Web Technologies Project Report

Group 4

28/12/2023

1 introduction

Our group has developed a movie library that acts as an independent service in which users can get an overview of a broad range of existing movies. The movie library enables users to create a watchlist and keep an overview of the added movies. Further, the web service features a rating system allowing users to rate movies with 1-5 stars. Additionally, a public comment section is available. Thus, allowing users to make comments, which can be read by others.
The movie library differentiates it's watchlist system from existing streaming services by providing access to a wider collection of movies. Thereby, creating an online environment in which users can create a collected overview.
characters with spaces: 688 words: 112
—— guide: ——
The goal of the introduction is to let the readers (the professor and TAs) know the topic of your work and the main takeaways of it. The introduction should be broad enough to understand the document without reading it and specific enough to let the reader know: *If you are interested in this topic, you should read this work.*
In the context of the Web Technologies course, the introduction should clearly describe:

- Motivation: what problem does this work try to solve (and why is it important)

- Project: clearly describes the topic the group chose to work with

- Contributions: main takeaways that readers will get from reading this work

Remember to keep this and all other sections within the page and column limits. It is your responsibility to describe first the most important and interesting aspect of each section. That way, you can leave behind non-interesting and repeated information more easily.
Length. Half a column.

2 Frontend

This project's first task is to build your application's front-end side. This section should clearly describe the technical implementation of the work put into building the front-end:

- Technically describe the use of HTML 5: which HTML tags do you use, where, and why

- Technically describe the use of CSS: why and how you use CSS (including interesting selectors/declarations and how it is incorporated in the application)

- Technically describe the use of JavaScript: why and how you use it in your application (including interesting behaviors and how they are incorporated into the application)

Resources. Lectures 1 to 3.
Length. 2 columns.

3 Recourse Management

The second task of this project is to build a resource management. A resource is a model of an object in

your system, and it could be anything: movies, music albums, pets, etc. This section should clearly describe the management of the chosen resource: the CRUD (Create-Read-Update-Delete) operations associated with that resource:

- Technically describe the resource (ie, the model)

- Technically describe how the CRUD operations are implemented

Resources. Lectures 4 to 6.

Length. 2 columns.

4 Authentication and Authorization

To help fortify the systems overall security, it is very important that the system knows which users has acces to surtain thing and users that doesnt have access this is done by implementing authorization and authentication on our system.

Authentication: is the process of verifying the identity of a user. In our system we have two distinct user categories 'Guest' and 'User'. The 'Guest' user is the default user and can only access the home page and the login page. The 'User' user is the authenticated user and can access all the pages in the system.
the implementation of the authentication is done by verifying the user's identity, the system asks for a username and password when you login. The system then checks if the username and password match the ones stored in the database. If they match, the user is authenticated and can access the system. if the username and password does not match anything in the systems database, the user is not authenticated and can only acces a limited set of resources on the page.

Authorization: now that the user is authenticated, the system needs to check if the user is authorized to access the resource he is trying to access. In our system we have two distinct user categories 'Guest' and 'User'. The 'Guest' user is the default user and can only access the home page and the login page. The 'User' user is the authenticated user and can access all the pages in the system. the implementation of the authorization is done by checking the user's role, the system checks if the user is a 'Guest' or a 'User'. This is done within the system to ensure that the user is authorized to access the resource he is trying to access. if the guest is trying to access something that he should not be able to access, the system will redirect him to the login page. this will help fortify the security of the system and ensure that only the right users can access the right resources and as a result, the system will be more secure.

To give a better indication of the different user roles we have in our system, we have:

- **Guest:** The default user, can only access the home page and the login page.

- **User:** The authenticated user, can access all the pages in the system.

By giving our website diffrent user roles, we can ensure that the system, is safe against incomming attacks. it alos makes it so, that people can't acces infomation in the system that they should not be able to see without having created a user.
it also works the other way around, only people that are created on the system, can comment on the different movies on the website, while the unauthorized users can only see the diffrent comments. If we where to develp the system further we could add some more user roles, with differnt authorizations, we could make an admin users, this user has access to everything including the profiles of the different users. With the way we have implemented the authorization and authentication in our system, we can easily scale the diffrent users roles, without any complications.

5   Conclusions

The goal of the conclusion is similar to the introduction: it summarizes the work itself and the takeaways a reader should take when reading this work. However, it can use the information presented in the work to be more specific than the introduction.
In the context of the Web Technologies course, the conclusion should clearly describe:

- Summary: summary of the work and main takeaways. Also include a class diagram of the system (the models).

- Future Work: interesting directions on how the presented work can evolve in the future (it may be the starting point to choose individual extension topics)

Length. Half a column.