

Design Document for FitBandit

Group 3_KK_4

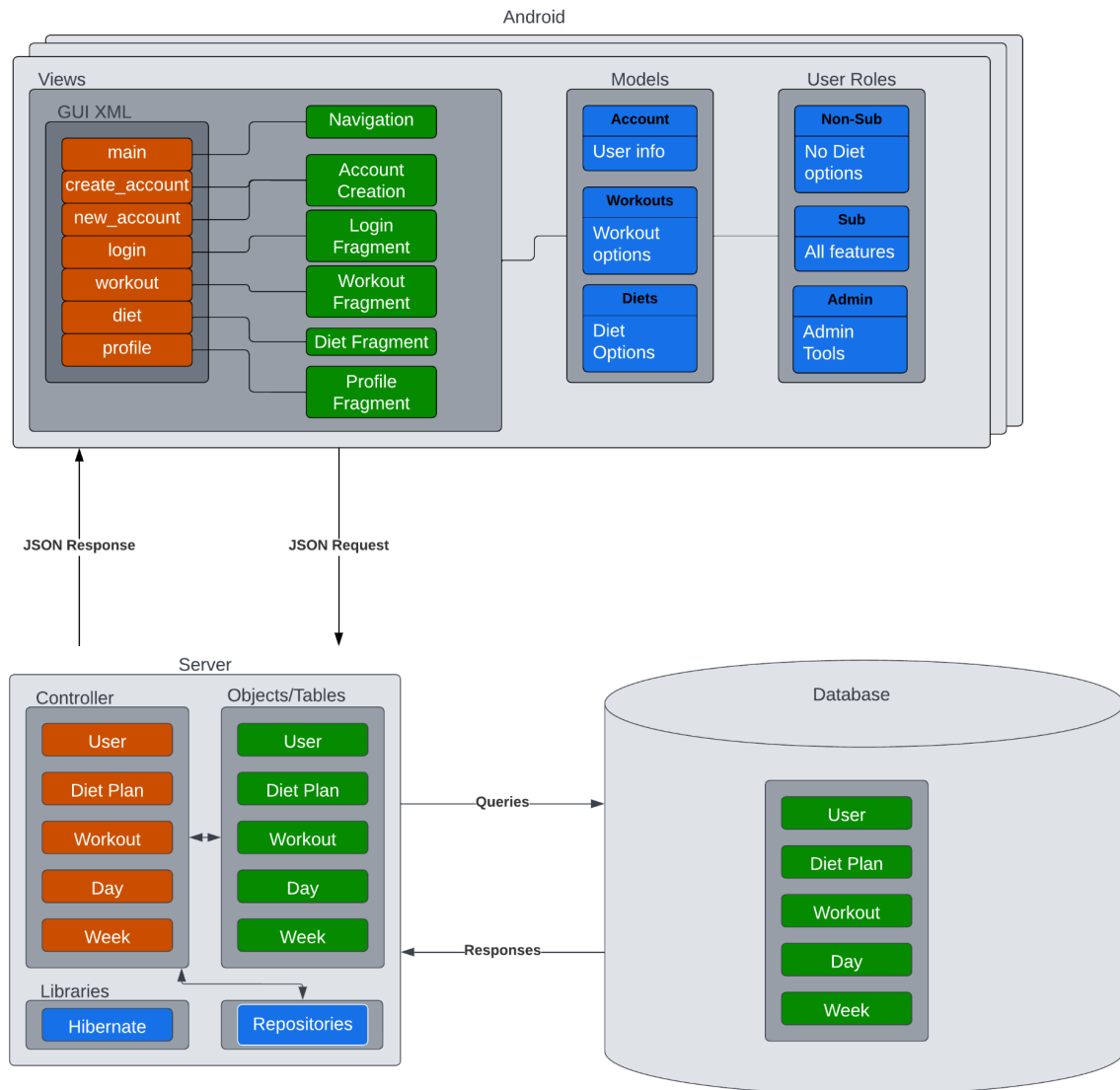
Adam Martin: 30% contribution

Nic Figueroa: 20% contribution

Sami Bensellam: 30% contribution

Thomas Nunez: 20% contribution

PUT THE BLOCK DIAGRAM PICTURE ON THIS PAGE! (Create the picture using pencil or drawIO)



Use this third page to describe complex parts of your design.

Frontend:

- Users create an account and input information regarding their body type, personal goals, and basic account information (username, password, etc.).
 - Login/Account creation is simple for our users to utilize, such as a slider for weight that displays their input, and a calendar in which the user may select their birthday.
- After an account is created or logged into it is sent to the backend, from there the account is sorted into a group of users based on their preferences and body type and backend sends information back to the frontend to display information for the diet, workouts, and goals for the user.
- One use case for web sockets would be to have a support line in which premium users may contact "support" staff for help from an administrator through the chat.

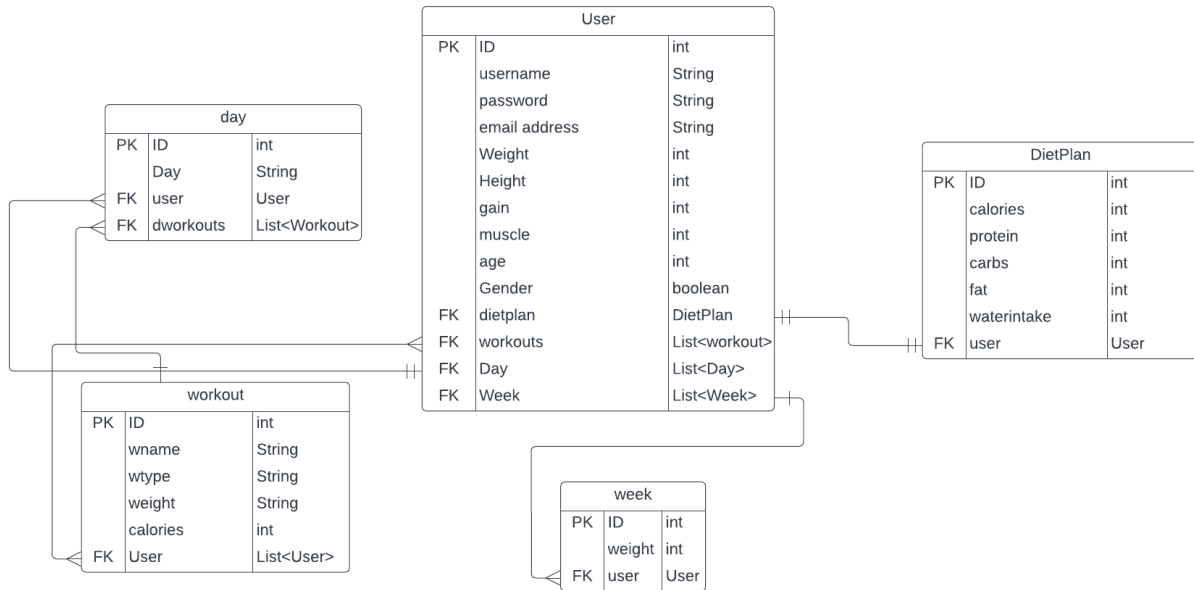
- Frontend will create administrator accounts which may be logged into, search users, and modify their data without needing to look at the actual backend.
- Frontend and backend will work together to create formulas/logic to display the best diet plan and workouts for the users.
- Workout menu will be generated based on the user's credentials, with each workout being able to expand into a window providing additional details, as well as giving the user the option to select other workouts instead.
- Diet menu works similarly to the workouts, wherein the data is generated and options can be modified by the user. This feature, as well as the admin support line, are only available to subscribed users. Attempts to use this feature will result in a pop-up asking if the user would like to subscribe.

Backend:

- There are 4 different controllers being used. DietPlansController, PremiumController, UserController, and WorkoutController.
- DietPlans Controller allows for client to retrieve DietPlan by Id and retrieve the users diets. It also allows for a creation of a diet based on the users preferences of losing, gaining, or maintaining weight.
- The PremiumController allows for the creation of a premium account for a user. A premium account allows the user to be able to access the Diet part of the app. Premium Controller has createPremium, UpdatePremium, and DeletePremium depending on the request from the client.
- The UserController allows for the creation of a user and retrieving a certain users account. It also allows updates to the users profile such as setting premium to the user.
- WorkoutController allows the client to retrieve certain workout information and create workouts based on the users preferences. If the user wants to gain weight certain workouts will be recommended and if they want to lose weight other workouts will be recommended.

PUT THE TABLE RELATIONSHIPS DIAGRAM on this fourth page! (Create the picture using MySQLWorkbench)

FitBit Database Schema



Backend API Link:

<http://coms-309-052.class.las.iastate.edu:8080/swagger-ui/index.html#/>