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**Description:**

For this project, our team decided that a layered architecture pattern would fit our software the best. The accompanied diagram depicts each of the 4 layers and the services that would be implemented in each.

To briefly explain the services, the UI layer will consist of two interfaces for the different types of OS's that will the mobile application will be available for, iOS and Android.

The configuration services layer contains the identity management services that will allow a user to create their account, login/out, reset their password, etc. It will also have application management services that manages the creation and message boards and any offline contents users have in their app.

The business logic layer consists of the recipe collection, with each recipe, its ingredients, creator, rating, and any tags. Also in this layer will be the list of favorite recipes of each user and users' comments on the recipes. The search functionality (searching by ingredients, name, and other filters) that this app is based on will also be implemented in the business logic layer.

The system support layer will be responsible for user authentication and encrypting users' passwords, as well as managing the database that will hold the recipes. Additionally, this layer will control the activity logs and system alerts, and provide support for the storage devices, making sure they are of enough capacity.