LaTeX Documentation

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1 Introduction

This document contains the documentation of the second coursework of the ecosystems class. For this project, a web page was made to test the proficiency in HTML, CSS, JavaScript, and XML mainly. Also, Git was used for the collaborative work, where the whole project was developed in a repository on the GitHub platform.

To create this webpage, Git and Github were used a lot among the members of the group, this to have a professional workflow to share the different versions and changes of the project among the members.

In this document, the methods used for the accomplishment of the project will be explained, as well as the difficulties and findings that were obtained along the development of the project.

2 Methods

As previously mentioned, different languages were used for this project.

- **Git/Github**
  For this project, a lot of group work was involved, so Git technology was used. All the work, from start to end, was done in a repository in Github, where all the members of the group collaborated in the development of the webpage, each change to the code was commented and uploaded to Github so that the collaborators can see it and update it with changes.
- **HTML/CSS**
  A big part of this projects contains html and css code. HTML to give the

structure and content of the page, like images and text. CSS to give the style, colors, text font, and also a big part of the structure of the web page with flexbox, this to make the page responsive depending on the device, no matter if it is being displayed from a mobile device, the structure of the web page still keeps coherence for a good user experience.

- **XML/JavaScript**
  For the interaction of the web page with the user, JavaScript was used, a button was made so that the user can copy the movie data in XML format. Additionally, the data from the movieInfo.xml file can be viewed in the DOM.

3 Findings

In the process of developing a movie recommendation website as a group assignment, I found a lot of things that need to be paid attention to or the difficulties we encountered in the whole project.

1.Github

Project structure and file management: Sharing a common repository of three team member on Github, a clear project structure helps management, collaboration, and mutual understanding of different ideas and code writing history among team members. Store HTML files, CSS files, JAVASCRIPT files, XML files, image resources and documents in different folders, such as index.html, Styles.css, JS.script, movieInfo.xml. Review: However, using terminal has not achieved the ideal efficiency in many uses. The setting and use of Github still requires more practice and application to achieve more efficient work efficiency.

2.HTML/CSS

Using HTML tags (such as ¡header¿, ¡main¿, ¡section¿, ¡nav¿, etc.) can improve the readability and maintainability of the code. The importance of using flexible layout (Flexbox) is that it enables the responsive pages we create to have good display effects on different devices. Customize styles: Create unique multi-visual effects through custom CSS. Using CSS variables and preprocessors can improve the maintainability and reusability of style codes. Review: The design and layout of the background still need more practice and training. Many ideas have not been realized, which is related to technical capability.

3.JavaScript

Interactive effects: Use JavaScript to achieve interactive effects, such as options and drop-down pages at the top of the page, so as to enhance the interactivity of the page Review: There are no large number of interactive options and buttons.

It is just an information display page, which also ensures the stability of the page to a certain extent.

4.XML

Data organization: XML is an excellent data organization method that can be used to organize and transmit movie information. The information of each recommended movie can be represented by an XML node, including title, director, main actor, release year, poster URL. Review: The use and writing of XML is difficult to a certain extent, because its syntax is somewhat complicated, so it takes a certain amount of time to write and understand.

In this team assessment, not only requires to have a deeply understanding of how to effectively use GitHub for team collaboration and version control, also explore the important role and application of HTML, CSS, JavaScript, and XML in the project. This has greatly exercised all the relevant skills.

4 Conclusion

Throughout the development of this movie recommendation website project, our team has gained valuable skills and experience in various aspects of web development and collaborative work. It not only allowed us to integrate various web technologies such as HTML, CSS, JavaScript, and XML, but also made us aware of potential improvements in practice, such as more advanced GitHub usage techniques, more complex CSS styling, and richer JavaScript interaction features. Overall, this experience consolidated our theoretical knowledge, allowed us to face the challenges of practical development, and built a solid foundation for our future development in web design and team projects.