESIGN	SUB NAVIGATIONS			DOWNLOAD
	BTN 01	TEXT 01	IMAGE 01	
3D DESIGN	BTN 02	TEXT 02	IMAGE 02	SHOP
	BTN 03	TEXT 03		
TOY DESIGN	BTN 04	TEXT 04	IMAGE 03	LINK

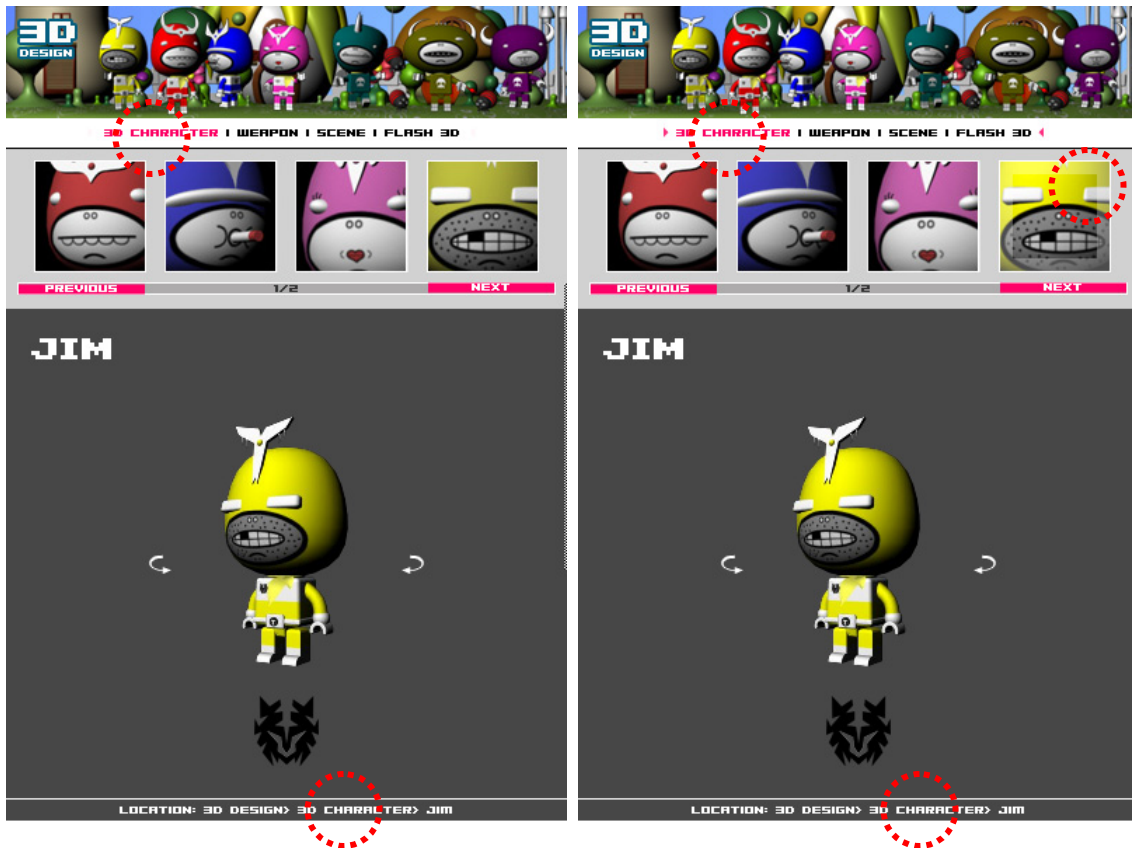
LAYOUT DESIGN – GAME SECTION

LOGO	TITLE TEXT		
NAVIGATIONS NAVIGATIONS NAVIGATIONS NAVIGATIONS			
2D DESIGN	SHOP		DOWNLOAD
	IMAGE 01	TEXT01	
3D DESIGN	IMAGE 02	TEXT02	SHOP
TOY DESIGN	IMAGE 03	TEXT03	LINK

LAYOUT DESIGN – SHOP SECTION

User Interface

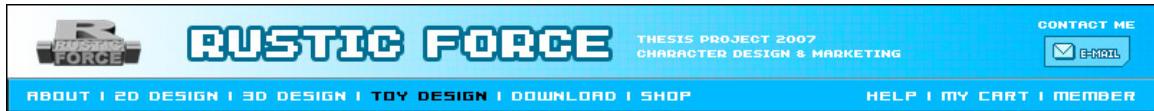
Users can easily know where they are from the appearances of font style such as bold or colored text, and the bottom bar shows users' location of the site. It helps users go around the website and not feel confused.



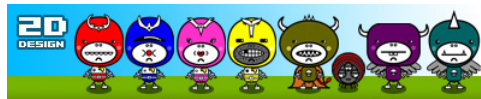
HIGHLIGHT TITLE AND BOTTOM LINE SHOWS WHERE YOU ARE

Graphic Design

Flash objects are used to give users more dynamic and interactive visual effects when compared with HTML. Colorful icons and different page styles allow users to enjoy the website.



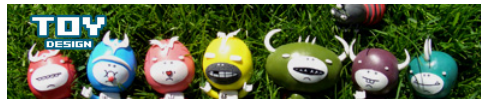
ROLLOVER NAVIGATION



BANNER – 2D DESIGN



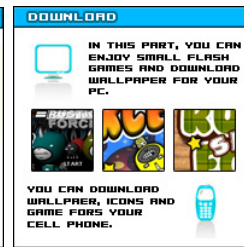
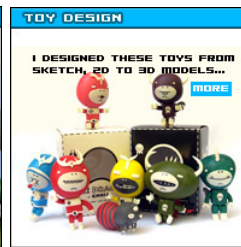
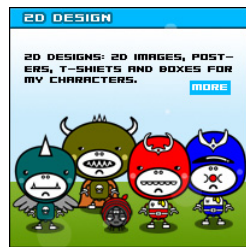
BANNER – 3D DESIGN



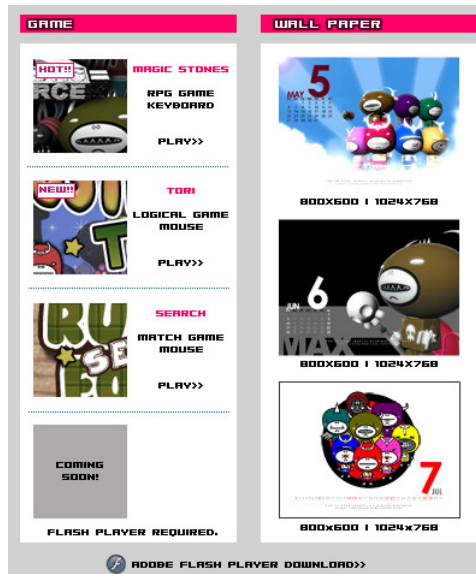
BANNER – TOY DESIGN



BANNER – HELP



ICON DESIGNS



LAYOUT DESIGN - GAME



LAYOUT DESIGN – CELL PHONE

8.2 Database: PHP + MySQL

PHP

The PHP Hypertext Preprocessor is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications.

MYSQL

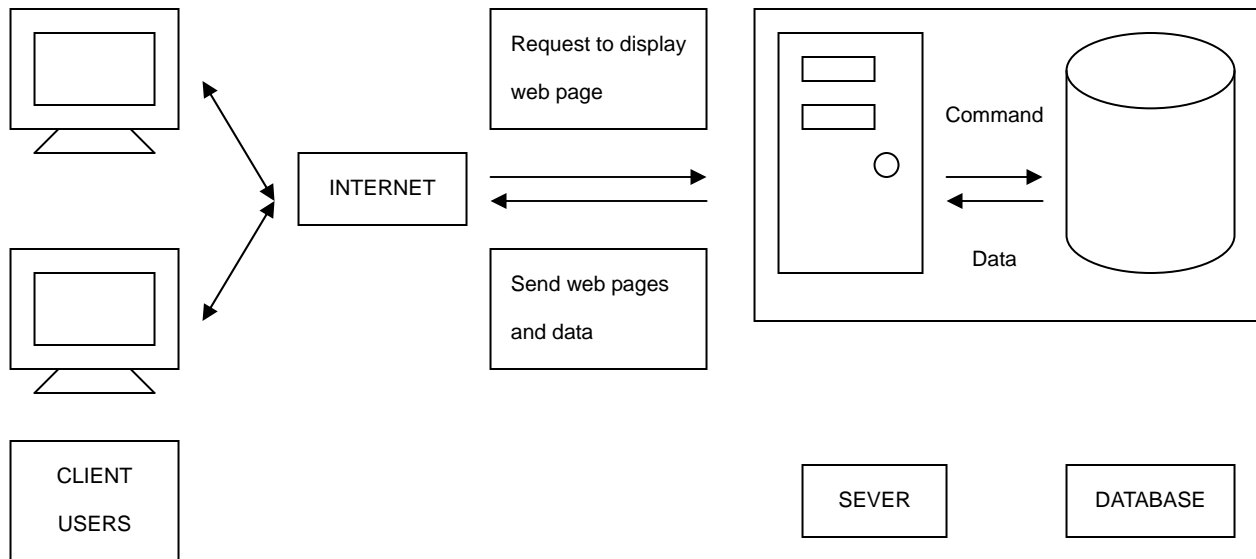
MySQL is a freely available third-party database engine designed to provide fast access to stored data. Data can be stored, updated and deleted using languages such as PHP. The data can be retrieved from the database to allow the generation of dynamic web pages.

(Wikipedia: <http://en.wikipedia.org/>)

Description of shopping process:

1. Users need to create a new account first before shopping online and the database will have personal information.
2. The website will keep tracking user status every time user logs in with the account.
3. The system will record what user would like to buy and these items will show up in the shopping bag.
4. When ready to check out, personal information will automatically show up on the mailing list.
5. If ok, the system will send a confirmation mail to notify users that the order has been completed.

(Detailed programs are presented in CD-ROM.)



THE OPERATION OF DYNAMIC WEB PAGE

9. THE LITERATURE SURVEY

Publication

Entertainment Industry Economics

By Harold L. Vogel

Published 2007 Cambridge University Press

Business / Economics / Finance

ISBN 0521874858

Summary: Harold L. Vogel examines the business economics of the major entertainment enterprises: movies, music, television programming, broadcasting, cable, casino gambling and wagering, publishing, performing arts, sports, theme parks, and toys and games. The result is a comprehensive up-to-date reference guide on the economics, financing, production, and marketing of entertainment in the United States and overseas. Investors, business executives, accountants, lawyers, arts administrators, and general readers will find that the book offers an invaluable guide to how entertainment industries operate.

Solution: A very clear explanation of the history, issues, rationale and economic flows of the entertainment industry. The book includes a comprehensive list of sources of information as well as details the sources for every bit of information it provides. It covers all aspects of the entertainment business, including film, television, cable TV, music, gaming, and Broadway. Chapter 8 "The Internet" and chapter 10 "Toys and games" which are related to my thesis topic are the two sections that I mainly focused on!

The Art and Science of Digital Compositing

By Ron Brinkmann

Published 1999 Morgan Kaufmann

Computers / Desktop Publishing

ISBN 0121339602

Summary: Computer-generated visual effects are now used extensively in feature films, commercials, music videos, and multimedia. The backbone of this process, the final and most important step, is known as digital compositing. The Art and Science of Digital Compositing is a comprehensive reference that provides a complete overview of the technical and the artistic nature of this process. This book covers a wide range of topics from basic image creation, representation, and manipulation, to a look at the visual cues that are necessary to create a believable composite.

Solution: This reference book mentions a lot about creating or manipulating images in a digital environment. It starts by explaining the very basics and later goes into really complicated topics, not only explaining techniques but also telling you

why something is done a certain way. Mainly, it provides a lot of skills helping me combine 2D images or 3D objects together to create one good digital composite.

Toys – New Designs from the Art Toy Revolution

By Jim Crawford, Jacob Hoye

Published 2005 Universe Publishing

Antiques / Collectibles

ISBN 0789313901

Summary: A fascinating look at the coolest and most coveted collectible toys being produced today. Toys are no longer for children only, as talented and innovative designers such as Eric So, Tim Biskup, Dalek, Gary Baseman, Todd Schorr and others are creating works of art in vinyl. This features over 300 delightful color images, as well as interviews with the artists.

Solution: As a photo book, "Toys" has an emphasis on eye candy images. The majority of the figures have been photographed specifically for the project, adding a distinctively colorful and original style to the mix. It covers highly collectible vinyl figures from the top artists in Hong Kong, Japan, the United States, the UK, Canada, and Australia. There are hundreds of toys collected from all over the world in this book, and these toys have their unique features and styles which give me many interesting ideas to design my toys, Rustic Force.

Dot Dot Dash

By Robert Klanten, Matthias Hubner

Published 2006 Dgv

Antiques / Collectibles

ISBN-10: 3899551613, ISBN-13: 978-3899551617

Summary: Vinyl figures, plush dolls, designer toys and action figures can be seen as a new movement in contemporary design, art and popular culture. A recent trend of character applications aspiring from inherent crossovers of the character and art worlds is also taking form in sculptures and objects, creating a new art market where artists are progressively moving beyond the boundaries of the gallery and extending their work to a disparate audience. This voluptuous volume exhibits the expansive scope of designs and objects in the ultimate compilation of contemporary character design.

Solution: This book has great compilation of pictures, hundred of toys, very visual and complete. It represents new aesthetic approach of toys. Many designers in the entertainment industry and have always been fascinated and inspired by all the vinyl toys. This book which has many brilliant character designs causes me to create my toys and some other affiliated products such as box design, t-shirt, poster, etc...

Flash 3D

By Jim Ver Hague, Chris Jackson

Published 2006 Focal Press

Computers / Desktop Publishing

ISBN 0240808789

Summary: Push your creative ideas to the next level in content delivery. Use real and simulated 3D space in your Flash games and interactive systems. The majority of the instruction involves creating mathematical 3D space we can use to move our 2D objects around in. Each example builds on the ones before to eventually create a scene with a movable camera and objects that maintain a believable 3D space. The comprehensive coverage in this book makes it a great asset for anyone looking to add more depth to their Flash projects.

Solution:

The first few chapters provide tips on how to create graphics with depth and how to animate depth using the Flash timeline. You do not really need to know ActionScript very well and still can have 3D effects in your Flash projects. The rest of the book covers how to use ActionScript to simulate 3D and create interactive 3D environments. I appreciate the effort put in the exercises and the level of explanation of the code. I really enjoyed chapter 7 "Background Considerations." I modified some of the exercises and started using them in my own works to create 3D environments for my characters. And it came out great!

10. CONCLUSION

Feedback

I have shown my project to many people whose background is graphic design or industry design for some feedback since I finished the project. Toy lovers and collectors are my testing targets, too. I am grateful to receive much valuable advice from them. Moreover, some of them want to have my toys as their toy collections. That encourages me a lot and keeps me moving forward.

One of the biggest feedback is that a company wants to hire me to design a series of characters for their products. They are inspired by my toys and hope that there will be some characters just like Rustic Force to market their products to make their products look more fascinating and cooler. Whether the feedback is positive or negative, it is all valuable for me. Because of these suggestions, I know where I need to improve to make my designs better and better.

Question

These are the questions that I have been frequently asked.

01. Why don't you mass-produce your toys?

This is the most frequent question that I have been confronted with. If I mass-produce them, I need to spend 1000 US dollars for making a cast for each toy. The good thing for having a cast is that the cost of each toy will be lowered to 10 dollars. But the real problem is that I need to pay 8000 dollars first to make eight casts! Because of the limited budget, the most economical way is to make these toys by hand. Although I can not manufacture them, the nice thing is that these toys are unique on earth.

02. Do you have functions for the use of credit cards in your shopping section on your website?

Personally, I do not have any background of PHP and database. I had spent three months to learn basic PHP and started to build a website with PHP shopping cart functions. It was painful, but I am glad I did it, except a function for credit card use. So I have asked one of my IT friends about this question, and he already instructed me to fix the problem.

03. How do I play these Flash games, using keyboard or mouse?

I changed the layout design. Users can play the game on top of the web page and meanwhile instructions are shown on the bottom part. Not only will I have text information, but also graphics instructions. More specific instructions help users have a better understanding about how to play the game.

Prospect

Although this project is not 100% perfect, I am satisfied with the outcome of my efforts. One thing I hope to finish is to create a series of animations for my characters. In the future, I will try to complete this achievement step by step because I believe an animation will give my toys life and make them more enjoyable.

Thanks to this opportunity of thesis project, I can make my dream come true, having my own Power Rangers, Rustic Force!

11. BIBLIOGRAPHY AND DEDICATION

11.1 Bibliography

Publication

Entertainment Industry Economics (By Harold L. Vogel): Page39

The Art and Science of Digital Compositing (By Ron Brinkmann): Page39

Toys – New Designs from the Art Toy Revolution (By Jim Crawford, Jacob Hoye): Page40

Dot Dot Dash (By Robert Klanten, Matthias Hubner): Page40

Flash 3D (By Jim Ver Hague, Chris Jackson): Page41

The Internet

The Economics Times (<http://economictimes.indiatimes.com/>): Page01

Adobe (<http://www.adobe.com/>): Page28, 32

Light Force (<http://lightforce.freestuff.gr/>): Page30

CNN (http://money.cnn.com/2007/05/29/magazines/business2/ads_mobile.biz2/index.htm): Page33

Wikipedia (<http://en.wikipedia.org/>): Page34, 38

Hardware

Processor: 1.6 GHz Mobile AMD Athlon 64

Memory: 1024 MB of Ram

Operating System: Windows XP / Macintosh OSX

Software

2D graphic design: Adobe Photoshop CS2, Adobe Illustrator CS2

3D graphic design: Maya 8.0

Multimedia: Flash 8.0

Web design: Dreamweaver 8.0

Cell phone: Flash Lite 2.0

11.2 Dedication

To My Parents

First I would like to say without your help I would not be here. Although you are not well-educated, you always encouraged me for higher education, supporting me with all you can give. Studying abroad is a dream for many people. We have to conquer the culture and language differences, and the most difficult obstacle is that we need a great deal of money to support our life in another world. To get the MFA certificate cost most of your savings, I really appreciate your offer. Mom and dad, thank you! You are the best parents in the world!

To Professor Marla Schweppe

At the beginning I was not sure about my thesis project. During the thesis meeting you asked me one question - what were you fascinated with when you were a kid? I spent several days to solve this question until I saw an old picture of me wearing a Power Ranger t-shirt when I was around 7. I was dreaming one day I will become one of the Power Rangers to save the world when I was a kid... After twenty years, though, I have not had a chance to become a Power Ranger, at least I can have my own Power Rangers. You helped me figure out the theme of my toys. Your question led me to my childhood; my childhood reminded me of my heroes, Power Rangers. Power Rangers made me create these toys, Rustic Force!

To Associate Professor Chris Jackson

First, thank you for being my chair in the thesis committee. Your extensive background in graphic design, printing and interactive multimedia match what I need in this project. I used a lot of examples from your book, **Flash 3D**, as references to create 3D interactive multimedia in the website. At every thesis meeting you always gave me a lot of valuable suggestions on typography, user interface, the use of color and layout design. You also solved some painful programming problems. I did learn a lot from you. Thank you!

To Assistant Professor Dan DeLuna

There are 3D models of my toy designs and 3D environments in the project. Thank you for giving me so many suggestions on my 3D objects. "Rusty, are you really going to make these toys?" you asked me after I made a thesis proposal. Three months later I have my toys designed and showed them in the thesis defense. "Rusty, I can not believe you made it happen," you said to me. Your words kept pushing me forward and I am sure that I can achieve any goal as long as I have a passion for it.

To My Girlfriend

Finding a good toy company is very important for my project. I am not familiar with the US toy industry. Therefore, I found a toy company in Taiwan. Because of the distance, there are so many problems that I could not solve in time. You substituted for me going there and getting it right. Without your help, I could not have my toys done. Thank you for doing this for me and always being there for me. I love you.

Thanks to all!

PART B

THESIS PROPOSAL

Thesis Proposal for Master of Fine Arts Degree

Rochester Institute of Technology

College of Imaging Arts and Sciences School of Design

Computer Graphics Design

Character Design and Marketing – Designer Toys

By Yen-Fu Chen

October 14 2006

Thesis Proposal for Master of Fine Arts Degree Character Design and Marketing

Abstract

Designing a series of my characters and one story for those characters is the first step in this project. Those characters will be presented on my design products from 2D to 3D and from t-shirt to cell phone downloads. There are four categories for my design works.

The first part is 2D print media. I will put those characters on posters, stickers and post cards. Also, the customers can have my character designs on their t-shirts. The second is that I will have real toy models for my characters. The customers can have my real design works, and they can touch them and play with them personally. The third section is for cell phone downloads. There will be a set of downloads for cell phones, such as wallpapers, screensavers and games. The last category is to create icons, games, wallpapers and animations for computer users.

Making a dynamic website is my final stage. The customers can access my website. The website using dynamic PHP MySQL database has shopping cart functions. The customers can register for an account, and then they can login to use some functions just for registered members, like a live chat room where customers can have simultaneous answers from a store owner....

Good designs need good marketing strategies to promote them! Seeing people wearing the t-shirt you designed, seeing people using the icons you draw, seeing people playing the cell phone games you created and seeing people playing toys you made is incredible fun!

Designers put their ideas on people's lives from computers, cell phones to their clothing, making people's lives filled with joy and more designs.

Thesis Website Address - <http://rustychen.com>

Thesis Proposal for Master of Fine Arts Degree

Character Design and Marketing

Project Description

Audience -

Character designers and customers who look for interesting character designs

Methods and Process of Developing the Project -

1. Character design (brainstorms for ideas, draft some characters on sketch book and make up a story for those characters in the game design...)

Methods and tools: pencils, papers, a sketch book and crazy ideas.

2. 2D and 3D computer graphic designs (2D illustrations, animations and 3D models built in computers)

Methods and tools: a scanner, Photoshop, Illustrator, Flash and Maya.

3. Product designs: post cards, stickers, t-shirts, toys and cell phone downloads...

Methods and tools: ink, papers for post cards, stickers, blank t-shirts, some materials used to create toys, ActionScripts and Flash Lite and a cell phone.

4. Website to introduce and sell products

Methods and tools: web site for PHP MySQL databases and skills of web design (html, MySQL, PHP, Flash action scripts, etc).

Anticipated Components -

I will have real products of my characters and market those products on web. The customers have a series of my character designs, such as posters and stickers on the wall of their room, and my icon and wallpaper designs for their computers.

They can also manipulate my toys and play cell phone games while wearing my cool t-shirts.

Presentation -

At the thesis show, I will present all my character products, and the audiences can see real things and play with them. Also, the audiences can access my website to see all the details of my character designs and go shopping!

Design Issue -Design + Marketing

Thesis Proposal for Master of Fine Arts Degree Character Design and Marketing

Survey of the Literature

Character Designs –

These books and websites inspire me to come up with some ideas for my characters. I can see how people design their characters and learn from them, and I can also find out something more interesting and different from their works.

Digital character design and painting
Hingham, MA. : Charles River Media, c2003

<http://touma.biz/>

<http://www.scarygirl.com/splash.html>

<http://www.timbiskup.com/index.html>

http://www.flopdoodle.com/Merchant2/merchant.mvc?Screen=CTGY&Store_Code=FS&Category_Code=Bispop

<http://www.e18studio.com/e18/>

2D and 3D Designs –

There are some 2D computer graphics and 3D models in my project. So I need these textbooks and websites to help me solve some problems of software and character design.

Disney's Monsters, INC DVD
Disney Enterprises, Inc./ Pixar Animation Studios. All Rights Reserved.

Maya Character Creation: Modeling and Animation Controls
Chris Maraffi

<http://www.yumfactory.com/>

<http://nanospore.org/>

<http://www.unklbrand.com/>

<http://www.scottmusgrove.com/>

<http://www.mars-1.com/>

A Theory of Fun for Game Design

Raph Koster, Will Wright

Toy Models and Designs –

Putting your ideas on the sketch book and then transforming into computer graphics is not a problem for me. But, changing my characters from computer graphics to real objects, toys, will cost me a lot of pain. These reference books can help me figure out how to make toys from the beginning to the end products.

Better Game Characters by Design: A Psychological Approach (The Morgan Kaufmann Series in Interactive 3D Technology)

Katherine Isbister

So Crazy Japanese Toys!

Jimbo Matison, Rodney Alan Greenblat

Game Design Workshop: Designing, Prototyping, and Playtesting Games

Tracy Fullerton, Christopher Swain, Steven Hoffman

Cell Phone Downloads –

Cell phones are not like computers. You have to consider all the differences, such as the limitation of memory, the low graphic resolution and the user interface. These scurvies have lots of information about how to design a game for cell phones.

Character Design for Mobile Devices

Lawrence Wright (NFGMan)

Flash Design for Mobile Devices

August de los Reyes, Gregory P. Burch...

Adobe

<http://www.adobe.com/devnet/devices/flashlite.html>

Dynamic Website Designs –

My website will integrate 2D graphics (Flash), 3D objects (Maya), and databases (PHP & MySQL). I can some knowledge about how to merge those media together from these resources.

Foundation PHP for Dreamweaver 8

David Powers

Flash 3D: Animation, Interactivity, and Games

Jim Ver Hague, Chris Jackson

Flash, Php Y Mysql. Contenidos Dinamicos, 2006 / Flash, PHP and MySQL,
Dynamic Contents. 2006

Daniel De La Cruz Heras, Carlos Zumbado Rodriguez

Thesis Proposal for Master of Fine Arts Degree Character Design and Marketing

Budget

Reference Books -

Character Design for Mobile Devices

Flash Design for Mobile Devices

Better Game Characters by Design

A Theory of Fun for Game Design

Post cards (4"x6") -

Blank post card - \$1 / each *5

Ink - \$50 *1

Stickers -

Blank sticker - \$10 / each *5

Ink for stickers - \$30 *1

T-shirts -

Blank t-shirt - \$10 / each *5

Print - \$50 *1

5 Toy Models and Designs -

Material (clay, plastic and metal...) - \$100 *5

Paints - \$60

Wrapping Design - \$50 *5

Cell Phone Downloads -

One cell phone which supported Flash Lite (used) - \$100*1

Memory card (512mb above) - \$40*1

Hosting Services for Website (PHP, SMTP, MySQL Databases) -

Plan fee - \$70 / year *1

Others -

Mug Design – \$12 / each *5

2007 Calendar Design - \$20 *1

Key ring - \$15 / each *5

Card holder - \$15 / each *5

Total Cost – about \$1300

Those products are for the project use, not for sale.

PART C

PRESENTATION: THESIS PROPOSAL



THESIS PROPOSAL

YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T



Introduction

Computer Graphics are going to jump out limitations from a lifeless monitor to our lives!

Designers put their ideas on people's lives from computers, cell phones to their clothing, making people's lives filled with joy and more designs.

My project is to create a series of characters and then make those characters become tangible objects, and last I will build a website to present all my products and market them.

Audience

**Designers who want to convert their designs into touchable items
People from kids to any generation who look for fun stuff**

YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T



Process

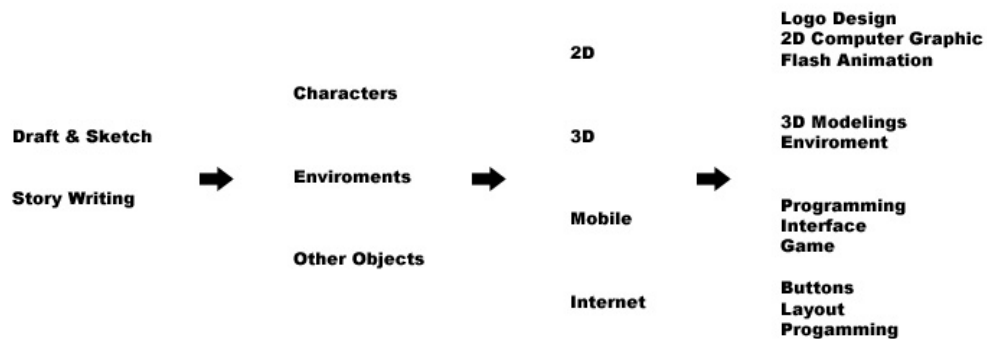


01. Proposal > 02. Computer > 03. Products > 04. Website > 05. Final Stage

YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T



Process



01. Proposal > 02. Computer > 03. Products > 04. Website > 05. Final Stage

YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T



Process

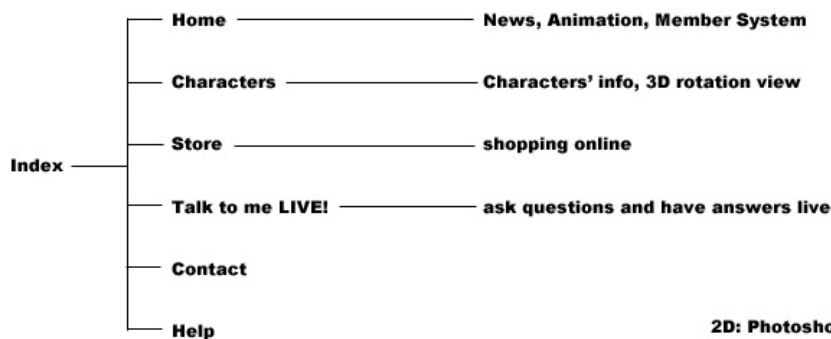
Print	Poster, Post Cards, Stickers, Books
T-Shirt	T-Shirt Designs
Toys	Toy Designs
Mobile	Wallpaper, Screensaver, Game
Others	Box Design, Cup
Computer	Icon, Wallpaper, Game, MSN Icon

01. Proposal > 02. Computer > **03. Products** > 04. Website > 05. Final Stage

YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T



Process



2D: Photoshop + Illustrator
3D : Maya + Flash
Animation: Flash
Coding: HTML + CSS + PHP

01. Proposal > 02. Computer > 03. Products > **04. Website** > 05. Final Stage

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Process

User Test ➡ Revise the project ➡ Finish the project ➡ Show & Survey

01. Proposal > 02. Computer > 03. Products > 04. Website > **05. Final Stage**

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What is already been done?



YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T

Marketing Plan

Target Market

Competitive analysis
who are the successful players in your market segment?
What are they doing right?
What are they doing wrong?

4P Analysis
1. Product
2. Price
3. Place (distribution)
4. Promotion

SWOT Analysis - cutting down the weakness and threat
1. Strength
2. Weakness
3. Opportunity
4. Threat

Positioning

YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T



Conclusion

The customers have a series of my character designs, such as posters and stickers on the wall of their room, and my icon and wallpaper designs for their computers. They can also manipulate my toys and play cell phone games while wearing my cool t-shirts.



YEN-FU CHEN @ COMPUTER GRAPHIC DESIGN @ R.I.T