Type of System Architecture:

For Dream Catcher we plan on using Model-View-Controller (MVC) architecture. We believe that this architecture will be the best fit for our application since it logically breaks down the structure of the system into three components which is perfect for Dream Catcher. In our application the model component of the architecture will handle all of the data that is stored. This component will also manage the operations that can be performed on this data which in our case will include creating buckets, creating items, deleting items, adding deadlines, adding photos, sharing buckets with other users, and many more. The second component which is view will handle the user interface of our application. This will manage how the data within the application is presented to the users of the application. This will manage the display of multiple features such as the menu bar, the bucket section, the items within a bucket, the login screen, the account page, messages, notifications, and more features. The last component which is the controller will be able to handle all of the input from users of our application. This will include handling the input of certain buttons such as “+ New Bucket”, “+ New Item”, “Confirm”, “Cancel”, the menu bar and the buttons within the bar, and many more buttons that will be featured. It will also handle when a user inputs text when creating a bucket, creating a task, and when typing messages to be added as descriptions. The controller component will also handle transmitting these interactions to the model and the view components.

Overall, the MVC architecture provides the most seamless way to incorporate all of the needed features for our application. By using the model, view, and controller components our application will be able to support all of the needed operations, interfaces, and interactions that will occur.

UML Package Diagram: