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CICC Information System

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I have always been interested in the human-machine interface. While I was an industrial and product designer, I found that a successful interface design can play a communication role between the end-users and the product. Observing the users' response and reflecting the result in my designs has been one of my favorite jobs. For this reason, Hypermedia caught my attention when it was first introduced. Compared with the interface design of products, designing Hypermedia seemed more direct and straightforward. Not only was the three-dimensional interface changed into a two-dimensional one, but also all the man-machine interface was focused on the small computer screen. These differences made Hypermedia design more difficult to me, but also made it a challenge. Therefore, when asked to decide a topic for my thesis project, Hypermedia or interactive media design became my first consideration.

The CICC Information system is an interactive media project simulated to be provided by the Chinese Information and Culture Center (CICC). It provides various Chinese information and the CICC services via the telecommunication network between the end-users' computer and the terminal of the CICC. Through this connection, the user can not only search the Chinese art and culture information they are interested in, but also acquire the services providing by the CICC Library, Taipei Gallery and Taipei Theater. The intention of this project is to design an electronic information system for the real world. Both interface design and audio-visual aspect are my concerns.

Thesis Background

Last summer while I was traveling to New York City, I got a chance to visit the Chinese Information and Culture Center (CICC), which was located in Rockefeller Center and established on May 20, 1991 by the government of the Republic of China (Taiwan). I was deeply impressed by the multi-functional Chinese information and culture that the center provided and presented to the American public.

As a Chinese student studying in America, I met lots of people who were interested in Chinese culture or questioned me about my country. I was proud of my country and willing to introduce it to my friends, but I always felt that I could not answer their questions or express what I knew to them completely. The establishment of the CICC solved my problems. Most of the information about the Chinese art and culture that my friends were curious about could easily be found there. The only problem left was the regional limitation. It seemed only people who lived near NYC could make full use of this center. How to make the information available to a wider audience through technology became an important question remaining in my mind.

The Chinese Information and Culture Center

Before I proposed my thesis idea, it was important to have a better understanding of the center. The Chinese Information and Culture Center is the first large-scale and multi-functional information and culture center set up by the government of the Republic of China (Taiwan). The CICC, comprised of the Taipei Theater, Taipei Gallery, CICC Library, AV Room, and classrooms, is a new channel for the exchange of information and culture between the American public and the Chinese people living in Taiwan.

The Taipei Theater features live performances and film showings. The adjacent Taipei Gallery will stage exhibitions of traditional and contemporary Chinese art. The Library houses a 30,000 volume book collection and a large collection of periodicals from Taiwan. The AV Room and classrooms provide facilities for videotape showings, lectures, and related activities. All these were opened to the American public after August 14, 1991.

Thesis Concept

The purpose of my thesis was to create an electronic information system for the Chinese Information and Culture Center, which provided the Chinese Information searching service via the telecommunication network ISDN(Integrated Service Digital Network). This system was supposed to be installed both in the CICC and the end-users' houses. Through the connection of the end-users' home computer and the CICC, users could access the CICC's information directly at home. Generally the services this system provided would be based on the services of the CICC, which include the CICC library searching service, the gallery information service, and the theater information and reservation service. An introduction to Chinese art and culture or a specific emphasis on popular Chinese folk art might be appropriate as additional functions for this system.

The original idea of this topic was to use telecommunication to bridge the gap of geographic distance, and popularize the services provided by the CICC. My intention of this thesis was to create an electronic interactive application, emphasizing the man-machine interface design and the audio-visual aspects, applying the knowledge that I have recently acquired.

Defining the Users Group

After the idea of the thesis project had been proposed, a conceptual prototype of an electronic information system simulated to be provided by the CICC had been built. The next important consideration of this project was to define a user group. Due to the original purpose of this center, the audience of this system would be the general American public, including both Chinese people living in U.S. and the Americans, who were interested in the Chinese art and culture. In addition, because this system was going to be a Macintosh-based application, the prerequisite for installing this system was having their own Macintosh computer at home; therefore, I assumed the users would already be Mac users who know how to click, doubleclick, or hold down the mouse button and drag. These are all the required operations users needed for using the electronic information system.

Identifying Design Problems and Establishing Design Objectives

Before launching into the the design process, it was important to define the problems to be solved or the objectives to be pursued. To design an electronic information system, the first design problem I expected in the beginning was the management of the vast amount of information and data. How to sort, organize and present the information to the audience in a logical way was a very important question to study at the initial stage. A successful interactive media design should provide an interface for the users to interact with and navigate through the information in various ways; therefore, providing an appropriate and versatile tool for the users to navigate through the information on their own became my first objective of this project.

The wide variety of intended users presented another design problem I needed to work on. To avoid any confusion and misunderstanding, I set out to make the interface as simple and direct as possible. From another point of view, since the audience of this project were comprised of Chinese and Americans, how to present this project was my third concern. As a Chinese student, presenting Chinese information to a Chinese audience was easier than to the American audience. Satisfying both audiences was my original intention. How to find a balanced way to present the project was my other objective.

The last objective of this project was using visual and audio elements to facilitate the users' relationship with the content and make it effortless to use. Through the use of graphics, I wanted not only to enhance the content, but also to stress the theme of the project, and provide a context and create visual landmarks.

All those above are the design problems I defined and objectives I established. After these processes had been accomplished, all the subject matter of the thesis project became clearer to me, and it also made the tasks easier for me to perform.

Software Concerns

When I was considering software options for the thesis project, HyperCard first came into my mind. HyperCard, an object-oriented toolkit for database production which can provide a flexible authoring tool, seemed to satisfy all the needs of this project. In addition, its high capacity for combining different media-text, images, sounds, graphics, animation and motion sequences, also made it my first choice. The only weakness that bothered me was the awkwardness of using color in that environment. Color was a very important factor in my design, so I decided to use another new application, SuperCard, which had all

of HyperCard merits and also provided a colorful environment to build up my thesis project.

Being a multimedia system, I had lots of images to deal with, so I had planned to use an NTSC digitizer to digitize the images and Adobe PhotoShop to retouch them. Also Macromind Director was planned to create animation, and MacRecorder to record the sound resources. Those were all the software concerns at this step.

The Design Development Process

After the thesis proposal had been approved, there were several things I tried to accomplish before I started to implement the possible features of this project. They were visiting the CICC, searching for useful Chinese graphics elements, and studying SuperCard. The purpose of visiting the CICC was to get complete information to form the database of this system. Searching Chinese graphics elements helped me to get a better sense of the spirit and beauty of the Chinese art and culture, so it would be easier for me to create an interactive environment that was full of Chinese atmosphere. Further, the study of SuperCard assisted me in the further refinement of my project design.

When the researching part was finished, I started to develop the project design. All the design process can be summed up into the steps described below.

First, I created a storyboard to outline all the services this system provided, and then a project structure to identify the relationship between different services and to determine the navigation paths. Next I began to visualize the interface and screen layout with some rough drawings and sketches. After the basic layout was decided, more attention was focused on the visual metaphors and detailed graphics design. I used Macromind Director to complete the graphics design, and imported them into SuperCard. At this step, most of the graphic design had been done.

Afterward, I created a HyperCard stack to test the scripting and the navigation before I did it in SuperCard. When the scripts were successful, I brought them into the SuperCard project I had created before. I then entered all the data and tested the whole project, iterating the test process to smooth all the navigation paths. The

feedback such as highlighting and sound effects was added after the navigation scripts were completed.

The General Interface Design Techniques

To make the interface of the project consistent and easy to use, there are some general interface design techniques I used throughout the project.

The first technique was the use of three-dimensional looking text-based buttons. The intention of this 3-D effect was to make the buttons stand out from the graphics environment. The use of the text-based button was to minimize confusion and make the real function clear to the users. Besides, I used some graphic-based buttons for visual interest.

The second one was the use of highlighting and sound effects. Almost all the buttons in this project had the auto-highlighted function. This function accompanied with sound effect gave users enough feedback to know whether the computer was functioning or not. Also these two effects increased the audio-visual interest.

The last technique used in the project was the visual effect. I always used iris open or close to link different sections, and wipe left or right to go through the data cards. In addition, the visual effects were also based on the navigational functions concerned. Most vertical structure relationships used the iris open or close effects; and the horizontal structure relationships used the wipe left or right effects. The using of these effects made the project more consistent.

The CICC Information System

The project was named "The CICC Information System" after lots of consideration. This name was given to both indicate the basic function of this project, and the information provider, the CICC. The CICC Information System is made up of six SuperCard projects-CICC Information System, A Brief Introduction of Chinese Art and Culture, A Special Connection to the CICC, CICC Library, Taipei Gallery and Taipei Theater (Figure 1). The CICC Information System acts as a central link between both 'A Brief Introduction' and 'A Special Connection'. Also the other three projects are linked to 'A Special Connection' which acts as a sub-central link of this system.

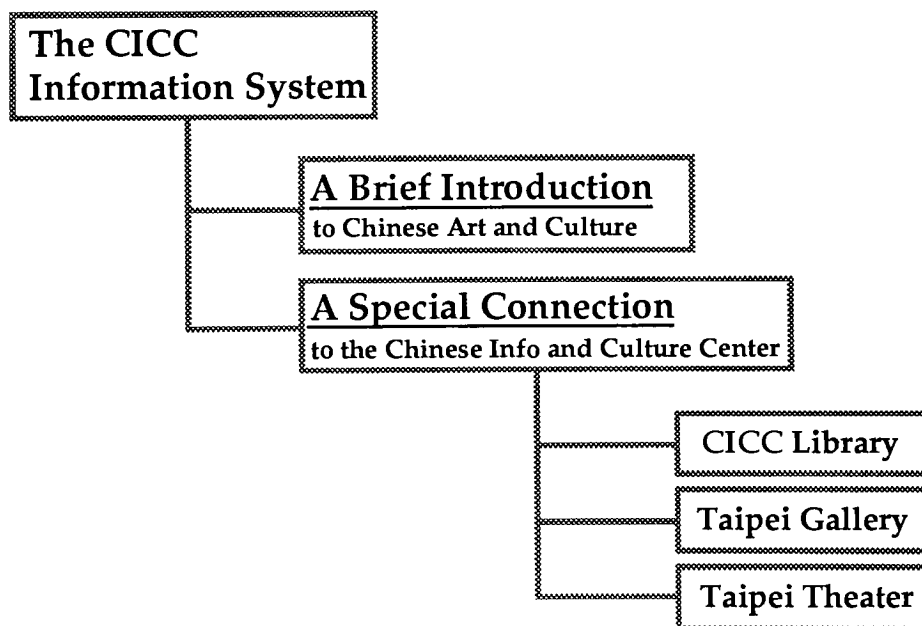


Figure 1, The CICC Information System Structure

You can launch this system by double-clicking on the 'CICC Information System' application icon. This will bring you to the first greeting screen (Figure 2). The light-brown and middle-green pattern background, stretched red title and the Chinese calligraphy brush stroke effect on this screen were all used to create a Chinese atmosphere environment. There is also some text below the title to introduce the function of this system and tell you how to continue.

Pressing the mouse button will take you to the second screen which is a card containing service paths (Figure 3). From this point, there will be a common screen design used by the other five sections. It is a middle-green pattern bar placed on the lefthand side that has a system logo on the top. The logo, combining both Chinese characters and English text which means 'The Chinese Information System', was intended to keep the same image as the first screen. All the system navigation buttons were designed to be placed on the bottom of this bar.

On this service paths card, there are two colorful images which indicate special services provided by the CICC Information System: a brief introduction of Chinese art and culture, and a special connection to the CICC. You can click on either one to get the service you need.

A Brief Introduction to Chinese Art and Culture

This section provides a brief introduction to Chinese art and culture. When you first access this section, you will see fifteen colorful images placed in the shape of a staircase on the screen (Figure 4). Each image has a green title text bar and acts as a button, used to acquire the specific information. When you click on an image, it will take you to another data card that contains both information and a picture about that topic (Figure 5). After you view the information, you can click on

Figure 2, Initial Greeting Screen



Figure 3, Service Paths Card

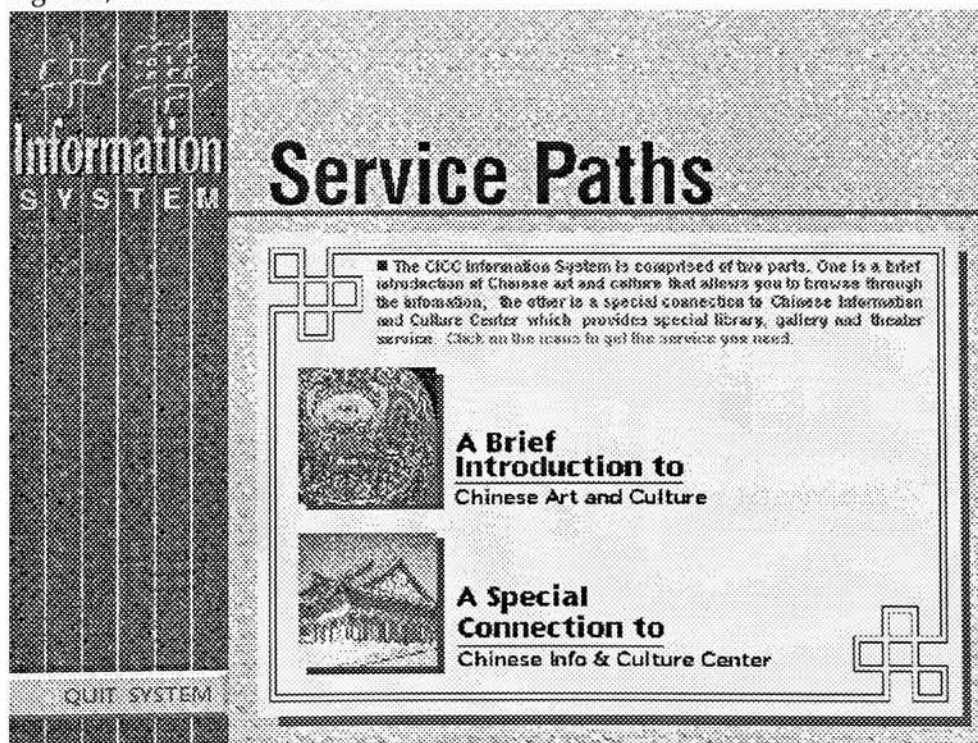


Figure 4, The Introduction Main Menu Card

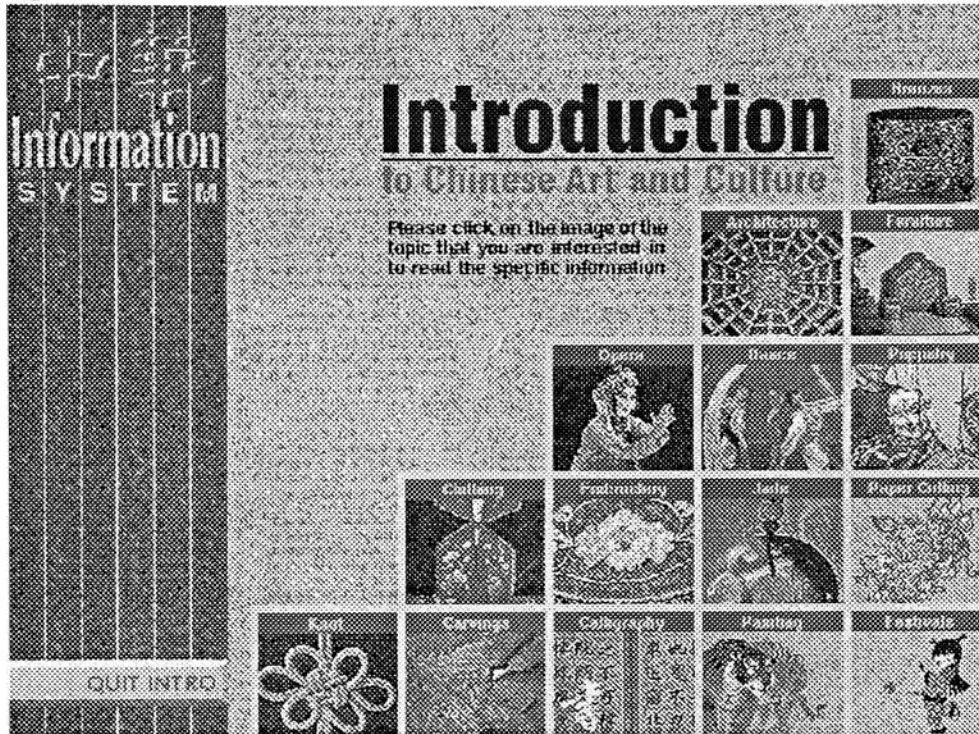
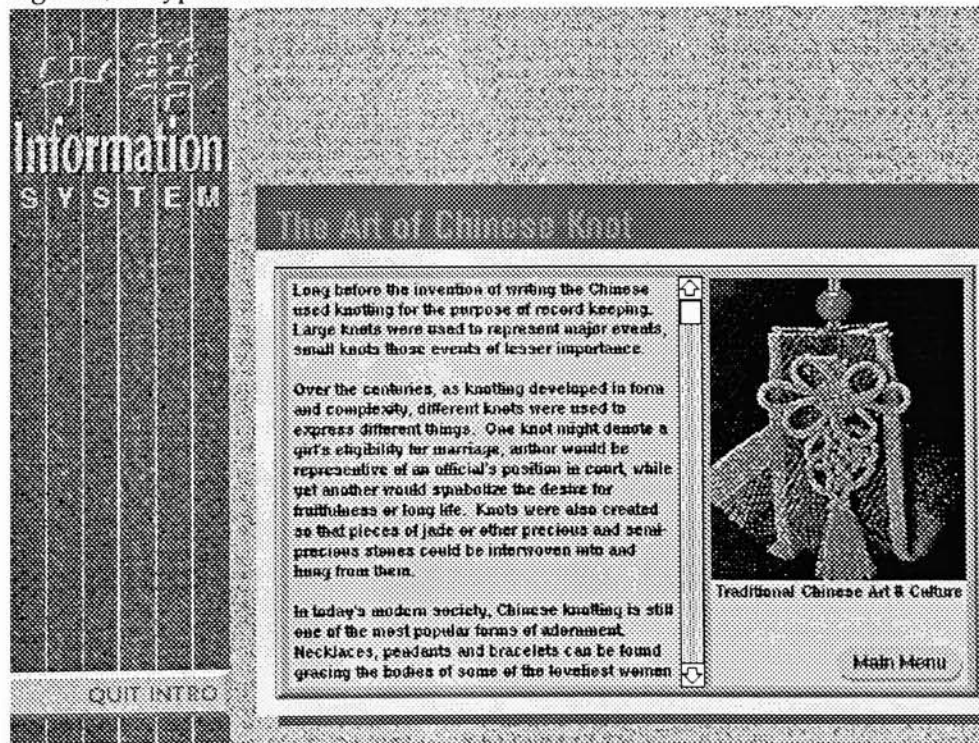


Figure 5, A Typical Introduction Data Card



the main menu button to go back to the first screen. 'QUIT INTRO' button will bring you back to the CICC Information System project. I used images instead of a list of topics to display the choices to enhance the interface and make the topics clearer to the users. This works well for the fifteen choices represented, but a more hierarchical design would be required for a more extensive system.

A Special Connection to the CICC

The major function of this section is to let you access the terminal of the Chinese Information and Culture Center. Through the network connection, you can easily get the services of the CICC Library, Taipei Gallery and Taipei Theater from the CICC. The way to access this section is simply clicking the 'A Special Connection' button on the service paths card of the previous section. Once the telecommunication network is connected, there are three feature service buttons showing on the screen (Figure 6). You can click on one of the buttons to access the service you need, and click the 'Quit' button on that section to take you back. This section acts just like the main menu of the CICC services. In addition, two more buttons on the left side provide information about 'What's CICC' and 'Where's CICC', which might be useful for the new users.

The design of those three buttons used a visual metaphor, combining the images of Chinese painting, fan and characters, in order to create a Chinese atmosphere and indicate the meanings of library, gallery and theater. This design worked better as graphics for the general audiences; therefore, I used the English text placed on the bottom to clearly express the functions of the buttons. To keep the visual consistency of the project, this design was also applied to the other three sections.

CICC Library

The CICC Library section is just like an electronic library that provides general library information and allows you to search and reserve the library resources. You can access this section by clicking on the 'CICC Library' button located in the 'Special Connection to CICC' project. It will bring you to the first greeting screen of this section (Figure 7). By pressing the mouse button, a short animation will bring you to another card that contains general information and library access. The visual metaphor of the CICC Library logo is the same as the one used in the CICC main menu section. This same graphic concept applies to the Gallery and Theater section.

The prerequisite to do the library searching or acquire the library resources is being a library member. So when you click on the library access button, the system will ask you whether you are a library member or not. If you are, you can access the searching part by typing in your name; otherwise, you can use this system to apply for your library card. After the system makes sure you are already a library member, the searching button will appear. You can click on it to reach the searching menu card (Figure 8).

The CICC Library provides three different methods to assist you in searching the library resources. They are by title, by subject and by language. Clicking on one of the buttons, the default scripts will create a list of that topic for you by sorting all the data cards. After you choose one field from the list, the computer will generate a virtual stack for you and take you to the first card of that field. You then can go through the detail information of each resource showing on each data card (Figure 9). According to your need, you can either use one of the methods to find the resources you are looking for, or use the browsing button on the same card to browse through all the resources. When you find the book or material you want, you can use

Figure 6, The CICC Main Menu Card

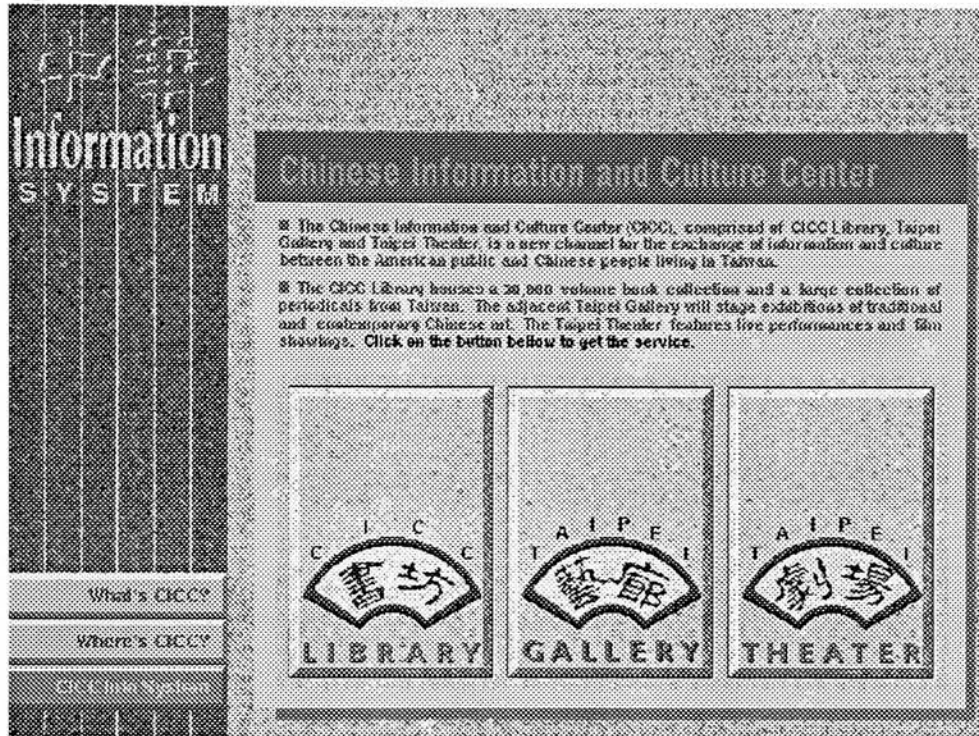


Figure 7, The CICC Library Greeting Screen

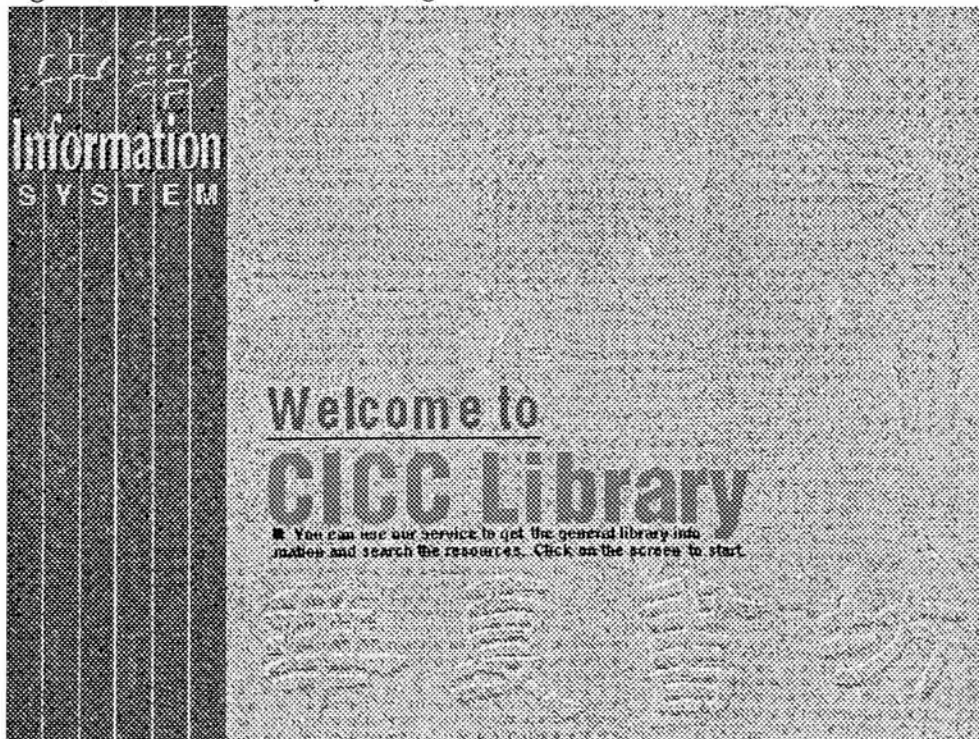


Figure 8, CICC Library Search Menu Card

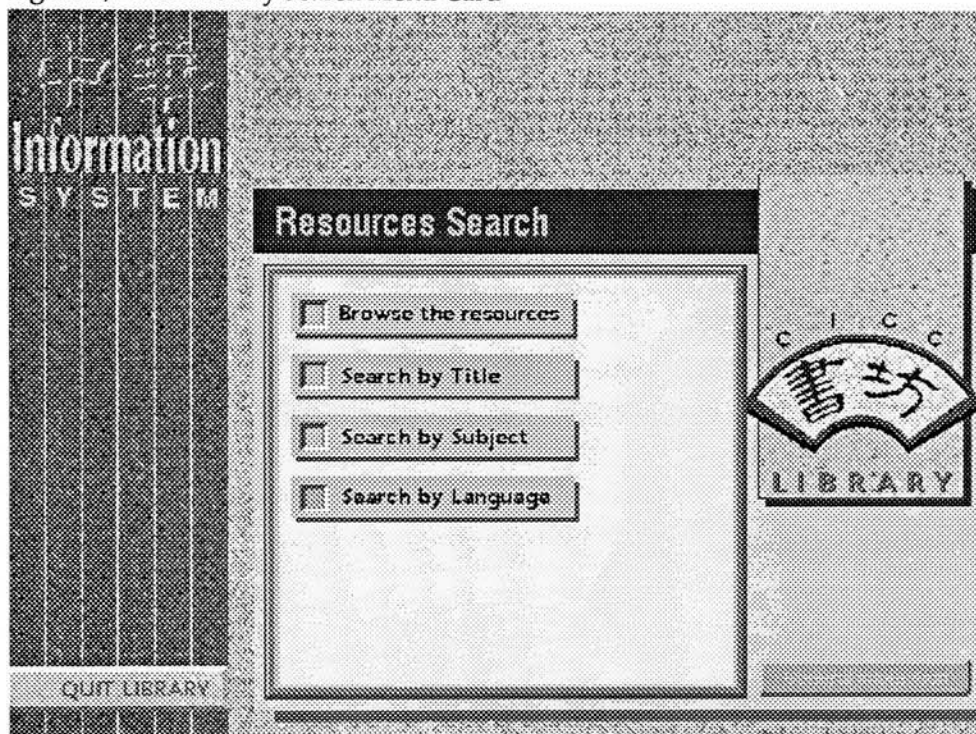
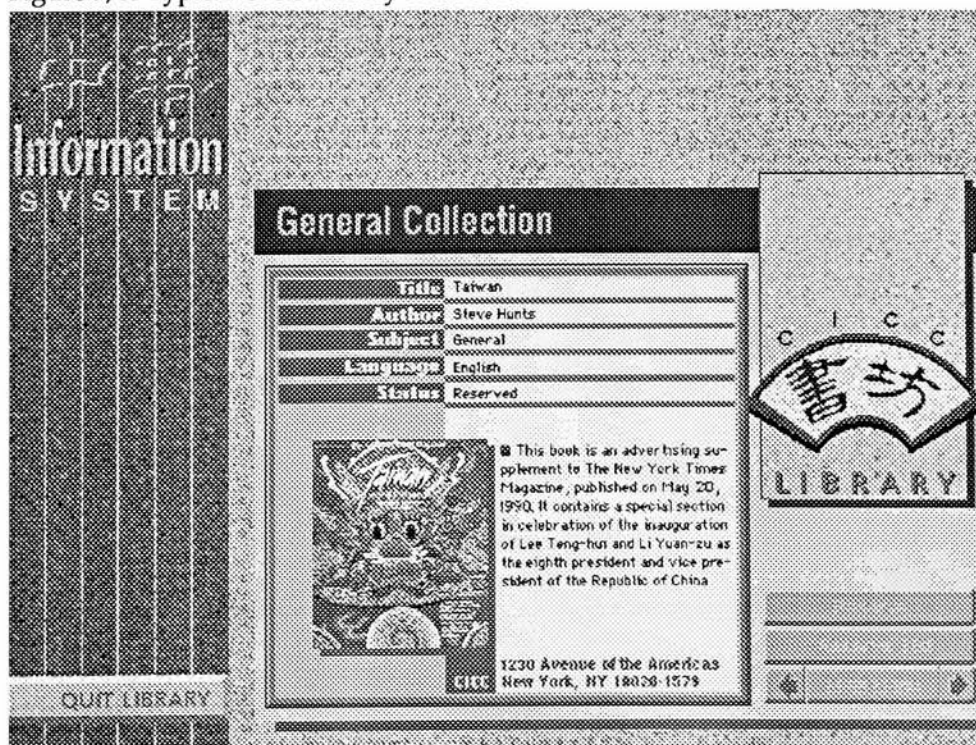


Figure 9, A Typical CICC Library Data Card



the 'reservation' button on the data card to reserve the book, and also use the 'reservation list' button to view the materials you reserve. Those are all the features this section provides to you.

Taipei Gallery

The Taipei Gallery section works just like an electronic billboard, providing the general gallery information and all the gallery's exhibition information. You can use this system to view the coming exhibitions, check the show time and get the general introduction of the exhibition. And for some recommended exhibitions, there will also be the special preview function for you to view representative art pieces in advance.

When you first log onto this section, similar greeting images as the library section will show on the screen. Pressing the mouse button will take you to the general information card (Figure 10). After viewing the gallery's general information, you can click on the 'Coming Exhibition' button to get the brief information of the new exhibitions (Figure 11). Clicking on each exhibition button will take you another data card that contains more detail information (Figure 12). Besides, the 'Special Preview' button will allow you to preview some masterpieces of that exhibition (Figure 13). Any 'General Information' within this section will bring you back to the general information card to view the gallery hours and location.

Figure 10, Taipei Gallery General Information Card

Information SYSTEM

General Information

Location: McGRAW - HILL BUILDING
1221 Avenue of the Americas
Concourse Level 2
New York, NY 10020-1579

Admission Fee: Free

Opening Hours: 10:00 a.m. - 5:00 p.m.
Monday - Saturday

Features:

- The Taipei Gallery exhibits the works of past masters and present Chinese artists who work in traditional and contemporary modes.
- Another facet of the exhibitions in Taipei Gallery is Taiwan's folk art tradition.
- Special exhibits in Taipei Gallery present Chinese-American artists' works. They in some way draw inspiration from Chinese art and culture.

TAIPEI GALLERY

EXHIBITS

QUIT GALLERY

Figure 11, Coming Exhibitions Data Card

Information SYSTEM

Coming Exhibitions

Leather Sculpture Show
By Chiao Lin-Ming
Surprising Use of a Familiar Material
August 14, 1991 - September 24, 1991

Tin Sculpture Exhibition
By Chen Wu-Heng
Expression of Ancient Chinese Craft
October 4, 1991 - November 14, 1991

Soho Art Exhibition
By Chinese Artists
A Joint Exhibition of Artists from SoHo
November 22, 1991 - January 2, 1992

TAIPEI GALLERY

Click on each exhibition to get more information.

QUIT GALLERY

Click on each exhibition to get more information

Figure 12, Detailed Exhibition Data Card


Information
SYSTEM

QUIT GALLERY

Soho Art Exhibition

Hsin Chen, Sung Chin, C.J. Yao, Dennis Huang, Che Chuang, Mark W.H. Chen, Kwong Szeto, James Tsing-fang Chen, Y.J. Cho, Chihong Yang, Deane Mei, Ava Houch, each of whom entered works best representing their own skill. These overseas Chinese artists hold varying degrees of artistic aspiration, and owing to their having arrived in New York at different times and each having undergone the rigors of artistic struggle and the process of recognition or disapproval, each of them displays a different artistic style. In this exhibition, they all had the opportunity to inspect each other's work and learn from each other's personal experiences, as well as to systematically probe the significance of our times in light of what Chinese artists have discovered in New York's trends of artistic thought.

By Chinese Artists
from Soho
Nov 22, 91 - Jan 2, 92



Special Preview

TAIPEI
ART GALLERY
GALLERY

Other Exhibitions
General Information

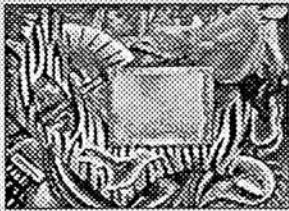
Figure 13, Taipei Gallery Special Preview Card

Information
SYSTEM

QUIT GALLERY

Special Preview

Soho Art Exhibition
October 1991-1992



Title: Game
Size: 121.9 x 152.4cm
Year: 1990
Artist: Mark W.H. Chen

18 out of 18

TAIPEI
ART GALLERY
GALLERY

Other Exhibitions
General Information

Taipei Theater

The last section of this system is the Taipei Theater, which provides all the Taipei Theater's performance information and reservation function. Similar to the searching function of the CICC Library, there are also three different methods the Taipei Theater section provides to assist you finding the performance you are interested in. You can search the performance either by program's name, by category, or by show time (Figure 14). When you click on the either 'Searching by Name' or 'Searching by Category' button, a virtual stack will be created for you, which is similar to the searching buttons in the CICC Library. If you want to search by time, the 'Searching by Show Time' button will provide a list of different time periods. You can select one time period to get the performance schedule (Figure 15). Clicking on the program name, you can go to the data card to get more information (Figure 16).

When finding a performance you are interested in, you can use the reservation button on each data card to reserve the tickets. The reservation process includes clicking the reservation button, selecting a show time, answering the question about the type and amount of tickets you need, and finally completing the reservation form for the payment (Figure 17). When you finish the reservation process, you can click on the 'Quit Theater' button which will bring you back to the CICC main menu section. From here you can access another CICC service.

Figure 14, Taipei Theater Search Menu Card

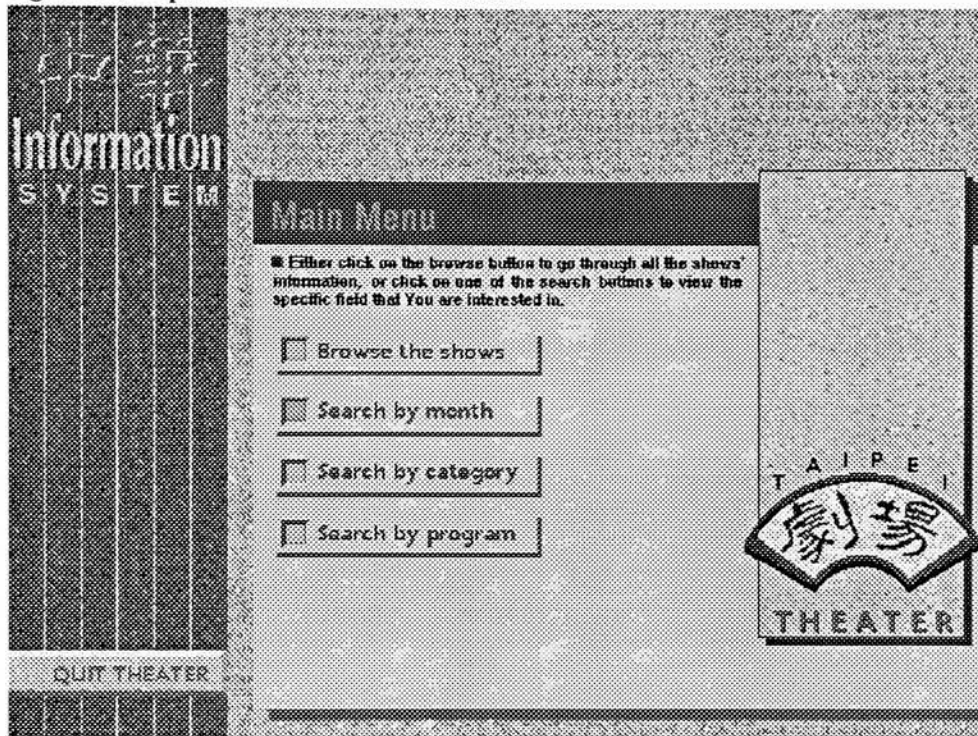


Figure 15, Taipei Theater Performance Schedule Card

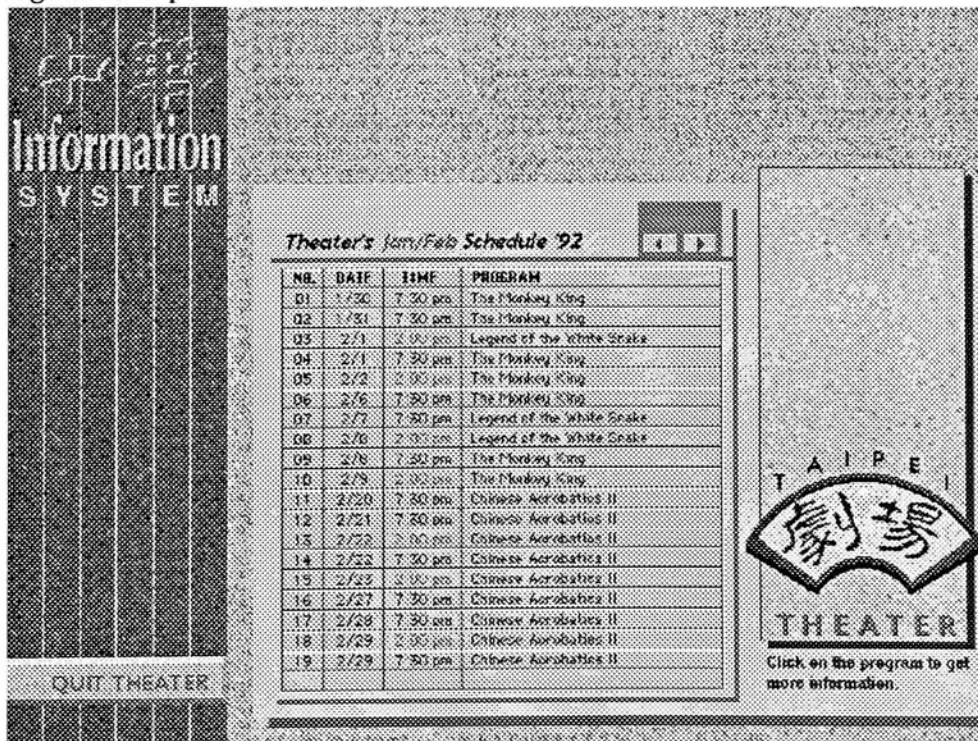


Figure 16, Taipei Theater Program Information Card

Information SYSTEM

String Puppetry

Chinese string puppetry dates back over 2000 years and is the oldest form of Chinese theater. These "marionette" performances have maintained their traditional role in Chinese ritual, but have grown to be appreciated as entertainment. The Hsin Fu Hsuan Puppet Theater is one of the most accomplished string puppetry troupes.

CATEGORY	Puppet
PERFORMER	Hsin Fu Hsuan Puppet Theater
TICKET PRICE	Adult \$8.00, Student & Senior \$3.00
SHOW TIME	Oct 4-5, 7:11 - 7:29 pm

TAIPEI THEATER

QUIT THEATER Reservation

Figure 17, Taipei Theater Reservation Form

Information SYSTEM

Confirmation List

The programs listing below are the shows you reserved. If it is correct, please fill in the reservation form to complete your reservation process, otherwise click the cancel button.

PERFORMANCE	SHOWTIME	TICKET QTY.	
		Std.	Adult
String Puppetry	Oct 5 - 7:30pm	2	-
Chinese Acrobatics I	Aug 15 - 7:30pm	-	4

NAME	Chen, Ming-Lia
PHONE NO.	719-770-9004
ADDRESS	154 Klokoff Drive Brometer, NY 14623
CREDIT CARD	7039 5000 8753 7232
VALID DATE	10/14

TAIPEI THEATER

QUIT THEATER Cancel Done

The Conclusion and Evaluation

The first prototype of the CICC Information System has been done. Considering this is an interactive media project, the user's response becomes a very important factor in evaluating this project. Although there was no formal research or users' evaluation undertaken, I received feedback throughout the thesis show opening and the committee meetings. In addition, I would like to discuss some ideas that have not been implemented due to time limitations. I hope it will be helpful for the next people who want to develop it into a real project.

First of all, I would like to have short opening animations for all of the sections. The content of the animations might be the demonstration of Chinese folk arts, current news or new CICC services. When the user first logs onto this system, an opening animation with traditional Chinese music would make the whole project more interesting and vivid. Moreover, it might help the users to be aware of the new environment they just logged onto.

A help function that appears within the whole project is another consideration. Observing the reaction during the time while they worked with this system, I found that for some new users who were not familiar with this system, it was easy for them to get lost in the system. A help function providing additional instructions may be useful when the users don't know what to do next.

Using QTMovies to replace the picture on each data card of the Taipei Theater section is another idea I propose. This gives the user the chance to preview part of the performance, rather than just see a photograph of the show. It might help the user to make a decision about which performance they are interested in. Besides, the using of new technology can always arouse user's interests.

To extend the content of the introduction section is another important part that should not be ignored. In this prototype, the introduction section only contains some still images and basic information. It might be more interesting to have some short video movies or graphic animations to demonstrate some some specific topics. Learning from video is always easier and faster that from reading. This improvement might make the project more effective.

Although the first try of this project has been completed, there is always lots of room for improvement. Before this prototype could develop into a real project, there must be some technical problems and detail designs to be worked out. But as I was working on the project, I couldn't stop imagining how exciting it would be when this system really works on my computer. Searching the library materials, previewing the gallery's coming exhibition and making a reservation for my favorite Chinese hand puppetry show at home, everything seems so real to me. I could not wait to see all these dreams come true.

Andrew Himes, Craig Ragland. SuperCard. Washington: Microsoft Press, 1990.

Chang Jing-Yu. Republic of China. Taipei: Kwang Hwa Publishing Company, 1987.

Dan Winkler, Scott Kamins. HyperTalk 2.0: The Book. New York City: Vytron Graphics, Inc., 1990.

Shaw Yu-Ming. Chinese Information and Culture Center. This paper presents information about the Chinese Information and Culture Center.

Tony Bove, Cheryl Rhodes. Using Macromind Director. Indiana: Que Corporation, 1990.

Tourism Bureau, Ministry of Communications, Republic of China. Festivals & Folk Arts: Taiwan. Taipei: CT&T Communications, Inc., 1989.

Scripts of Project 'CICC Info System'

1. card graphic 'Intro' of card 'Service Paths' of window 'Main'

```
on mousedown
  set the ink of me to blend
  play "clavSwash"
end mousedown
```

```
on mouseup
  set the ink of me to notSrcOr
  lock screen
  go to cd "intro list" of window "intro" of project "Brief Intro"
  unlock screen with visual effect iris open slow
end mouseup
```

2. card graphic 'Connect' of card 'Service Paths' of window 'Main'

```
on mousedown
  set the ink of me to blend
  play "clavSwash"
end mousedown
```

```
on mouseup
  set the ink of me to notSrcOr
  visual iris open slow
  go to cd "opening" of window "CICC" of project "CICC"
end mouseup
```

3. card graphic 'Quit' of card 'Service Paths' of window 'Main'

```
on mousedown
  set the ink of me to blend
  play "click"
end mousedown
```

```
on mouseup
  set the ink of me to notSrcOr
  answer "Quit CICC Information System?" with "Cancel" or "Yes" at 360,210
  if it is "Cancel" then exit mouseup
  if it is "Yes" then
    domenu "quit"
  end if
end mouseup
```

Scripts of Project 'Brief Intro'

1. card graphic 'Opera' of card 'Intro List' of window 'Brief Intro'

```

on mousedown
  set the ink of me to blend
  play "clavSwash"
end mousedown

on mouseup
  set the ink of me to notSrcOr
  lock screen
  go to cd "Opera"
  unlock screen with visual effect iris open slow
end mouseup

```

2. bkgn graphic 'Main Menu' of bkgn 'Brief Intro.bkgn' of window 'Brief Intro'

```

on mousedown
  set the ink of me to blend
  play "synDrum"
end mousedown

on mouseup
  set the ink of me to addMin
  lock screen
  go to cd "intro list"
  unlock screen with visual effect iris close slow
end mouseup

```

3. bkgn graphic 'Quit Intro' of bkgn 'Brief Intro.bkgn' of window 'Brief Intro'

```

on mousedown
  set the ink of me to blend
  play "click"
end mousedown

on mouseup
  set the ink of me to notSrcOr
  answer "Quit the Introduction?" with "Cancel" or "Yes" at 360,210
  if it is "Cancel" then exit mouseup
  if it is "Yes" then
    lock screen
    go to cd "service paths" of wd "main" of project "CICC info System"
    unlock screen with visual iris close slow
  end if
end mouseup

```

Scripts of Project 'CICC'

1. card 'Map of CICC' of window 'CICC'

```

on opencard
  wait 15
  repeat 5 times
    wait 8
    set the ink of cd grc "hilited1" to blend
    set the ink of cd grc "hilited2" to blend
    wait 8
    set the ink of cd grc "hilited1" to notSrcOr
    set the ink of cd grc "hilited2" to notSrcOr
  end repeat
  wait 30
  lock screen
  hide cd grc "hide"
  unlock screen with visual dissolve slow
end opencard

```

```

on closecard
  show cd grc "hide"
end closecard

```

2. card graphic 'Library' of card 'Choices' of window 'CICC'

```

on mousedown
  set the ink of me to blend
  play "clavSwash"
end mousedown

on mouseup
  set the ink of me to notSrcOr
  lock screen
  go to cd 1 of wd 1 of project "CICC Library"
  unlock screen with visual effect iris open slow
end mouseup

```

Scripts of Project 'CICC Library'

1. project 'CICC Library'

```

on startUp
  editor
end startUp

on openproject
  hide menubar
  global reservelist, namecount, confirmname, reservecount
  put empty into reservelist

```



```

    put 0 into namecount
    put 0 into reservecount
    put empty into confirmname
end openproject

```

2. card graphic 'Library Access' of card 'General Info' of window

'Opening'

```

on mousedown
    set the ink of me to blend
    play "Harp"
end mousedown

```

```

on mouseup
    global confirmname
    set the ink of me to addMin
    answer "Are you a CICC library member?" with "No" or "Yes" at 325,195
    if it is "No" then
        lock screen
        show cd grc "apply library card"
        show cd grc "apply button"
        unlock screen with visual venetian blinds very fast
    else
        ask "Please type in your name first." at 325,195
        if it is not empty then
            put it into confirmname
            lock screen
            show cd grc "search button"
            unlock screen with visual dissolve
            answer "Click SEARCH RESOURCES button to continue." with →
            "O.K" at 325,195
            wait 10
            repeat 3 times
                play "click"
                set the ink of cd grc "Search Resources" to blend
                set the ink of cd grc "Search Resources" to notSrcOr
            end repeat
        else
            exit mouseup
        end if
    end if
end mouseup

```

3. card graphic 'Apply Button' of card 'General Info' of window

'Opening'

```

on mousedown
    set the ink of me to blend

```

```

play "Gong"
end mousedown

```

```

on mouseup
  set the ink of me to addMin
  lock screen
  hide cd grc "apply library card"
  hide cd grc "apply button"
  go to cd "Application Form"
  unlock screen with visual wipe right slow
end mouseup

```

4. card graphic 'Done' of card 'Application Form' of window 'Opening'

```

on mousedown
  set the ink of me to blend
end mousedown

```

```

on mouseup
  global counter, confirmname
  set the ink of me to addMin
  if counter = 1 then
    play "synDrum"
    put cd fld "name" into confirmname
    lock screen
    hide cd grc "confirmation"
    unlock screen with visual dissolve
    visual effect wipe left slow
    go to cd "general Info"
    lock screen
    show cd grc "search button"
    unlock screen with visual dissolve
    repeat 3 times
      play "click"
      set the ink of cd grc "Search Resources" to blend
      set the ink of cd grc "Search Resources" to notSrcOr
    end repeat
  else
    select empty
    if cd fld "name" is empty or cd fld "SS#" is empty or cd fld "birthday" is →
      empty or cd fld "address" is empty or cd fld "phone no." is empty then
      play "hornswash"
      answer "Please fill the form completely." with "Cancel" or "O.K." at →
        325,195
      if it is "cancel" then
        lock screen
        go to cd "general Info"
        unlock screen with visual wipe left
      else

```

```

    select before line 1 of cd fld "Name"
  end if
else
  play "clavswash"
  lock screen
  show cd grc "confirmation"
  unlock screen with visual venetian blinds very fast
  add 1 to counter
end if
end if
end mouseup

```

5. card graphic 'Confirmation' of card 'Application Form' of window 'Opening'

```

on mouseup
  play "synDrum"
  global confirmname
  lock screen
  hide cd grc "confirmation"
  unlock screen with visual dissolve slow
  put cd fld "name" into confirmname
  visual effect wipe left slow
  go to cd "general Info"
  lock screen
  show cd grc "search button"
  unlock screen with visual dissolve
  repeat 3 times
    play "click"
    set the ink of cd grc "Search Resources" to blend
    set the ink of cd grc "Search Resources" to notSrcOr
  end repeat
end mouseup

```

6. card graphic 'Browse' of card 'Search List' of window 'Opening'

```

on mousedown
  set the ink of me to blend
  play "gong"
end mousedown

on mouseup
  global wholestack
  put true into wholestack
  set the ink of me to notSrcOr
  lock screen
  go to card 1 of window "Data"
  unlock screen with visual effect wipe left slow
end mouseup

```

7. card graphic 'Subject' of card 'Search List' of window 'Opening'

```

on mousedown
  set the ink of me to blend
  play "gong"
end mousedown

on mouseUp
  put empty into cd fld subjectlist
  set cursor to watch
  set lockscreen to true
  go to cd 1 of wd "Data"
  sort by fld "Subject"
  put field "Subject" into currentSubject
  put currentSubject&return into Subjectlist
  put short id of this card&return into idlist
  repeat number of cards -1
    go next
    if currentSubject is field "Subject" then
      put short id of this card &return after idlist
    else
      put field "Subject"&return after Subjectlist
      put field "Subject" into currentSubject
      put ","& short id of this card &return after idlist
    end if
  end repeat
  go cd "search list" of wd "opening"
  set lockscreen to false
  lock screen
  show cd fld "Subjectlist"
  unlock screen with visual effect wipe right slow
  set the ink of me to notSrcOr
  put subjectlist into cd field "Subjectlist"
  put idlist into cd field "idlist"
  set the cursor to "hand"
end mouseUp

```

8. card field 'SubjectList' of card 'Search List' of window 'Opening'

```

on clicklist
  play "click"
  global thelist, index, wholestack
  put the hilitedLines of cd fld "Subjectlist" into lineNumber
  put item lineNumber of cd field idlist into thelist
  put 1 into index
  put false into wholestack
  put last word of line index of theList into cardid
  visual effect wipe left
  go to card id cardid of wd "Data Cards" --show the card
end clicklist

```

9. bkgnd graphic 'Next' of bkgnd 'Data Cards.bkgd' of window 'Data Cards'

```

on mousedown
  set the ink of me to blend
end mousedown

on mouseUp
  global index, thelist, wholestack
  set the ink of me to notSrcOr
  if wholestack is true then
    lock screen
    go to next card of this bg
    unlock screen with visual effect wipe right slow
  else --we have a customized database
    if index < the number of lines in thelist then
      add 1 to index
      put last word of line index of theList into cardid
      lock screen
      go to card id cardid
      unlock screen with visual effect wipe right slow
    else
      beep
      answer "There is no more item in this search area." with "O.K." at —
      325,195
    end if
  end if
end mouseUp

```

10. bkgnd graphic 'Reserve' of bkgnd 'Data Cards.bkgd' of window 'Data Cards'

```

on mousedown
  set the ink of me to blend
end mousedown

on mouseup
  global reservelist, namecount, reservecount, confirmname
  set the ink of me to notSrcOr
  add 1 to namecount
  if reservecount > 2 then
    beep
    answer "You can only reserve up to 3 books!" with "O.K." at 325,195
    exit mouseup
  end if
  if namecount = 1 then
    play "Harp"
    answer "Remember! You can reserve up to 3 books." with "O.K." at —
    325,195
  end if
end mouseup

```

```

end if
if bg fld "Status" contains "available" then
  play "clavswash"
  answer "Do you want to reserve this book?" with "Cancel" or "Yes" at 325,195
  if it is "yes" then
    put "Reserved" into bg fld "status"
    play "gong"
    answer "Please pick up this book within two days." with "O.K." at 325,195
    put bg fld "title" & return after reserelist
    add 1 to reservecount
  end if
else
  play "syndrum"
  answer "This book is not available right now." with "O.K." at 325,195
  play "hornswash"
  answer "Do you want your name on the waiting list?" with "Cancel" or "Yes" at 325,195
  if it is "Yes" then
    play "gong"
    answer "We'll inform you when the book is available" with "O.K." at 325,195
  end if
end if
end mouseup

```

11. bkgnd graphic 'Reserve List' of bkgnd 'Data Cards.bkgd' of window 'Data Cards'

```

on mousedown
  set the ink of me to blend
end mousedown

on mouseup
  set the ink of me to notSrcOr
  global reserelist, confirmname
  set the ink of me to notSrcOr
  put "Dear" && confirmname & ":" & return & return &
  "We'll hold the books listing" && "bellow for you for two days."
  & return &"-----"
  & return & reserelist into bg fld "reserelist"
  show bg fld "reserelist"
  show bg grc "DoneGrc"
  show bg grc "DoneBtn"
end mouseup

```

Scripts of Project 'Taipei Gallery'

1. card graphic 'Coming Exhibits' of cd 'General Info' of window

'Gallery Info'

```
on mousedown
  set the ink of me to blend
  play "harp"
end mousedown
```

```
on mouseup
  set the ink of me to notSrcOr
  lock screen
  go to cd "coming exhibitions"
  unlock screen with visual effect wipe left slow
end mouseup
```

2. card graphic 'Soho Art' of cd 'Coming Exhibitions' of window

'Gallery Info'

```
on mousedown
  set the ink of me to blend
  play "clavSwash"
end mousedown
```

```
on mouseup
  set the ink of me to notSrcOr
  lock screen
  go to cd "soho.1"
  unlock screen with visual effect wipe left slow
end mouseup
```

3. card graphic 'Special Preview' of cd 'Soho.2' of window 'Gallery Info'

```
on mousedown
  set the ink of me to blend
  play "Gong"
end mousedown
```

```
on mouseup
  set the ink of me to addMin
  lock screen
  go to cd "Special preview.1"
  unlock screen with visual effect wipe left slow
end mouseup
```

Scripts of Project 'Taipei Theater'

1. project 'Taipei Theater'

```

on startUp
  editor
end startUp

on openproject
  global theDate, theProgram, Std.Quantity, AdultQuantity
  put empty into theDate
  put empty into theProgram
  put empty into cd fld "Std.Quantity" of cd "reservation"
  put empty into cd fld "AdultQuantity" of cd "reservation"
end openproject

```

2. card graphic 'Month' of cd 'Search' of window 'List'

```

on mousedown
  set the ink of me to blend
  play "gong"
end mousedown

on mouseup
  lock screen
  show cd fld "Schedule"
  unlock screen with visual effect wipe right slow
  set the ink of me to notSrcOr
end mouseup

```

3. card field 'Schedule' of cd 'Search' of window 'List'

```

on clicklist
  global wholestack
  put true into wholestack
  put the hilitedLines of cd fld "Schedule" into lineNumber
  lock screen
  go to cd lineNumber of wd "schedule"
  unlock screen with visual iris open slow
end clicklist

```

4. card graphic 'Category' of cd 'Search' of window 'List'

```

on mousedown
  set the ink of me to blend
  play "gong"
end mousedown

on mouseUp
  put empty into cd fld categorylist
  set cursor to watch

```



```

set lockscreen to true
go to cd 1 of wd "Data Cards"
sort by fld "category"
put field "category" into currentcategory
put currentcategory&return into categorylist
put short id of this card&return into idlist
repeat number of cards -1
  go next
  if currentcategory is field "category" then
    put short id of this card &return after idlist
  else
    put field "category"&return after categorylist
    put field "category" into currentcategory
    put ", "& short id of this card &return after idlist
  end if
end repeat
go cd "search" of wd "list"
set lockscreen to false
lock screen
show cd fld "categorylist"
unlock screen with visual effect wipe right slow
set the ink of me to notSrcOr
put categorylist into cd field "categorylist"
put idlist into cd field "idlist"
set the cursor to "hand"
end mouseUp

```

5. card field 'CategoryList' of cd 'Search' of window 'List'

```

on clicklist
  global thelist, index, wholestack
  put the hilitedLines of cd fld "categorylist" into lineNumber
  put item lineNumber of cd field idlist into thelist
  put 1 into index
  put false into wholestack
  put last word of line index of theList into cardid
  visual effect wipe left
  go to card id cardid of wd "Data Cards" --show the card
end clicklist

```

6. window 'Data Cards'

```

on ReserveTicket
  global popOK, theDate, theProgram, Std.Quantity, AdultQuantity
  wait 10
  answer "What kind of tickets do you want?" with "Cancel" or "Student" —
  or "Adult" at 325,195
  if it is "Student" then
    wait 10

```

```

ask "how many tickets do you want?" at 325,195
if it is not empty then
  put it & return after Std.Quantity
  put "-" & return after AdultQuantity
end if
else if it is "Adult" then
  wait 10
  ask "how many tickets do you want?" at 325,195
  if it is not empty then
    put it & return after AdultQuantity
    put "-" & return after Std.Quantity
  end if
else
  exit ReserveTicket
end if
wait 10
answer "Do you want to make other reservations?" with "No" or "Yes" at →
325,195
set cursor to "watch"
if it is "No" then
  push card
  lock screen
  go to cd "reservation" of wd "List"
  unlock screen with visual wipe left slow
end if
set cursor to "hand"
end ReserveTicket

```

7. bkgnd graphic 'Reservation' of bkgnd 'Data Cards.bkgd' of window 'Data Cards'

```

on mousedown
  set the ink of me to addOver
  play "Gong"
end mousedown

on mouseup
  set the ink of me to addMin
  answer "Do you want to make a reservation?" with "Cancel" or "Yes" at →
325,195
if it is "Yes" then
  play "gong"
  answer "Click on SHOW TIME button to select the time." with →
"Cancel" or "O.K." at 325,195
if it is "O.K." then
  wait 10
  repeat 3 times
    play "click"
  end repeat
end if
end mouseup

```

```

    wait 3
    set the ink of cd grc "theDate" to blend
    wait 3
    set the ink of cd grc "theDate" to notSrcOr
  end repeat
end if
end if
end mouseup

```

8. card graphic 'theDate' of cd 'Chinese Acrobatics 1' of window 'Data Cards'

```

on mousedown
  set the ink of me to blend
  play "Click"
  global PopOK
  put "false" into PopOK
  popup menu "Acrobatics 1" at 287,340
end mouseDown

on mouseUp
  global PopOK, Std.Quantity, AdultQuantity
  if PopOK = false then
    answer "Hold down mouse to select a show time." with "O.K." at 325,195
    set the ink of me to notSrcOr
  else if PopOK = true then
    set the ink of me to notSrcOr
  end if
end mouseUp

```

9. item 'Aug 15 - 7:30 pm' of menu 'Acrobatics 1' of window 'Data Cards'

```

on itemSelect
  global popOK, theDate, theProgram, Std.Quantity, AdultQuantity
  put true into popOK
  play "click"
  set the ink of cd grc "theDate" to notSrcOr
  get the short name of me
  put it & return after theDate
  put bg fld "program" & return after theProgram
  ReserveTicket
end itemSelect

```

10. card 'Reservation' of window 'List'

```

on opencard
  global theDate, theProgram, Std.Quantity, AdultQuantity
  set the cursor to watch

```

```

put empty into cd fld "name"
put empty into cd fld "phone no."
put empty into cd fld "address"
put empty into cd fld "credit card"
put empty into cd fld "valid date"
put theDate into cd fld "theDate"
put theProgram into cd fld "theProgram"
put Std.Quantity into cd fld "Std.Quantity"
put AdultQuantity into cd fld "AdultQuantity"
set the cursor to hand
select before line 1 of cd fld "name"
end opencard

```

11. card graphic 'Done' of card 'Reservation' of window 'List'

```

on mousedown
  set the ink of me to blend
end mousedown

on mouseup
  global counter, confirname, theDate, theProgram, Std.Quantity, ↵
  AdultQuantity
  set the ink of me to addMin
  if cd fld "name" is empty or cd fld "Phone no." is empty or cd fld ↵
  "address" is empty or cd fld "Credit Card" is empty or cd fld ↵
  "Valid Date" is empty then
    play "hornswash"
    answer "Please fill the form completely." with "Cancel" or "O.K." at ↵
    325,195
    if it is "cancel" then
      play "syndrum"
      answer "Sorry! We can't complete your reservation." with "O.K." at ↵
      325,195
      put empty into theDate
      put empty into theProgram
      put empty into Std.Quantity
      put empty into AdultQuantity
      lock screen
      pop card
      unlock screen with visual wipe right slow
    else
      select before line 1 of cd fld "Name"
    end if
  else
    play "symdrum"
    select empty
    answer "The tickets will be mailed to you in one week." with "O.K." at ↵
    325,195
  end if
end mouseup

```

```
    lock screen
    pop card
    unlock screen with visual wipe right slow
end if
end mouseup
```

12. card graphic 'Cancel' of card 'Reservation' of window 'List'

```
on mousedown
    set the ink of me to blend
    play "synDrum"
end mousedown

on mouseup
    set the ink of me to addMin
    global theDate, theProgram, Std.Quantity, AdultQuantity
    put empty into theDate
    put empty into theProgram
    put empty into Std.Quantity
    put empty into AdultQuantity
    lock screen
    pop card
    unlock screen with visual wipe right slow
end mouseup
```