Assignment platit

In order to make an informed decision in regard to a satisfactory selection of programming languages and technologies I had to conduct extensive research.

The technologies I decided to use are **MySQL** along with the **PHP** scripting language for implementing the database aspect of the application. When talking about backend I did chose to use Facebook’s **React** framework and for implementing the structure and styling of the website I used **HTML** and **CSS**.

Below I will try to explain what made me use those over other similar technologies and how their usage allowed me to write a well optimized and fully working comparison website.

According to Russel, **MySQL** seems to be a very well-known database implementation which also has the benefit of being open source. It seems to be fast and stable and for the purpose of this assignment this database technology might prove as an excellent choice.

In order for the **MySQL** database to communicate with the website, I used **PHP** which, according to **PHP**’s official website, seems to be a popular open-source language which is optimized for usage in web development.

The reason I used this scripting language is because it seems to be very easy to implement and has a wide set of features which might prove very useful in the case that the website needs to have the ability to scale in the future.

For implementing the dynamic aspect of the website which is needed for showing the fetched data from the database in a flexible manner; I chose to use the **React** framework which, according to **React’s** official website, looks to be a fast and flexible library based on the **JavaScript** programming language. It seems to be very well suited for creating web interfaces. According to a **StackOverflow** survey, ranked the 3rd place on the list of the most used web frameworks. The reason I used **React** for creating this website is because of its’ intuitive approach, ease of use, speed and powerful features like dynamic rendering based on state, ability to pass data among multiple pages in an easy manner using context **hooks** and easy integration with different other libraries and languages which in turn might make websites made in **React** very scalable.

In order to implement the structure of the website, I decided to use **HTML** which seems to be a markup language used to define the basic structure of a website and enable elements like images and text to be shown on the screen of the user. **CSS** is a web technology used to style the resulting elements from **HTML** which seems to improve readability, allows the developer to show effects like animations and provides the ability to define the positioning of the elements.

Those technologies provide the means of creating a fully working and responsive website which can fully serve the needs of the user.

For the purpose of this assignment, I created multiple web pages which can be directly accessed by a **<nav></nav>** element inside a **React** stateful component. Because of the way **React** works, the website is served as a singular page and based on the URL path, the server renders the matching component which is defined on that respective path. A **React** library is used to route to the respective component on the path and a render call is triggered each time another component is shown. This in turn seems to give the impression of fluid behaviour.

When speaking about the different pages, I did decide to create components that encompass a Home, About, Comparison and Contact.

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