

Architectural Design

Our group will be using the Model-View-Controller (MVC) architectural pattern. The model component will consist of a database to store the system data. It will be in charge of adding, retrieving, and modifying items from the database, such as user login credentials. The view component will define and manage how information is displayed to the user. Because our project is a web application, HTML is a good option to use. The controller will consist of a server that will handle all user interactions by communicating with the model and view components. When the user interacts with the view, the server will communicate with the database to retrieve the necessary information. The server then communicates with the view to display the new information.

MVC is the most common architectural pattern for web-based applications because of its many advantages.

- Supports parallel development, as developers can be working on different components at the same time. This makes the project easier and quicker to implement.
- Allows the developers to create multiple views for a model.
- Modification of one component will not affect the entire system.
- Makes it easy to develop Search Engine Optimization friendly URLs which increases online traffic [1]

References

- [1] Interserver Tips. (2019). *What is MVC? Advantages and Disadvantages of MVC - Interserver Tips*. [online] Available at: <https://www.interserver.net/tips/kb/mvc-advantages-disadvantages-mvc/> [Accessed 17 Oct. 2019].