**Team: Money Gremlin**

**Architecture Design:**

Money Gremlin is a web application with both a client-side and a server-side. The application is based on the MVC architecture. It is a common architecture with plenty of documentation.

**Architecture Design Diagram**:



**Design Description:**

The architectural pattern consists of three components, the view, the controller, and the model.

The view for YourApp handles the UI of the web application. This is mostly handled by React and Bootstrap. The view will contain the login, create account, and other web pages once the user logs in. The inputs made by the user while interacting with the sections of the view will be sent over to the controller. The team will be using CSS to make the view look presentable.

The controller handles the various events from the view. These events can be a simple button press to view the visual budget representation, or to make changes to your account such as changing passwords or deleting the account itself. When an input is detected, the controller then notifies the view of any changes if necessary and then notifies the model of any state changes. We will be using Firebase react libraries.

The model is the database for Money Gremlin. Firebase will be used as the primary database. The view will access data from the model, such as transactions, bills, and income. Any state changes notified by the controller will be stored in Firebase and a notification of a change, if necessary, can be sent out by the model to the view controller. This will allow for the view to be updated when a new item has been added or a new message has been sent out.