SolHunt

System Design Document

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Description of Classes and System Interaction

CRC Cards

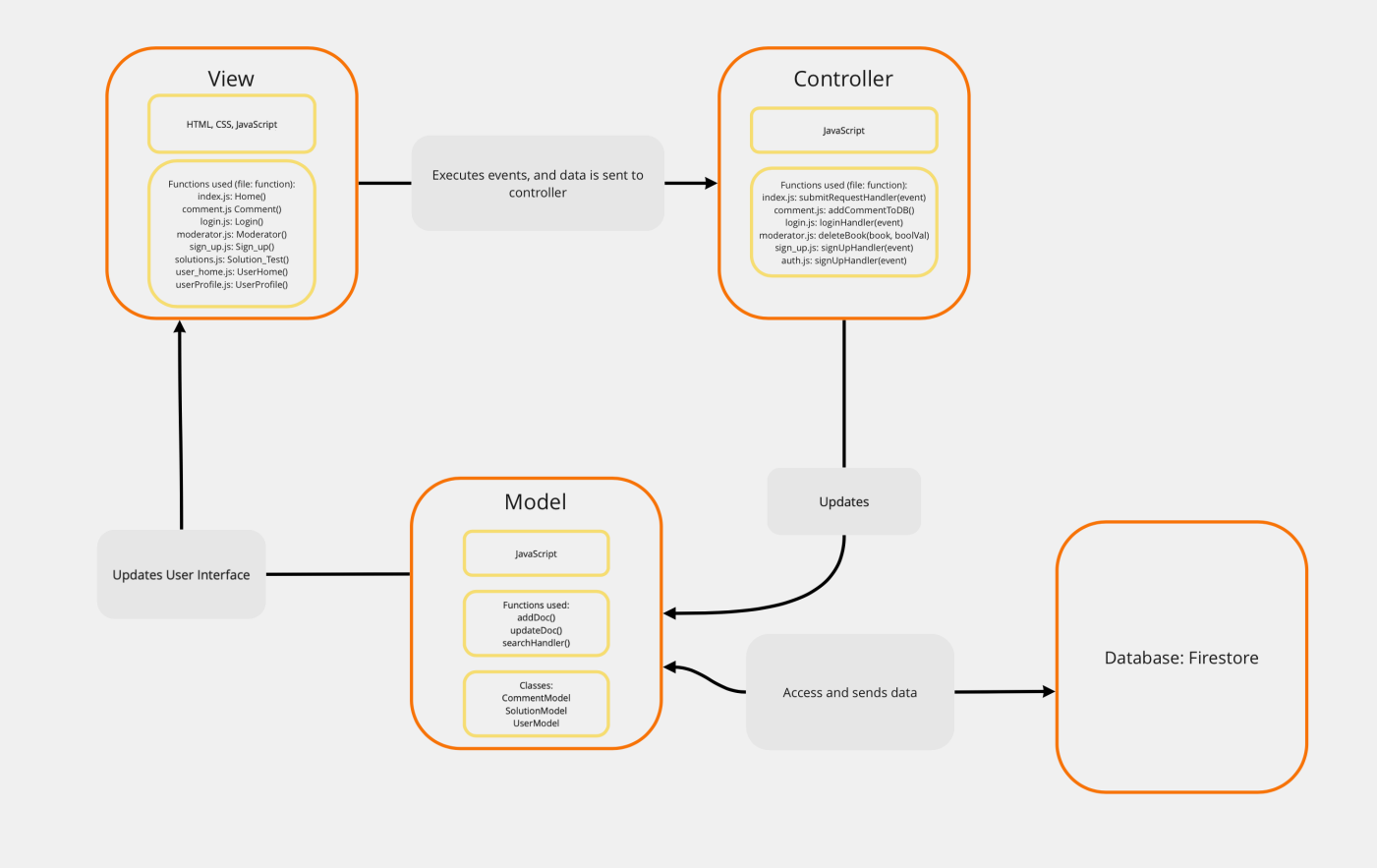
PDF included /doc/sprint1

Description of System Interaction with the Environment

Dependencies: node.js 16.3.1
Firefox, Chrome, Safari
OS: Windows 10 Mac OS
DB: Firebase firestore

Software Architecture

Diagram



System Decomposition

Our system architecture is divided into three main components, which are: Model, View, and Controller. Each one of the components have a specific responsibility, that allows the SolHunt web application to function.

- View: This component is the user interface, this means that the data stored is presented to the user with styling to improve user experience. This component also allows user interaction that includes submitting data that will be processed.
- Controller: The Controller handles any user input that needs to be processed and sent to the database to be stored. It also informs the Model of any data that needs to be retrieved from the database to present to users.
- Model: The Model is the mediator between the web application and the database. Any updates processed by the Controller are sent to the Model and the Model forwards it to the database, in our case Firestore, to be stored. This component also handles any data requests, which means that it retrieves the required data to be presented to the users.

The strategy that was put in place for error handling is the “Try Catch” method. In case of any errors, or exceptional cases our application will inform the users of any task that was not be able to be completed, and this will be done in a manner where the application will not crash.