

Design and Implementation of Video Playback Website Based on ElementUi+PHP Technology

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Abstract: To cater to the current upsurge of the development of Internet movies and television and people's pursuit of quality of life under the epidemic, The website consists of a simple front-end website for users of all ages and a back- In the course of the project development, we will strive to create a more In the course of the project development, we will strive to create a more concise, practical and human-friendly movie and TV broadcasting website, and make personalized recommendations through data analysis, so that people can achieve more "universal" online on demand under the influence of the epidemic situation, and give full play to the advantages of convenient and fast Internet movies and TV.

Keywords Film and TV play; PHP technology; Data base

INTRODUCTION

In the current rapid development of network information technology, various types of websites are also of great interest and preference to the general public, with a wide range of website types, of which entertainment websites are among the giants, sought after by the general public. Among them, many of the network entertainment fully with the operation of film and television broadcast, so that its timeliness in the development of the current stage of information network has been fully applied. With the rapid development of the information industry led by the Internet, various changes are taking place in various fields. Such information to with the continuous improvement of network information, online film and television playback has changed the traditional way of film and television playback, its not subject to other external factors and can not leave home and other convenient advantages increasingly favored by the majority of users.

REVIEW OF THE CURRENT STATUS OF DOMESTIC AND INTERNATIONAL RESEARCH

Internet video is a newly created concept in recent years. The word network was originally a technical concept, while film and television was a cultural concept, and the two did not intersect and were independent. 2005 was the year Youtube became famous in the United States, which led to the first generation of Chinese video cameras in 2005 and 2006. As a result, the two separate

concepts of Internet and film began to intermingle and develop, and the concept of online film and television emerged and developed rapidly. Since this period, a new concept of online film and television that combines technology, media, culture and market attributes has been favored by the elites of various industries, thus expanding the industry chain. It has also set off a great wave of development of online film and television.

As of June 2016, China's online film and television users have occupied more than seventy percent of the Internet users' overview, and surpassed the number of users in other entertainment fields such as online literature, music, games and other genres, successfully jumping to the top of the entertainment field. There are various ways to disseminate online movies and videos, and the choice of channels and terminals has become more diversified. Due to the development of smartphones, mobile movies and videos are still the mainstream, so most users use mobile devices such as cell phones to watch movies and videos, and many users also use computers on top of that. In recent years, only TV terminals are also developing rapidly, and most TV sets have terminal interfaces to access the network and implement membership systems.

In today's online market, various technologies are constantly creating new models, and various applications such as live streaming, virtual reality, artificial intelligence, etc. are widely known and will generate more models in the online environment. In the whole process of interconnection two and traditional industry

intermingling, resources are re-broken and integrated. Film and television broadcasting can be described as a traffic code, and the major film and television companies are always concerned about the changes of the Internet, observing the development rules of network film and television, and studying how to be able to achieve new achievements in the network era while maintaining their own advantages.

SYSTEM RELATED TECHNOLOGY TECHNOLOGY

PHP technology

The back-end of a website is also an important part of a good website, and this time we used PHP technology, combining the call interface and php crawler technology to obtain movie resources, which are integrated and returned to the front-end for presentation. php is a scripting language executed on the server side, which combines the features of several languages such as C and Java, and has developed its own unique syntax that can always improved and enhanced. The reason for choosing php is that while it is perfect for web development to embed in our front-end html, it is also a free, fast, widespread and easy to use general purpose open source scripting language. Using a flexible scripting language such as php has helped us to improve the efficiency of our websites.

2.2 Front-end HTML+css

The front-end of this movie playing website uses html+css technology. html is a hypertext markup language used to build web documents, and this is the essence of what is called a web page. In the process of front-end construction, we can use markup tags to present the text, animation, images and sound elements needed in the website. html documents are static web files, which include the html command code, the markup structure language that determines the position of elements in the web page. html is very easy and flexible to use, highly scalable, and has no excessive requirements for platforms and browsers. This is one of the reasons why it is so widely used. By combining html with other web technologies and complementing each other, we can create web pages that are more powerful and functional.

This time we combine html and css techniques to build our movie playing website. css, whose full name is Cascading Style Sheets, is a language that can modify html. Not only can it statically modify our web pages like css, but it can also be used with other scripting languages to dynamically and more

precisely typeset and edit web objects and model styles for elements in our web pages. With css, it is possible to modify a small style and update all other page elements associated with it. css has a rich set of styles and is very easy to use and change. Also, css files can be saved separately to ensure that multiple pages of our website are styled the same way.

Database

The important function of our movie playing website is to make intelligent recommendations by analyzing user data, so a powerful database is undoubtedly very important for this website. Database literally means a large warehouse to save data, it is a file system in the computer, which can save the data in a certain format, and we can also add, change, delete and check the data inside a series of operations. In the process of operation, we choose the database management system is MySQL, which is now one of the most widely used relational database management system. MySQL is not just a large warehouse, but contains several tables, so we can store the data in different tables, which is more efficient and flexible.

Web development technology Ajax

Ajax comes from describing the transition from Web-based applications to data-based applications. It is not a new programming language, but a technology for creating better, faster, more interactive Web applications. It is a new term introduced by Jesse James Garrett in 2005 to describe a "new" way to use a collection of existing technologies that include HTML/XHTML, CSS, JavaScript, DOM, XML, XSLT, and XMLHttpRequest. This allows programs to respond faster to user actions, and using Ajax technology web applications can quickly render incremental updates to the user interface without reloading the entire page, which allows programs to respond faster to user actions.

The biggest advantage of using Ajax is the ability to maintain data without updating the entire page. This allows web applications to respond to user actions more quickly and avoids sending information over the network that has not changed. Using JS to make requests to the server and process responses without blocking the user's core object XMLHttpRequest, Ajax uses asynchronous data transfer between the browser and the web server, which allows the web page to request a small amount of information from the server instead of requesting the entire page. When developing Ajax, network latency - the interval

between the user's request and the server's response - needs to be carefully considered. Not giving the user a clear response, not pre-reading the data properly, or improper handling of the XMLHttpRequest can be annoying to the user. The usual solution is to use a visual component to tell the user that the system is performing background operations and is reading data and content.

Web server Apache

Apache HTTP Server, or Apache for short, is widely recognized for its cross-platform and security and for its fast, reliable, and simple API extensions. This server generally runs as a background, started with a privileged user root, and then performs a series of resource operations such as configuration file parsing, module loading and initialization. Apache Web Server is easy to learn for beginners and is free for most systems. It works well with the PHP programming language in this project.

Web crawlers

A web crawler is a program or script that automatically crawls the World Wide Web for information according to certain rules. Web crawlers are classified into: general-purpose web crawlers, focused web crawlers, incremental web crawlers, and deep web crawlers. The description and definition of its crawl target is the basis for deciding how the web analysis algorithm and URL

search strategy are ordered. The web analysis algorithm and candidate URL ranking algorithm are the key to determine the form of service provided by the search engine and the fear into the web extraction behavior. Web analysis algorithms can be divided into three types: web topology-based, web content-based, and user access behavior-based.

SYSTEM DESIGN

System functional design

The movie playback website is guided by the basic idea of software engineering, using Element UI component library based on Vue (a set of progressive JavaScript framework for building user interfaces) to build the frontend, and applying php technology combined with database (MySQL) and web crawlers in the backend. The website takes user login to watch movies, comments, and administrator login management as the main functional structure, and designs basic movie and TV drama category management, popular recommendation, and personalized recommendation functions. All user, administrator and drama information is uploaded to the database. Users and administrators can modify and query related information instantly according to their needs. The main functional structure of the system is shown in Figure 1.

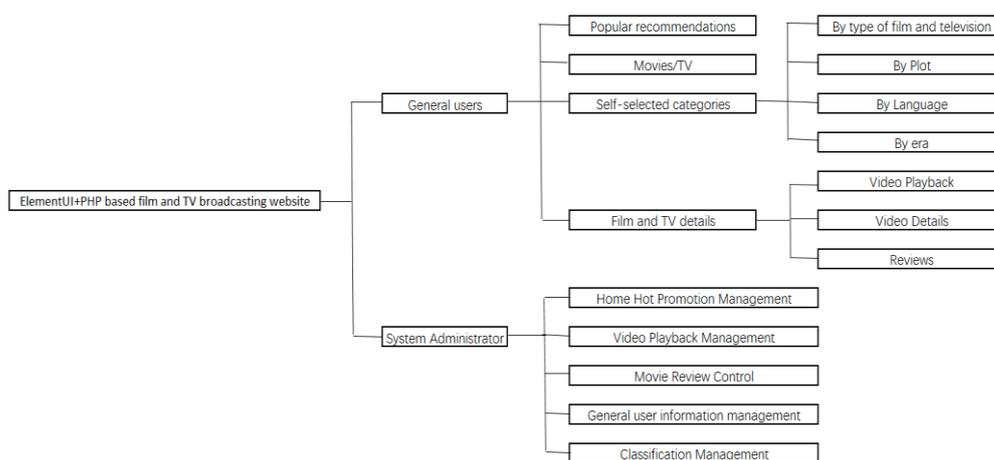


Figure 1 System function initialization module diagram

The online video-on-demand system was designed on a practical basis after a study of the actual way some users watch movies. The system belongs to B/S mode, users can search, browse, on-demand and comment videos online, and can modify personal information and apply for

password protection through the user service module. The system includes three modules: video information module, user information module, and general user function module, as follows.

Video information management: The video information on the website should include basic information such as video introduction, director, lead actor, comments, etc., and be categorized and

managed according to the type of video, including information fields such as tags, hotness, ratings, etc.

User information management: you can log in to the system's user management, the initial default an administrator, the administrator can add, delete and modify user information, user comments and other operations.

Ordinary user function: the use of first registration and then login to enter the site, in the site can browse online video information, search, comment, download video and other operations and management of their own personal information.

Database Design

The data in the video broadcasting website

Table 1 User information table

Name	Type	Description
id	Int	Primary key, the user's unique identifier in the system
username	Varchar	User Name
password	Varchar	Login Password
like	varchar	User Preferences
Register_time	Datetime	Registration Time
Super_admin	varchar	Whether it is an administrator

The video information table is mainly to save the video information obtained using web crawlers, including video number, video name, rating

platform mainly contains basic information and change information. The basic information mainly includes information about users, movies, etc. The change information mainly includes the update of popular movies and the addition and deletion of comment information. The information in the video broadcasting platform is stored in the data tables of each database, and according to the functions and users to be realized by the website, the data tables mainly involve the user information table, video information table, comment table, etc.

The user information table mainly stores information of common users who use this system, including user ID, user name, login password, user preferences, registration time and other information, as shown in Table 1.

information, web address, cover information, belonging category and other information, as shown in Table 2.

Table 2 Video information table

Name	Type	Description
number	Int	Main key, video number
rate	Varchar	Scoring Information
title	Varchar	Video Name
url	Varchar	Web Address
id	Varchar	Video Account
cover	Varchar	Cover Information
types	Varchar	Classification
tag	varchar	Video Tags

The comment table is used to save users' comments on movie information, which mainly contains information such as user account, user

name, comment content, comment time, and the video account reviewed, as shown in Table 3.

Table 3 Comment form

Name	Type	Description
------	------	-------------

id	Int	User account
username	Varchar	User Name
content	Varchar	Comments
rq	Timestamp	Comment Time
Video_id	varchar	The commented video account

SYSTEM IMPLEMENTATION

Database Implementation

A large amount of movie video data collection and storage is very important for movie playing website, so a clear and complete database is the most important thing to realize the website. The main code is as follows.

```
// Create database
$conn = new DB();
$link = $conn->mysqlServer();
$rate = $_GET['rate'];
$title = $_GET['title'];
$url = $_GET['url'];
$id = $_GET['id'];
$cover = $_GET['cover'];
$type = $_GET['types'];
$tag = $_GET['tag'];
$isEditAdd = $_GET['isEditAdd'];
// Determine if you are already logged in (prevent requests through the interface)
if(isset($_SESSION['name'])){
// Determine if it is an administrator
    $nicheng = $_SESSION['name'];
    $checkAdmin =
$conn->checkAdmin($nicheng);
    if($checkAdmin){
        if($link){
            if($isEditAdd=="Add"){
                $sql = "select title,id from
sitedata where title='$title' or id='$id'";
                $result =
mysqli_query($link,$sql);
                $res =
mysqli_fetch_row($result);
                if($res){
// Already exists
                    echo "false";
                }
//Save data to database
                for ($i=0;$i<sizeof($arr);$i++)
                {
                    $id = $arr[$i]['id'];
                    $sql = "select id from sitedata
```

```
where id='$id'";
// first query if it exists, if not, insert
                $res =
mysqli_query($link,$sql);
                $result =
mysqli_fetch_row($res);
                if(!$result){
                    $rate = $arr[$i]['rate'];
                    $title = $arr[$i]['title'];
                    $cover = $arr[$i]['cover'];
                    $id = $arr[$i]['id'];
                    $url = $arr[$i]['url'];
                    $sql = "insert into
sitedata(rate,title,url,id,cover,types,tag) values
('$rate','$title','$url','$id','$cover','$type','$tag)";
                    mysqli_query($link,$sql);
                }
//Synchronize database
interface DatabaseSync {
    /*readonly/const*/version: string;

    transaction(callback: (transaction:
SQLTransactionSync) => void): void;

    readTransaction(callback: (transaction:
SQLTransactionSync) => void): void;

    changeVersion(oldVersion: string, newVersion:
string, callback: (transaction: SQLTransactionSync)
=> void): void;
}
```

JavaScript implementation

User engagement and interaction between the webpage and the user are mainly through two aspects: firstly, the user gets targeted resources by searching for movies; secondly, the user gives feedback to the webpage through comments on the movie viewing experience. The website is implemented through JavaScript, with the following code.

```
(1) for comments added
//add a comment (this.videoId: used to distinguish
the video identifier)
```

```

        addComment: function() {
            //this.inputValue

            if(this.inputValue.length>1){
                // Determine if you
                are logged in

                axios.get('php/userVrification.php').then(response => {

                    if(response.data===false){

                        alert('Please login first');

                    }else{

                        axios.get('php/comment.php?content='
                            + this.inputValue
                            + '&id='
                            + this.videoId).then(response => {

                            if(response.data == 'published successfully'){
                                //
                                Clear the input box

                                this.inputValue = "";
                                //
                                for back-end judgment

                                this.limit_start += 1;
                                //
                                After submitting a comment, execute the show
                                function to display the comment

                                this.show();

                            }else{

                                alert('Posting failed');

                            }

                        })

                    }

                })

            }

            // Get comments for the corresponding Id video
            show() {

                axios.get('php/show.php?id='
                    + this.videoId+'&limit_start='+this.limit_start).then(response => {

                    //console.log(response);

                    if (response.data !==
                        'There are no comments for this video') {

                        // Append the
                        returned data to the group number

                        this.commetMessage
                            =
                            this.commetMessage.concat(response.data);

                    }

                })

                (2) Home page to get video
                // Send request to get video data
                getHotMovieData() {

                    axios.get('php/backJson.php', {

                        params: {

                            type: this.videoType,
                            tag: this.tag,
                            page_limit:

                                this.page_limit,

                                page_start: this.page_start

                        }

                    }).then(response => {

                        this.loadingTip = 'Click to load
                        more';

                        if

                        (response.data.subjects.length == 0) {

                            alert('Uh! There is no
                            more data');

                            this.page_start -= 30;

                        } else {

                            // Save the returned data
                            to the hotMovie array

                            this.hotMovie
                                =
                                response.data.subjects;

                        }

                    })

                }

            }
    
```

```

    })
  }
// Play Video
  play: function(videoName,id){
    $.cookie.raw = true;
    $.cookie.json = true;

    $.cookie('videoName',videoName,{path:'/'});
    var
id=id.replace(/[^\d-9]/ig,"");//only keep the number,
because the top rotation map video id in the url, so
use the regular processing
    $.cookie('id',id,{path:'/'});
    window.location.href =
'history/history.html';
  }
// Video search function
  doSearch(){

    axios.get('php/search.php?search='+this.value
Search).then(response=>{
      this.hotMovie = response.data;
      this.valueSearch = ";
      window.location.href =
'#more';
    })
  }

```

Front-end UI

The wide range of user groups facing the movie playback website requires a simple and convenient front-end interface, based on various functional requirements, to achieve the function of data exchange. The code is as follows.

```

(1) Head navigation bar
<div class="nva">
  <div class="nva-left">
    <h3>Backend
Management</h3>
  </div>
  <div class="nva-right">
    <h3
v-text="isGetName">User name</h3>
  </div>
</div>

```

(2) Right column

```

<div class="mian-right">
  <div class="header">
    <input type="search"
placeholder="Please enter account
nickname/keyword" v-model="serach_key"
@keyup.enter="getVideo" />
    <button
@click="getVideo">Query</button>
    <button
@click="add">Add</button>
    <a
href="JavaScript:void(0)"
@click="back_page">&lt;</a>
    <a
href="JavaScript:void(0)" @click="next_page"
v-show="isNull>=25">&gt;</a>
  </div>
  <div class="list">
    <table class="table"
border="0" cellspacing="0" cellpadding="10px">
      <tr>
        <th>Select</th>
        <th>Serial
Number</th>
        <th>User
Name</th>
        <th>Account Password</th>
        <th>Registration Time</th>
        <th>Administrator Logo</th>
      </tr>
      <tr>
        <td>
v-for="(item,index) in
video" :style="index%2==0?even: "">
        <td><a
href="javascript:void(0)"
@click="edit(item.username,item.password,item.s
uper_admin,item.id)">edit</a>
        <a
href="javascript:void(0)"
@click="del(item.username)">delete</a>
        <td>
v-text="item.id"></td>
        <td>
v-text="item.username"></td>
        <td>
v-text="item.password"></td>
        <td>
v-text="item.register_time"></td>

```

```
v-text="item.super_admin"></td>
</tr>
</table>
</div>
```

CONCLUSION

The video broadcasting website system consists of front-end website and back-end management and maintenance. The design and completion process for general users needs to consider the visual interaction problems of general users and simple operation to adapt to all age groups. The back-end management and maintenance requires real-time updating and control of film and TV information, and management of basic information of general users. The main functions of the front-end are film and TV category selection module, popular recommendation module and personalized recommendation module, and after selecting film and TV details, there are modules such as playback interface, film introduction and hot reviews. The system administrator is temporarily divided into user information management module, special film and television information management module, film review information management module, film and television playback management module, etc.

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