Criterion E: Evaluation and further extensions
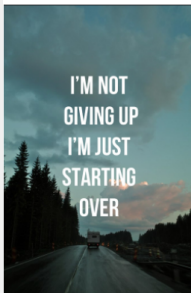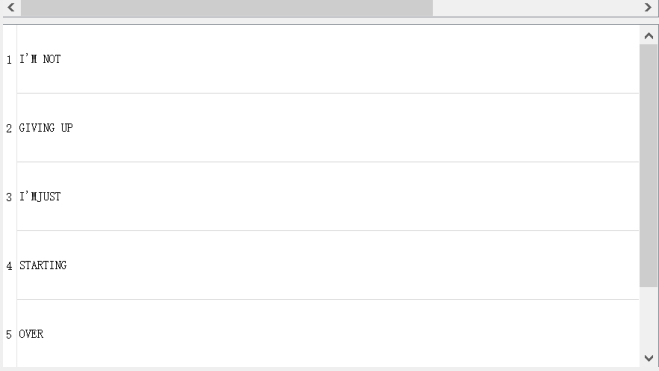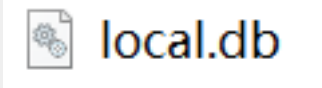
Evaluation based on success criteria
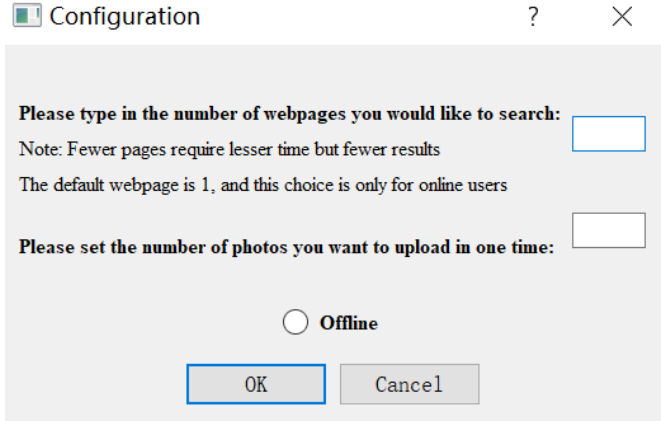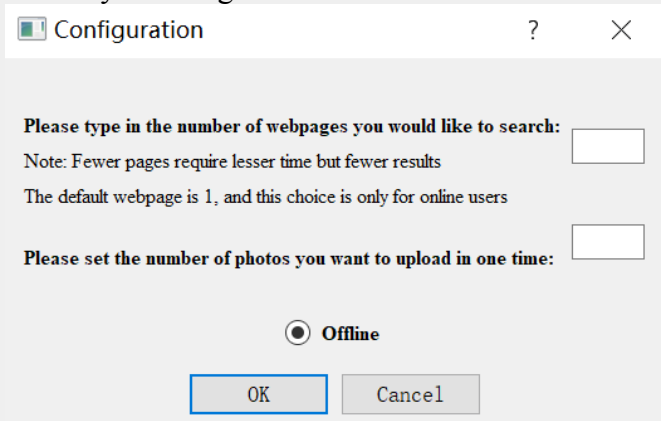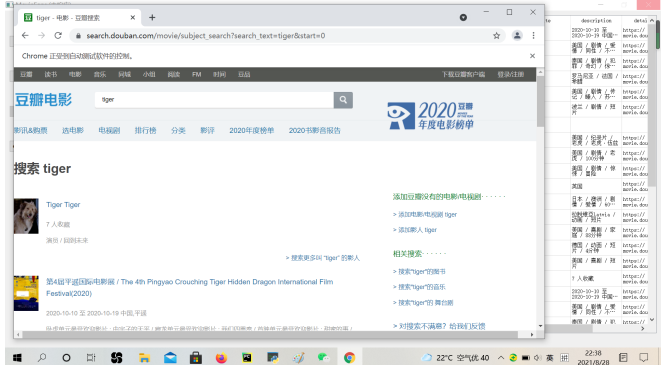
In this part, I will refer to the success criteria to evaluate my application. Overall, my application meets all of my criteria.

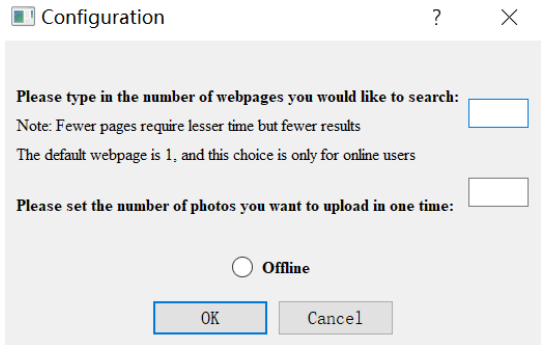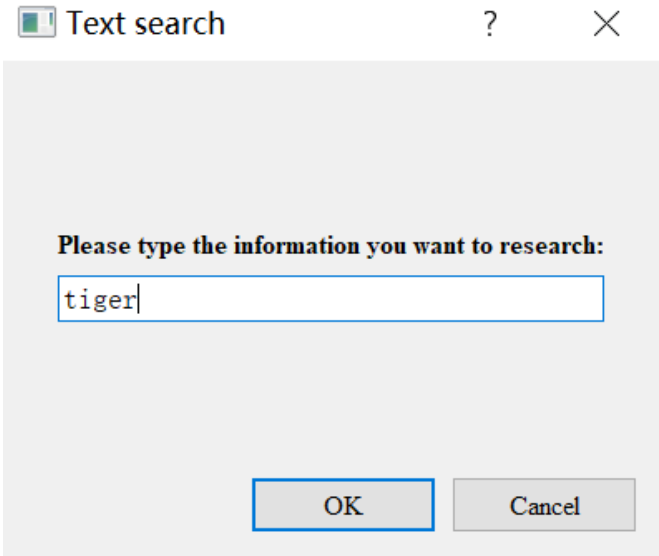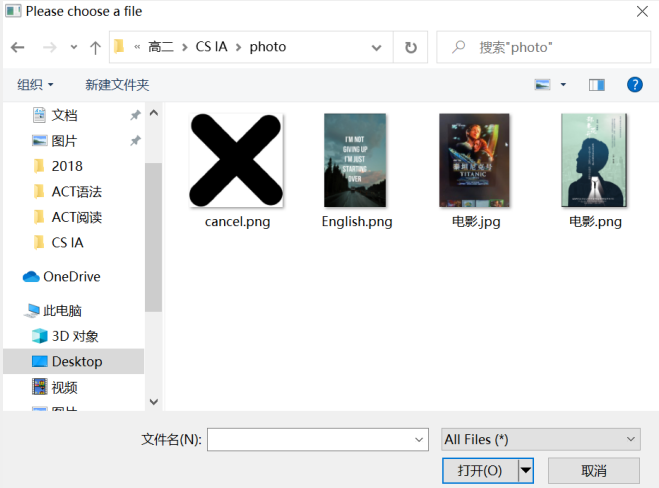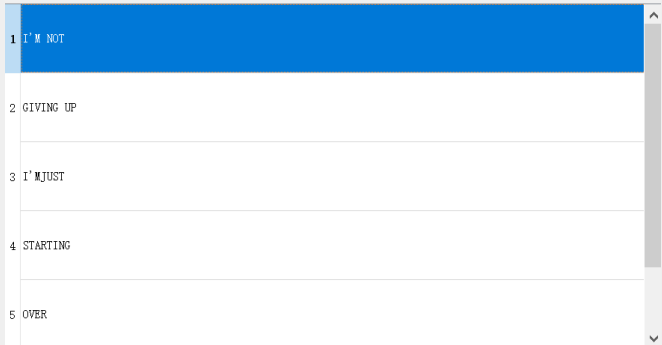| Module	Success criteria	Real results
Function		
	The system allows users to choose their identity	When users open the system, this interface offers them a choice of a way to enter the application.
	The system should encrypt inputted usernames and passwords using Hash	After users pass the registration step, their information will be stored as the following form:
	The system will insert user information into user database	User database file: More details in Appendix E
	The system allows users to change some Configuration	Users can change these following three configurations.
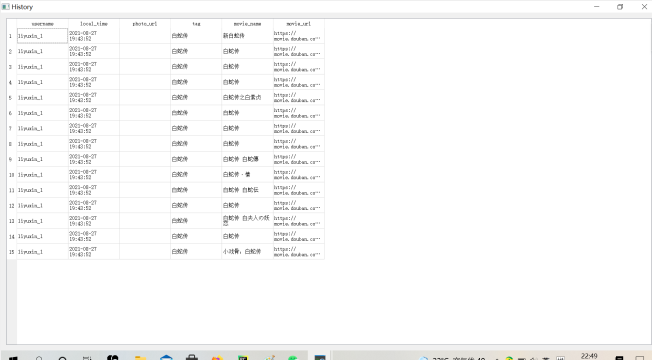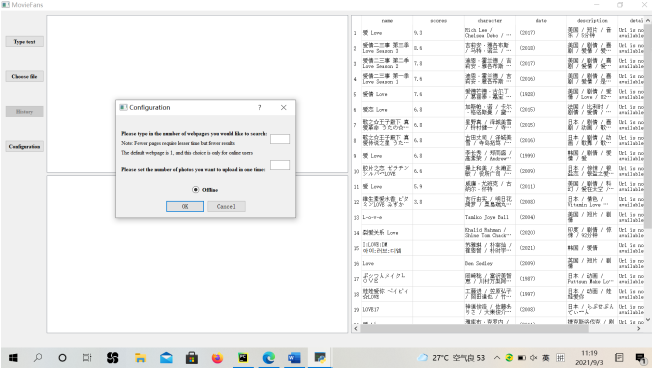
Module	Success criteria	Real results
	The system allows users to input the information they would like to search	**Text search** ? ✕ Please type the information you want to research: tiger OK Cancel
	The system allows users to upload posters	Please choose a file ✕ « 高二 › CS IA › photo 搜索"photo" 组织 ▾ 新建文件夹 文档 图片 2018 ACT语法 ACT阅读 CS IA OneDrive 此电脑 3D 对象 Desktop 视频 图片 cancel.png English.png 电影.jpg 电影.png 文件名(N): All Files (*) 打开(O) 取消
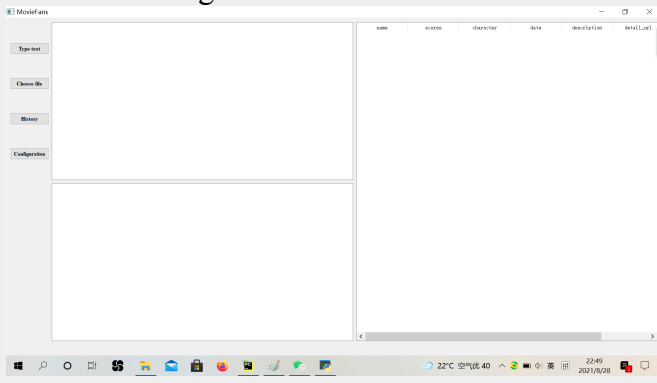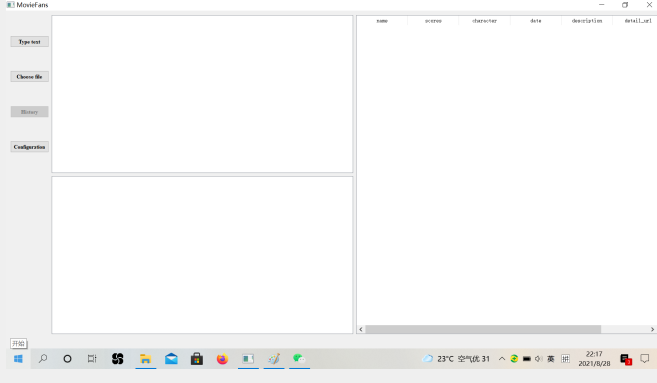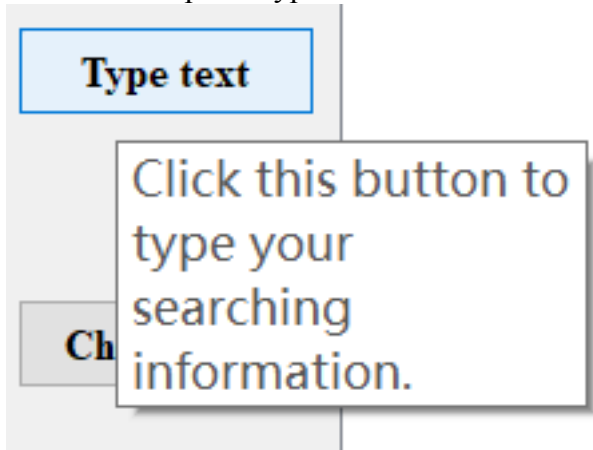
Module	Success criteria	Real results
	The system offers a translation between posters and text contents	The uploaded poster: The translated word results: `[{'words': "I'M NOT"}, {'words': 'GIVING UP'}, {'words': "I'MJUST"}, {'words': 'STARTING'}, {'words': 'OVER'}]`

Module	Success criteria	Real results
	The system can display the posters users chose to be searched + it will divide word contents extracted from posters into tags	Show posters & tags:
	The system will be able to acquire movie lists from Douban Movie by Crawler	Get movie lists from Douban Movie website:
	The system will insert movie lists into local database	Local database file: More details in Appendix E

Module	Success criteria	Real results
	The system will display searching results based on users' preference	Searching results sorted by scores:
	The system will be able to store and display searching histories	History database file: More details in Appendix E Show history searchings:
User		
	The system offers Registration interface	Show registration interface:
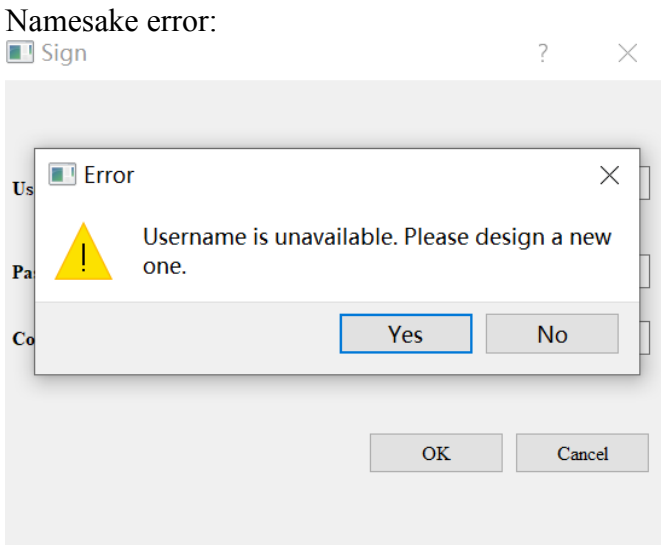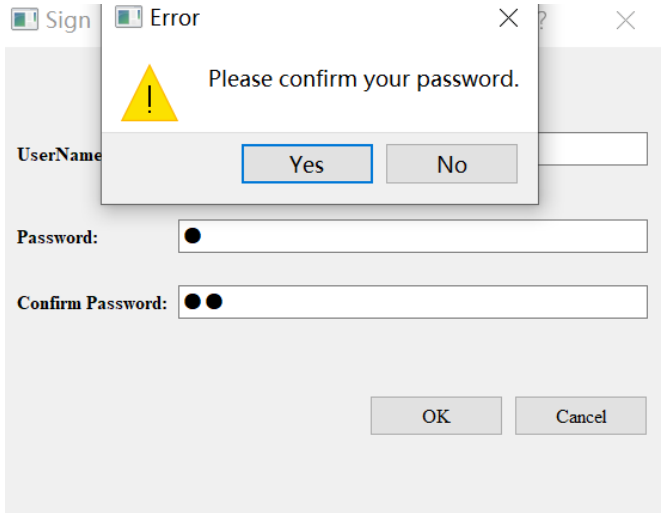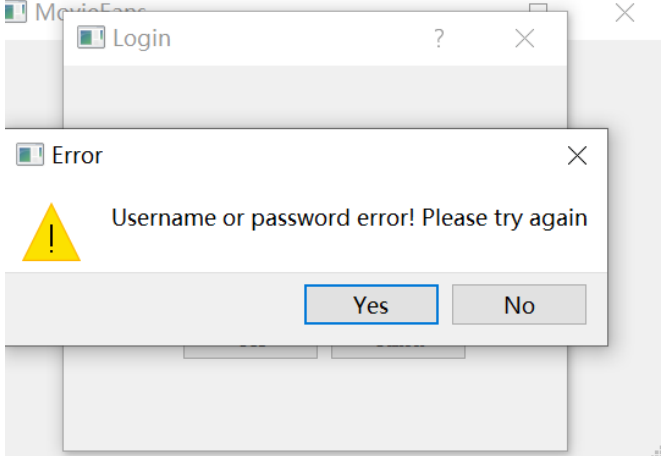
Module	Success criteria	Real results
	Users can set the configurations to change the number of displayed results and the number of photos uploaded in once	When users click 'configuration button', show configuration interface:
	The system allows users to choose whether they are in online or offline condition	The way to change into offline condition:
	For online users, show crawler interface	When users are in online condition, the system will do crawler. Crawler interface will be shown:
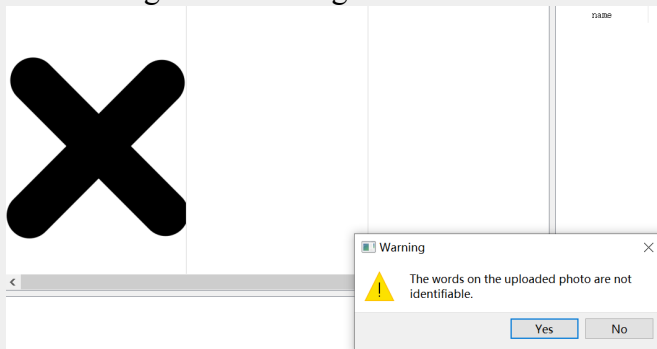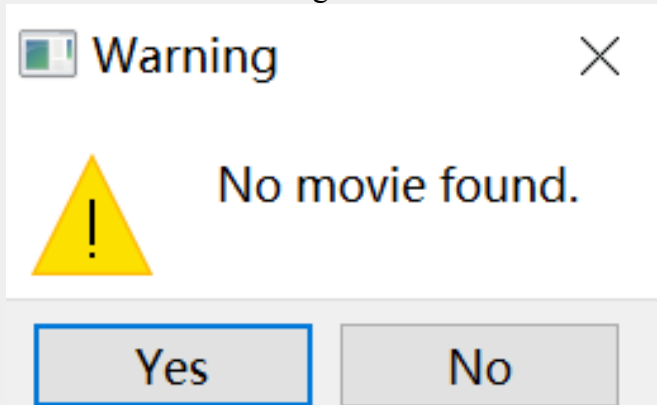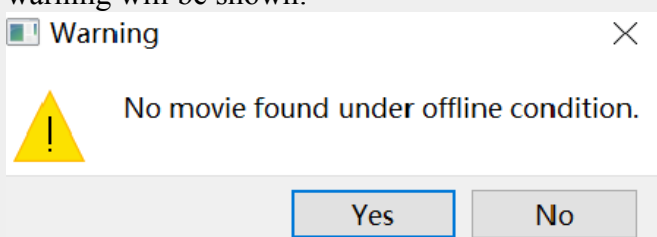
Module	Success criteria	Real results
	Users can click on 'tags' to certify the needed information on posters	Click tags: 1 I'M NOT 2 GIVING UP 3 I'M JUST 4 STARTING 5 OVER
	Users can click on the hyperlinks to get other information about their interested movies and watch it	Click a hyperlink: **detail_url** https://movie.douban.co··· m/subject/1292792/ https://movie.douban.co··· https://movie.douban.co··· https://movie.douban.co··· https://movie.douban.co··· Results after clicking a hyperlink: 第4届平遥国际电影展 The 4th Pingyao Crouching Tiger Hidden Dragon International Film Festival (2020)

Module	Success criteria	Real results
	For registered users, they can see using histories	When users click 'history' button, show history searchings:
	The system offers movie search from local database for offline users	Under offline condition, users will not see Crawler interface. All movie lists will be searched from database.

Module	Success criteria	Real results
Interface	**A menu bar illustrating different functions is available at the left hand side**	Interface for registered users: Interface for unregistered users: 'history' menu bar is disabled:
	Guiding information will be shown once users' mice are on the functioning buttons	On-screen help for 'type text' button:

Module	Success criteria	Real results
	If users successfully register their accounts, a verification will be shown	Successful registration:

Module	Success criteria	Real results
	If users type in invalid information or there are not any movie results found, error verifications will be shown	Namesake error: Password confirmation error: Login error:

Namesake error:

Sign   ?   ✕

Error   ✕

⚠ Username is unavailable. Please design a new one.

Yes   No

OK   Cancel

Password confirmation error:

Sign   Error   ✕ ?   ✕

⚠ Please confirm your password.

Yes   No

UserName

Password: ●

Confirm Password: ● ●

OK   Cancel

Login error:

MovieFans   ✕

Login   ?   ✕

Error   ✕

⚠ Username or password error! Please try again

Yes   No

Module	Success criteria	Real results
		Photo recognition warning: If the information inputted by online users cannot access to a movie from Douban Movie, the following interface will be shown: No movie found warning: If users are in offline condition and their inputs cannot be found in local database, the following warning will be shown:

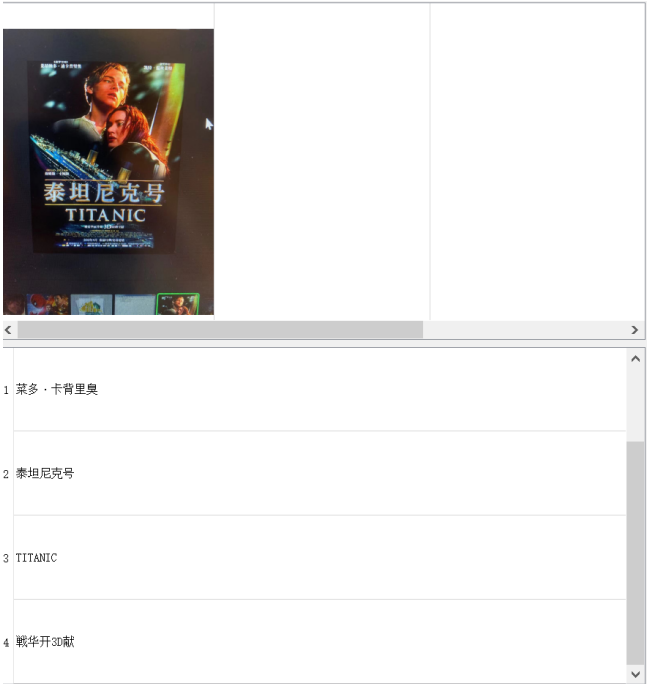However, the 'photo recognition' function has some limitations:

Figure 1: Vague recognition

As Figure 1 illustrates, if the uploaded poster contains vague text contents(either caused by pixels or word sizes), the generated tags might not reflect all word contents.
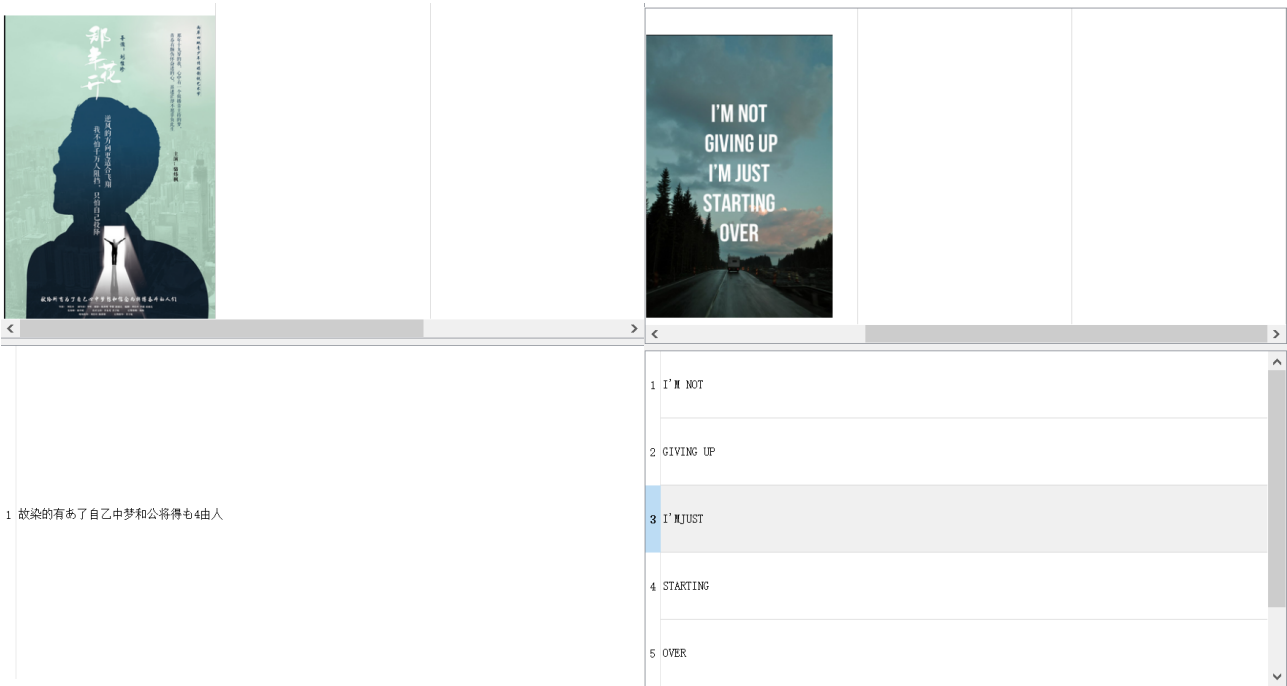

Figure 2、3: Wrong recognition

As Figures 2 and 3 show, if the word contents are cursives or vertical writing or the spaces between words are small, the system might have wrong recognition.

The above illustrations are under the condition when the system operates properly, but several unusual conditions might happen, and the solutions to these are mentioned in Appendix F.

Client's feedback

After having the final interview(Appendix C) with my client, I get her feedback on my product as following:

Overall she is satisfied with my application. She thinks my system is user-friendly and easy to use. Also, she mentions that the verifications and on-screen help are cool. Besides, the efficiency to get movie lists from the Douban Movie website is great.

However, several improvements could be achieved in the future. At this stage, user passwords are hidden, but my client prefers to have an option to show passwords after/while users are typing to help users check their inputs. Also, she would like to change the interfaces from user sides to increase aesthetic value. In addition, it would be better to add a 'bookmark' button, especially for offline users to reserve their preferences.

Possible further extensions

Referred to the system errors and client feedback, my product could be improved in following ways.

Current limitations/ need of improvements	Alternatives/ improvements	Long-term/short-term	Remarks
API_Photo recognition	Search and use more modules in Baidu API or find another API tool to enhance the ability of photo recognition.	Short-term resolution	
Offline users cannot save their records	Add a 'bookmark' button to record offline users' histories	Short-term resolution	Client suggestion
All histories are stored	Add a function to offer users a choice of the preservation time of historical records.	Short-term resolution	
Sort and display movies by their scores	The current sorting rationale was an agreement with my client; however, to promote the application in a wider audiences, the further version could provide a choice for users to decide their sorting preferences.	Short-term resolution	
Current limitations/ need of improvements	**Alternatives/ improvements**	**Long-term/short-term**	
Passwords are hidden when users input	Have an option for users to reveal their passwords in order to avoid typing mistakes	Long-term resolution because further designs and supports might be needed	Client suggestion
Fixed interface with less aesthetic value	Make custom interface for users to DIY	Long-term resolution because other interface design systems might be needed	Client suggestion

Current limitations/ need of improvements	Alternatives/ improvements	Long-term/short-term	
On-screen help pop up ever time	Since function buttons of my application are relatively simple to use, the on-screen help might only be helpful for first-time users. Because of this, an icon to close the help might be useful.	Long-term resolution because Qt-and-Python might not achieve this, so other platforms or exploration are needed.	

Upload photo/input text->Output movie lists	For the further extensions, when users input their needs into the system, possibly the outputs will have wider expressions:
	  - Upload posters and output relevant posters
	  - Input texts and output posters
	  - …
		Long-term resolution because extended designs are needed.	

Word Count: 114+135+16 = 265 (Excluding subheadings and tables)