
Design Document for CyLearn

Group 2_DO_1

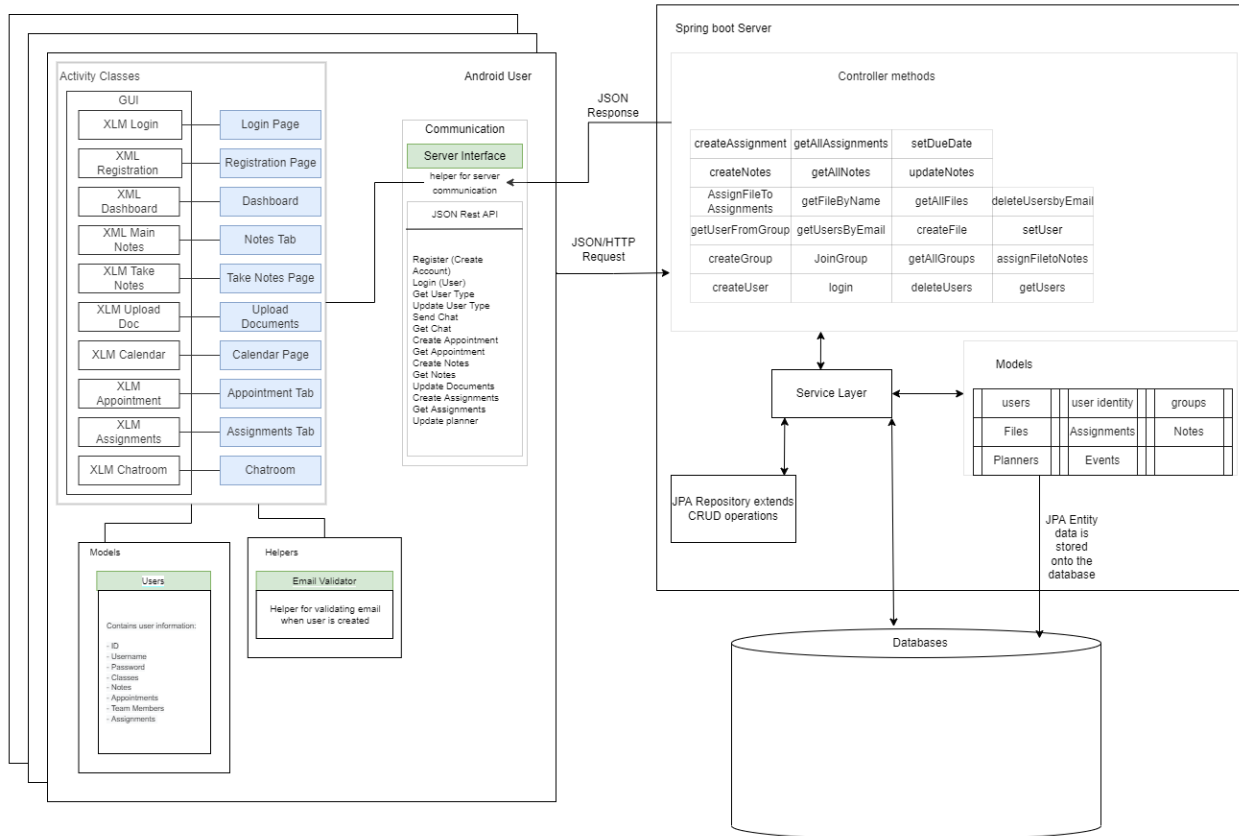
Macintyre Whitney: 25% contribution

Madhav Dhimal: 25% contribution

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Steven Tran: 25% contribution

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



Design Descriptions

Android Activity Classes

- The application has about 10 activity classes that will have corresponding XML files.
- Most logic is done within java activity classes but does use helper classes.

Android Communication

- Most activity pages will send or get data through the data.
- A server interface allows the JSON commands to the server to be handled.
- State updates between the android application and server are done synchronously.
- The user object contains all the information of the user upon login

Android Models

- One primary model used within the application (User model)
- Consists of basic user information
- Collects and updates information as the user uses the application

Android Helpers

- Email validator is used to help validate an email the user includes while registration

Server

- Holds Database
- Runs Spring Boot Application
- Uses git runners and CI/CD to update Spring Boot App

Spring Boot Application

- Overall backend application
- Controller container

Controller

- Handles Json Requests and Responses
- Passes requests to Service Layer

Service Layer

- Facilitates communication between, Controller, JPA repository, model, and database

JPA repository

- provides CRUD operations

Model

- Provides the database with a JPA entity

Databases

- Holds Information passed to it

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

