

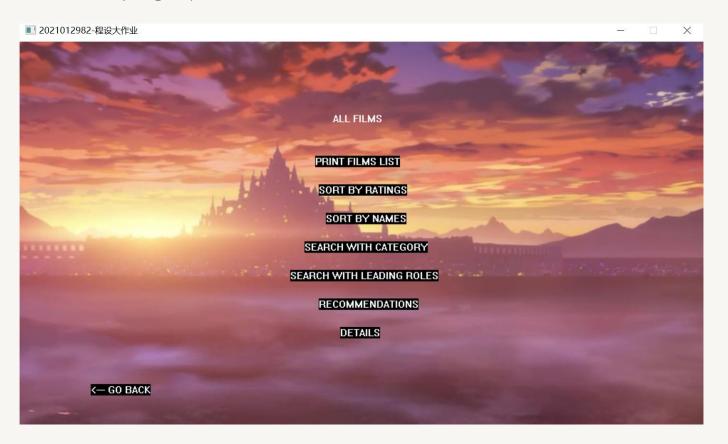
-Cinema Ticketing System

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- 1 Program Structure Overview
- 2. Flowcharts of Various Interfaces and Functions
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1 Integrate the console with the EasyX graphics library to give the program a more user—friendly graphical interface.



- a. Rendering images and displaying text on images
- b. Black text represents buttons, triggering corresponding operations when clicked with the mouse
- c.Flexible navigation between interfaces
- d. Utilizing text boxes to read input

The code implementation of interface navigation:

```
int choose: //Variable to store the case of the clicked button
while(1)
             //Implemented as a while loop to return to this interface after implementing the click function
         choose=page();
                                //Determines the case of the clicked button through the page() function
         int go_back=0;
                                //Variable to mark whether to exit this interface
         switch(choose)
                                //Switch statement to discuss cases
         case 1 : {do_action();break;}
                 //Calls the do_action() function to implement the function identified by this button
         case 2 : {go_back=1;break;}
                                                //Assigns go back to 1 to exit from this interface
         if(go_back==1){break;}
                 //Exits this interface, otherwise stays on this interface waiting for mouse messages
```

2 Backend text, simulating the setup of a small—scale database.



- a. Data information is stored as text files, facilitating backend viewing and editing.
- b. Text information is updated in real—time as modifications are made in the program.
- c. Data is read from text files when needed in functions, used only as local variables, and destroyed after the relevant functions end.

Helper functions for file operations:

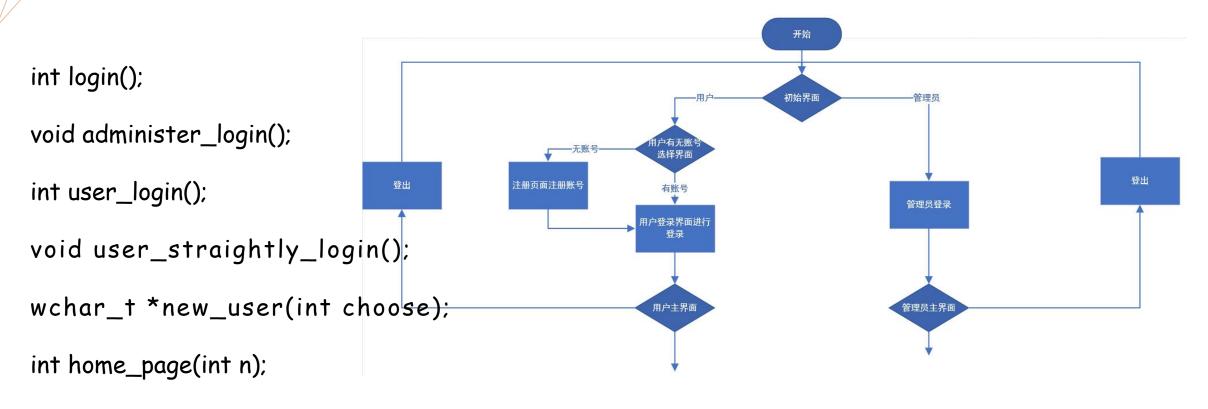
char *cat(wchar_t *file, char package[100]); //Concatenates file names

wchar_t *read_file(char *p); //Reads file contents and stores them in 'w'

Common file operations and their algorithmic approaches:

- a. Appending information to a specific file end Use the "a" mode.
- b. Searching for a specific keyword in a file Read file contents, traverse the beginning characters, and use wescmp for comparison.
- c. Modifying a specific string in a file Read file contents, locate the string to be modified, write characters before the string using the "w" mode to the original file, then write the modified content, and finally use fwprintf(fp, &w[end]); to write the content after the string to the original file.
- d. Deleting a file Use the remove() function.
- e. Renaming a file Read the contents of the original file into an array, then write them into the new named file, and finally delete the original file.

Initial Interface



Administrator Main Interface

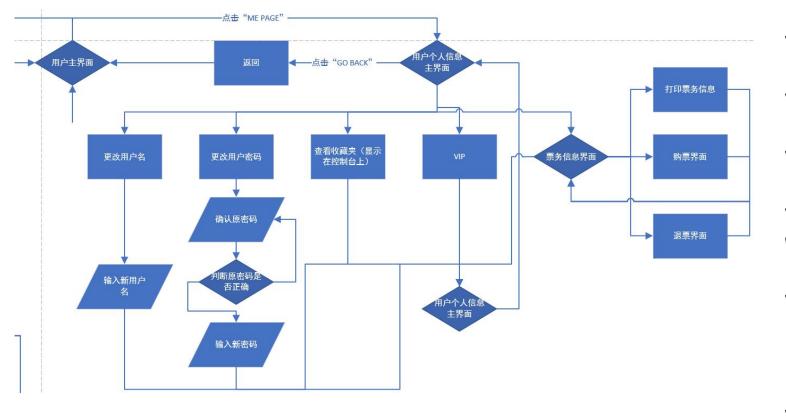
```
void edit_film_info(int n);
wchar_t *edit_details(wchar_t*point, int catt,wchar_t *newinfo);
wchar_t *add_new_film();
                                                                     管理员主界面
int delete_film(wchar_t *name);
void print_user_history();
                                          输入电影编
                                                                                     返回
void set_ticket(wchar_t *point);
int user_info_page();
                                                     输入更改的
                                                              显示电影信息更改
                                          行的更改操
                                                                          管理员确认
void print_user_list();
void film_if_on(wchar_t *name, wchar_t *newinfo);
```

电影海接界面

User Movie Information Interface

```
int user_film_page();
int read_film_list(int judge);
int read_film_detailed_info(wchar_t
*pointer);
int *search_with_cat(int wherecome,
wchar_t *name,int not_print);
int *search_with_roles(int wherecome,
wchar_t *name,int not_print);
void add_to_favorites(wchar_t
*name);
void recommend();
```

User Personal Information Interface



```
int me_page();
void user_change_id();
void user_change_pswd();
void vip();
void print_favorites();
void ticket_page(wchar_t *pointer, int
wherecome);
void print_ticket_info(int wherecome);
int user_ticket_info_page();
void ticket_refund();
```

Program Demonstration and Q&A

THANKS FOR LISTENING!