Software Design Description Document

MyCampusGym

6.2 Architectural Design Section

The MyCampusGym application will consist of many architectural pieces. Those architectural pieces will be organized by their features within the application as well as by the functions they perform. These architectural partitions are ultimately divided by Core, Components, and Services, with Components containing reusable software pieces that permeate throughout the application, and the Core containing the feature specific software pieces.

6.2.1 Major Software Component

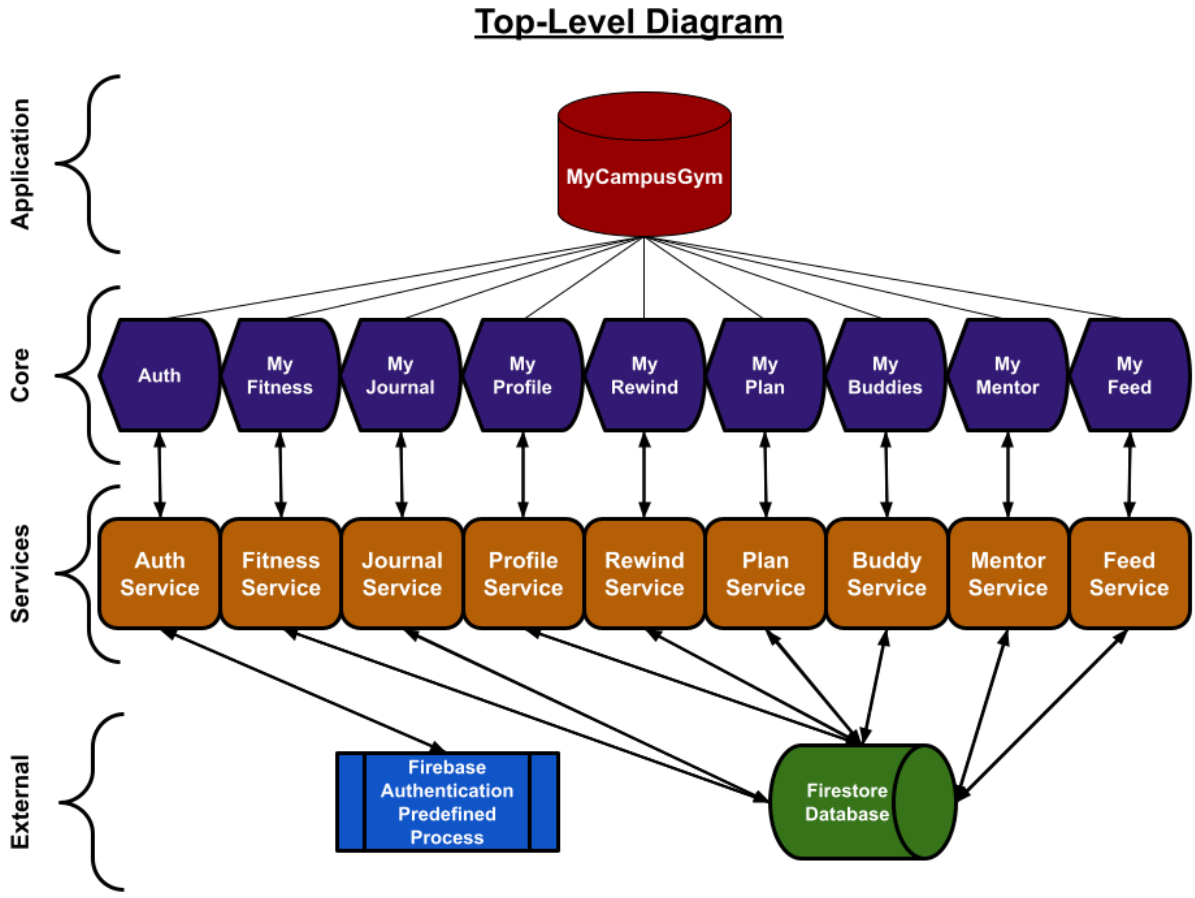
The major software components are contained within the Core partition of the software architecture. These components include the functional pieces of software that are responsible for the functionality of MyFitness, MyPlan, MyBuddies, MyJournal, MyProfile, MyRewind, MyMentor, and MyFeed.

While the Views responsible for each functional aspect of the application will be contained within their respective partitions, many of the application features will contain shared components of software. These components, including View components such as InputViews, ViewRows, Buttons, and more will be used throughout the application to ensure consistency with look, feel, and usage of the application for the user.

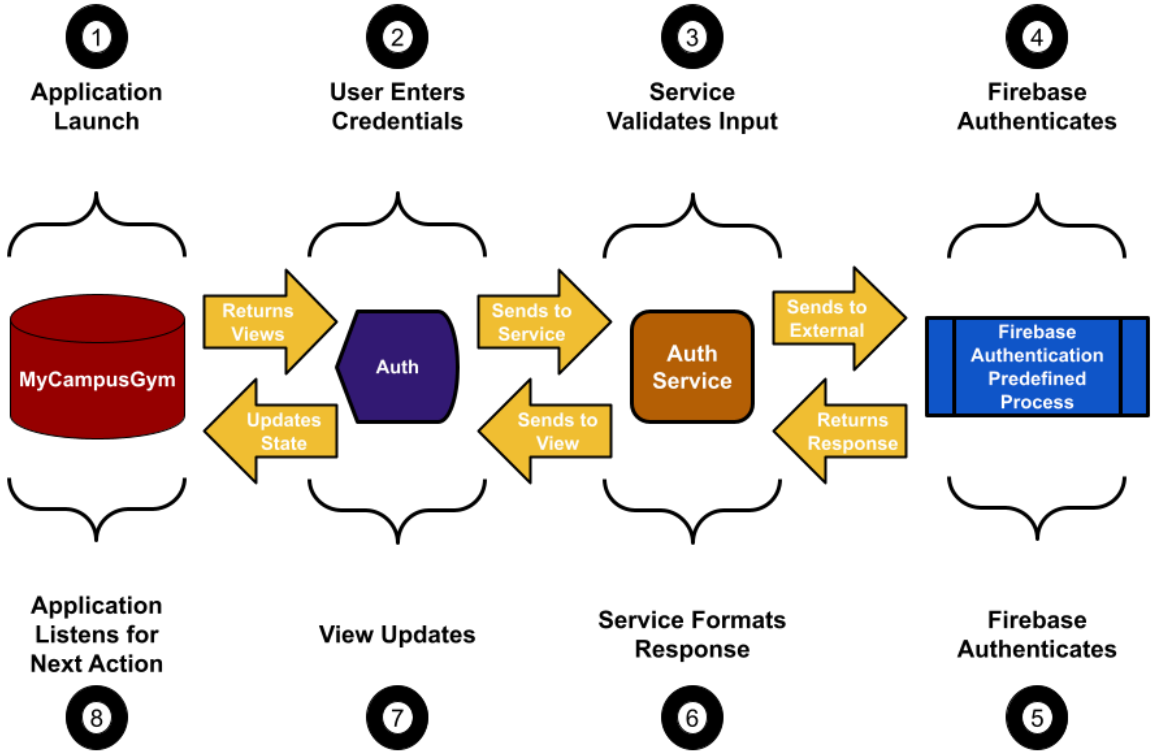
6.2.2 Major Software Interactions

Finally, the application will feature software components responsible for data services. These services will include the AuthService, for connecting to the Firebase Authentication product, as well various data services which will be responsible for enforcing and managing the Firestore Database. These data services include the ProfieService, JournalService, FeedService, MentorService, BuddyService, and PlanService. Each service will contain software that ensures data is retrieved and committed to the Firestore Database in a manner that conforms to the application data schema and is also usable by the application views detailed above.

6.2.3 Architectural Design Diagrams



Data Flow Diagram



Implementation Diagram