

Movie management system

Project for Software Engineering Course

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Abstract—As an entertainment, so many of us like watching movie. There are so many movies and movie systems on the internet. But so far, there is not a convenient movie system where we can integrate movies. We need a system which can make us easily to choose and manage the movies. And also this system can provide us many other functions about movies. This article will describe the project we do and the system we design. This is a perfect and convenient movie management system.

Index Terms—movie, management, integrate, convenient, system

I. INTRODUCTION

Nowadays, with the growing cultural needs of people, movies are much more popular in our life. There are so many movies on the internet. As a result, people sometimes don't know how to choose movies. In order to integrate some good movies to users, also to manage movies well, we plan to build a strong and convenient movie management system.

This essay will introduce this system and sketch how to implement it.

II. EXISTING WORK

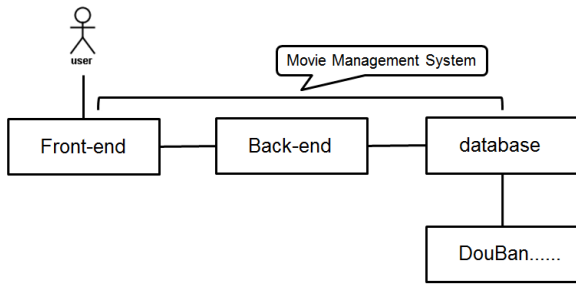
We can see lots of movie websites when we surfing the internet. The picture followed is one of the traditional movie websites. All of websites show movies for users. Maybe they can also give some other information about the movies. On the contrary, all of them are not very easy and convenient to manage. Maybe they have a gaudy interface which can attract us a lot. But the information in these websites is very confused and of course there will be a lot of advertisements. So in one word, the traditional movie websites only can give people information, but not in a users' friendly way. We should consider that the most important disadvantage is that we can't manage the movies conveniently. And this aspect is the most significant feature of our system.

Even though these websites aren't good, we can crawl information from it. This is the way we get our database.

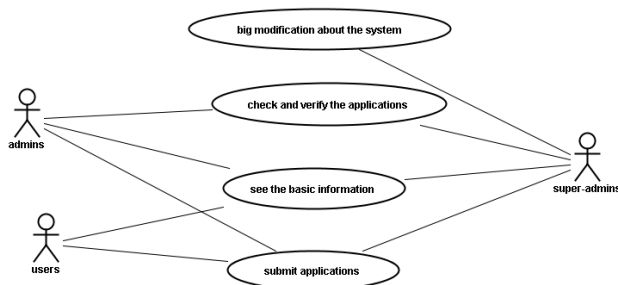
- 1  [肖申克的救赎 / The Shawshank Redemption / 月黑高飞\(港\) / 刺激1995\(台\) \[可播放\]](#)
导演: 弗兰克·德拉邦特 Frank Darabont 主演: 蒂姆·罗宾斯 Tim Robbins /...
1994 / 美国 / 犯罪 剧情
★★★★★ 9.6 764927人评价
“希望让人自由。”
- 2  [这个杀手不太冷 / Léon / 杀手莱昂 / 终极追杀令\(台\) \[可播放\]](#)
导演: 吕克·贝松 Luc Besson 主演: 让·雷诺 Jean Reno / 娜塔莉·波特曼 ...
1994 / 法国 / 剧情 动作 犯罪
★★★★★ 9.4 734932人评价
“怪蜀黍和小萝莉不得不说的故事。”
- 3  [霸王别姬 / 再见，我的妾 / Farewell My Concubine \[可播放\]](#)
导演: 陈凯歌 Kaige Chen 主演: 张国荣 Leslie Cheung / 张丰毅 Fengyi Zha...
1993 / 中国大陆 香港 / 剧情 爱情 同性
★★★★★ 9.5 538895人评价
“风华绝代。”

III. PROPOSED METHODOLOGY

First, because we will establish a movie system, we should have a database which stores many movies. Only in this way, can we show the movie management intuitively and conveniently. As I said before, we can get this information from the traditional movie system. In this essay, we download the information of movies from DouBan movie system. In the elementary work, we crawl only 245 movies from DouBan web which are enough to show a framework of our system. In this step, we crawl information with scrapy and python. When we use database, we need to use Mysql and sqlite3. Mysql can easily be used in scrapy with python for MysqlDB. Sqlite3 can easily be used in the back-end architecture of the web. On the other hand, transformation between them is very easy. So we choose both of them.



Then, we need to consider the most important part of this system. Because we will provide a convenient service for users, we should establish a strong back-end architecture. This architecture will reflect the unique characteristics of our convenient management system. The users are divided into three kinds of users and give them different authorities. They are users, admins and super-admins. As a user, you can see the basic information of all movies in the system, submit applications to ask for adding or modifying some movies. Of course, you can apply for being a user easily. As an admin, you have all rights users have. Besides this, you can check and verify the applications. As a super-admin, you have all rights admins have. Besides, you can make big modification about the system. For example, you can create and delete admins.



At the last of this section, I will introduce the back-end and front-end simply. We use Django framework to build the back-end part. Construct the database by sqlite3 which is from Mysql database. The sqlite3 DB mainly including two classes: Application and Official Movie. One to store the information of applications and another for movies. The database which stores Official Movie is imported with the database which download from DouBan web. On the other hand, we achieve some functions like sorting, selecting, searching and linking by back-end. Then we build the front-end by bootstrap framework, and some javascript from jquery. Because our system think a lot of management, the front-end is not very beautiful and gaudy. But it is users' friendly. The main method we use for communicating from front-end and back-end is ajax.

IV. DATA AND ANALYSIS

In this section, I will introduce the database of OfficialMovie.

First, we should download them from DouBan web. The main part of spider is very common. We copy the XPath of clause which we need to download. For some clauses, XPath is not enough to distinguish them. So we should use regular expression too. The movies of DouBan web are in different pages. We need to write a spider with interlinkage. The most convenient method is writing a regular expression. After this, the spider is entirely automatic.

At here, I will say another thing about the source codes. At the beginning of the project, we don't decision what we must get from DouBan web. As a result, I download information as much as I can. The database is seemingly abundant. But there are much information we don't use at the end. We can manage the database easily. So we don't need to worry about deleting needless information. I also download all the posters which we only use urls at last.

There are several things we should consider when we use scrapy. DouBan web can shield the spiders automatically, so we should modify the parameters in settings.py to change the USER_AGENT. On the other hand, we must store the data in Mysql database which is easy to manage and modify. So we should modify pipelines.py. All the information about database and table is in this python file. Of course, to achieve this function, we need to download and install python for MysqlDB.

When we use this to download the movies, we should set up a database firstly in shell. The information of database here is the same as information in pipelines.py. Different people have different databases in their computers. So everyone need to modify the pipelines.py and ensure that the information is the same.

The picture here is the information of the Mysql DB.

```
mysql> show columns from doubanmovie;
```

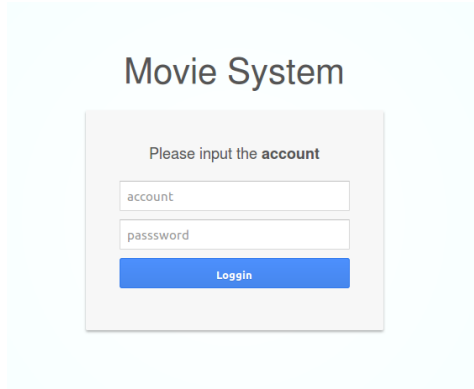
Field	Type	Null	Key	Default	Extra
电影名称	varchar(255)	YES		NULL	
上映年份	int(255)	YES		NULL	
豆瓣评分	int(255)	YES		NULL	
导演	varchar(255)	YES		NULL	
分类	varchar(255)	YES		NULL	
演员	varchar(255)	YES		NULL	
图片	varchar(255)	YES		NULL	
排名	int(255)	NO	PRI	NULL	
电影链接	varchar(255)	YES		NULL	
评论人数	int(255)	YES		NULL	
评论链接	varchar(255)	YES		NULL	
电影概要	varchar(750)	YES		NULL	

12 rows in set (0.01 sec)

Sqlite3 is also a common database. It is much simpler and easier than Mysql. We have so many methods translating Mysql to Sqlite3. I use navicat here. I will not show this database here, because it is in accessory.

V. CONCLUSION

At last, we achieve this system as a website. We have a succinct login interface.



In super-admin interface, you can all the information of the whole system and create(delete) admin. Besides, you can issue announcement conveniently. And all the users can see it quickly.

In admin interface, you can check and verify all the application. You can choose 'Approved' or 'Rejected'. If an admin choose 'Approved', he should complement the information of the movie. If an admin choose 'Rejected', he should give the reason why rejected.

In the users interface, you can add applications and look all the movies information. If a user want to add an application, he should write some information about the movie he add.

Add the Applications

Name

Movie Link

Description

Score You Give(5 most)

5

A user also can look all the movies information. Beside this, he can use several functions, such as searching, sorting and so on.

Overview of the details				
Search Keyword:.....				
Name	Introduction	Comment Num	Douban Score	Published Year
霸王别姬	段小楼（张丰毅）与程蝶衣（张国荣）是一对打小一起长大的师兄弟，两人一个演生，一个饰旦，一向配合天衣无缝，尤其一出《霸王别姬》，更是誉满京城，为此，两人约定合演一辈子《霸王别姬》。但两人对戏剧与人生关系的理解有本质不同，段小楼深知戏非人生，程蝶衣则是人戏不分。	538067	9.5	1993
美丽人生	犹太青年圭多（罗伯托·贝尼尼）邂逅美丽的女教师多拉（尼可莱塔·布拉斯基），他彬彬有礼的向多拉鞠躬：“早安！公主！”。历经诸多令人啼笑皆非的周折后，天遂人愿，两人幸福满满的生活在一起。然而好景不长，法西斯政权下，圭多和儿子被强行送往犹太人集中营。多拉虽没有犹太血统，毅然同行，与丈夫	365478	9.5	1997

At here, I will conclude movie management system briefly. First, it is a generally-completed system for movie management.

The system has different levels of users. Second, as for management, users can see the recommend list and do searching, selecting and sorting. Last, as for operation, users can submit and verify and modify the movie database.

VI. FUTURE WORK

As I said before, the important point of this system is management. So, it has a succinct but users' friendly interface and front-end. In the future, we can write a much more beautiful interface. This will make this system become more attractive.

So far, the database of this system is only from DouBan web. And it only has a small number of movies. As I said before, these are enough to show the system. But they are not enough to set an integrated movie system. In the future, we need to make our database more powerful and bigger. The data can download from websites and can also from all users.

The above two works are what we programme carefully. Beside these two works, we also have some long-term plans. For example, make the system more intellectualized, collect uses' information and do some big data-tests for further application