# **3. Detailed Design**

## **3.1 Module Descriptions**

Describe each module in detail, including its purpose and functionality.

### **3.1.1 Module Name**

● **Purpose:** Describe the purpose of the module.

● **Responsibilities:** List the responsibilities of the module.

● **Dependencies:** Describe any dependencies on other modules or systems.

### **3.1.2 Module Name**

● **Purpose:** Describe the purpose of the module.

● **Responsibilities:** List the responsibilities of the module.

● **Dependencies:** Describe any dependencies on other modules or systems.

## **3.2 Class Diagrams**

Provide class diagrams that detail the structure of each module.

## **3.3 Sequence Diagrams**

Include sequence diagrams that illustrate the interactions between objects for various scenarios.

## **3.4 State Diagrams**

Provide state diagrams that describe the state changes of important objects.

## **3.5 Activity Diagrams**

Include activity diagrams to show the workflow and operations within the system.

# **4. Data Design**

## **4.1 Data Structures**

Describe the data structures used in the system, including data types and relationships.

## **4.2 Database Design**

4.2.1 Users Table

* Id : Object Id **(PK)**
* userName: varchar(255) **(Unique)**
* password:varchar(255) **(Hashed + salt)**
* createdAt: Date **(Generated automatically)**
* isAdmin: Boolean

4.2.2 Post Table

* Id: Object Id **(PK)**
* Title: varChar(255)
* Description: varChar(255)
* createdAt: Date() **(Generated automatically)**
* updateAt: Date() **(Generated automatically)**
* Like: type:Number (Counter)
* Dislike: type:Number (Counter)
* userID: Object Id **(FK)**

4.2.3 Comment Table

* Id: Object Id **(PK)**
* userID: Object Id **(FK)**
* postID: Object Id **(FK)**
* Text: varChar(255)
* createdAt: Date() **(Generated automatically)**