



Software Design

Team Binary

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Brief overview

At every stage of development, we at team binary ensure to practice good design principles that allow for scalability of the product. It's not just about making everything work. It's about making sure that everything has a well thought purpose which allows product owners to make changes easily. We also ensure to put the client's needs before all else by communicating with the client before each sprint and catering to their demands. While planning for future sprints and the final release, we ensure that we follow good design patterns such as Single responsibility principle and Injection, to name a few. This ensures that the design is modular allowing for changes without breaking their dependent components. We also ensure to minimize coupling and maximize cohesion between components and models, making them independent, modular and most importantly, very flexible to change.

Design Architecture

We are following the MVC architecture while ensuring that the backend and frontend are not treated as two different entities but rather collaborate with one another in various aspects of functioning. The models include all the backend processing and storage. We are making use of the single responsibility principle to ensure that all the models have low coupling and high cohesion. We went one step further to divide what would otherwise just be components into components and screens. The components include all the parts that can be used in various screens. These include rendering error messages to the user, notifications, etc. The screens are just the views which consist of a collection of components. Screens are connected to one another. This will be more evident in the software architecture diagram as later presented.

CRC Cards

The CRC cards are located at [doc/sprint1/CRC.pdf](#) .

Software Design Architecture Diagram

The Software Architecture diagram is located at [doc/sprint1/SoftwareArchitectureDiagram.html](#). Kindly refer to the legend located at the top left corner of this diagram.