

Web Technologies Project Report

Group 4

28/12/2023

1 introduction

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

In this sections, the primary objective is to describe the authentication and authorization mechanisms of the system. This helps fortify the security of the system and ensure that only the right users can access the right resources.

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.

Role Table:

Role	Actions
User	Access all pages
Guest	Access home page and login page

- Authentication: The different users of the system and how it is implemented
- Authorization: Summarize the access of the different users in the system and how it is implemented
- Role table: Include a role table associating actions over the system (you can think of them as use cases) and users that can perform these actions.

Resources. Lecture 7.

Length. 2 columns.

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.