

**FLY AWAY PLUS**

**DETAIL DESIGN DOCUMENT**

**Class Design**

**Project Code: FAP**

**Document Code: FAP\_Class Design\_v1.2\_EN**

**Record of Change**

\*A-Added M-Modified D-Deleted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Item | A, M, D\* | Change Description | Version |
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| 2015/08/20 | Package Diagram  Package Description | M |  | V1.1 |
| 2015/08/23 | Wish List | A |  | V1.2 |

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# Introduction

## Purpose

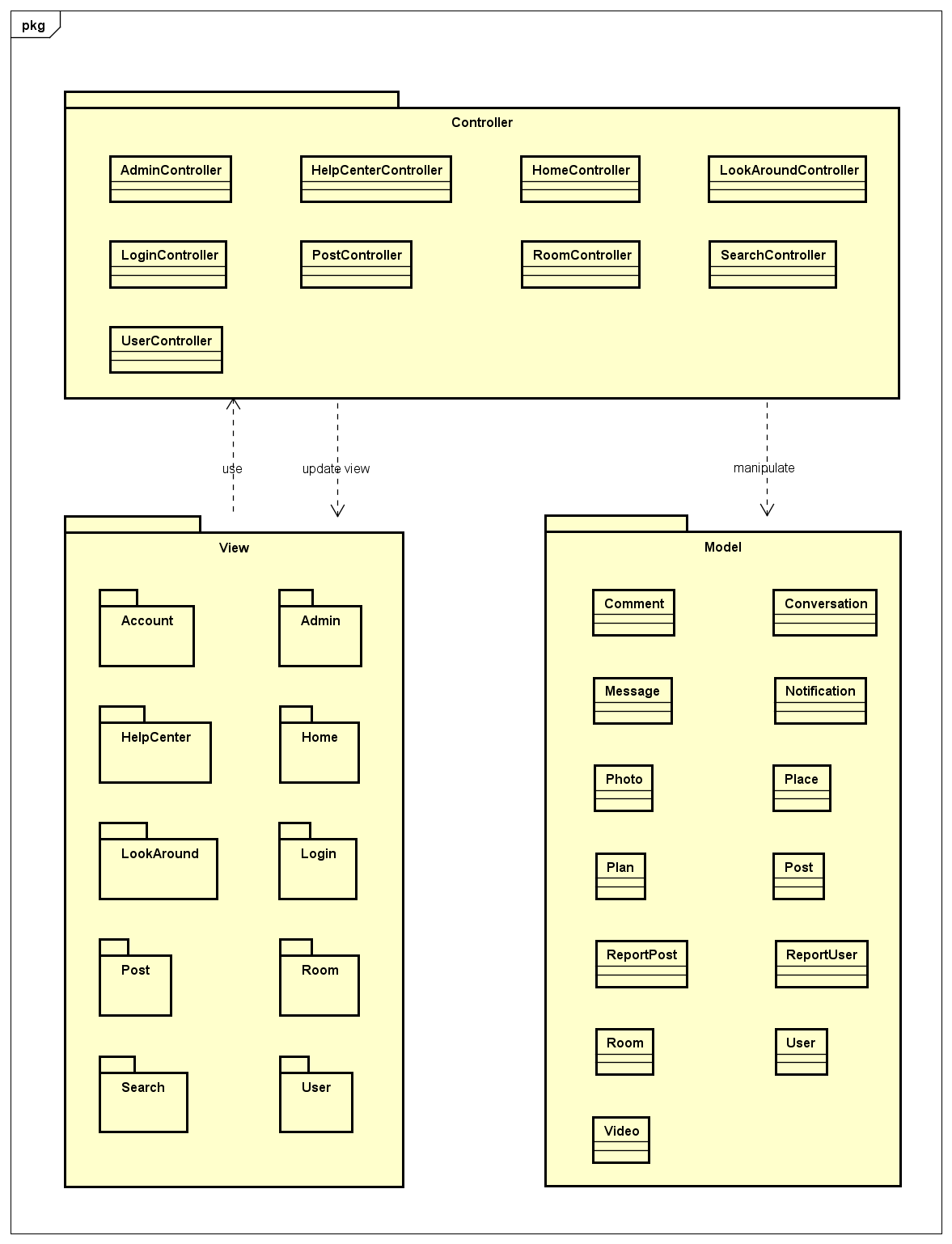
Fly Away Plus class design document contains descriptions of all classes of the Fly Away Plus. It includes: Class diagrams that describe the static relation of all classes in the system.

## Definitions, Acronyms and Abbreviations

|  |  |  |
| --- | --- | --- |
| Abbreviations | Description | Comment |
| FAP | Fly Away Plus |  |
| FAQ | Frequently Asked Question |  |

# Package

## Package Diagram



*Package Diagram*

## Package Description

### Model

#### Comment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | commentID | int |  |  | Comment’s ID |
|  | content | String |  |  | Comment’s content |
|  | dateCreated | String |  |  | Comment’s created date. Auto-created while uploading |

#### Conversation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | conversationID | String |  | public | Conversation’s ID |
|  | dateCreated | String |  | public | Conversation’s created date. Auto-created while creating conversation |

#### Message

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | messageID | int |  | public | Message’s ID |
|  | content | String |  | public | Message’s content |
|  | dateCreated | String |  | public | Message’s created date. Auto-created while creating conversation |

#### Notification

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | activity | String |  | public | Activity type of notification |
|  | dateCreated | String |  | public | Notification’s created date. Auto-created while creating conversation |
|  | user | user |  | public |  |
|  | post | post |  | public |  |
|  | lastActivityID | Int16 |  | public |  |

#### Photo

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | photoID | int |  |  | Photo’s ID |
|  | url | String |  |  | Photo’s URL |
|  | dateCreated | String |  |  | Photo’s created date. Auto-created while uploading |

#### Place

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | placeID | int |  |  | Place’s ID |
|  | name | String |  |  | Place’s name |
|  | latitude | Decimal |  |  | Place’s latitude |
|  | longitude | Decimal |  |  | Place’s longitude |

#### Plan

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | PlanID | int |  |  | Plan’s ID |
|  | WorkItem | String |  |  |  |
|  | LengthInMinute | int |  |  |  |
|  | DatePlanStart | String |  |  |  |

#### Post

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | postID | int |  |  | Post’s ID |
|  | content | String |  |  | Post’s content |
|  | dateCreated | String |  |  | Post’s created date. Auto-created while creating post |
|  | privacy | String |  |  | Post’s privacy |

#### Room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | RoomID | int |  | public | Room’s ID |
|  | RoomName | String |  | public | Room name |
|  | Description | String |  | public | Room’s description |
|  | DateCreated | String |  | public | Room’s created date. Auto-created while creating room |
|  | StartDate | String |  | public | Start date of room’s plan |
|  | LengthInDays | int |  | public | Length of room’s plan |
|  | MaxNoSlot | int |  | public | Number of room’s member |
|  | StartLocation | String |  | public | Start location of room’s plan |
|  | StartLatitude | String |  | public | Latitude of start location |
|  | StartLongitude | String |  | public | Longitude of start location |
|  | DestinationLocation | String |  | public | Destination location of room’s plan |
|  | DestinationLatitude | String |  | public | Latitude of destination location |
|  | DestinationLongitude | String |  | public | Longitude of destination location |
|  | Privacy | String |  | public | Room’s privacy |
|  | PhotoCoverUrl | String |  | public | Room’s cover photo URL |

#### User

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | userID | int |  | public | User’s ID |
|  | typeID | int |  | public | User’s type, includes: Normal, Facebook, Google+ registered |
|  | address | String |  | public | User’s address |
|  | avatar | String |  | public | User’s avatar image |
|  | dateJoined | String |  | public | User’s joined date. Auto-created while registering |
|  | dateOfBirth | String |  | public | User’s date of birth |
|  | email | String |  | public | User’s email |
|  | firstName | String |  | public | User’s first name |
|  | lastName | String |  | public | User’s last name |
|  | password | String |  | public | User’s password |
|  | phoneNumber | String |  | public | User’s phone number |
|  | status | String |  | public | User’s status, includes: Lock and Active |

#### Video

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | videoID | int |  | public | Video’s ID |
|  | path | String |  | public | Video’s URL |
|  | dateCreated | String |  | public | Video’s created date. Auto-created while creating video |

### View

* Contain many .cshtml files to display user interface.

### Controller

#### AdminController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | Authenticate |  | ActionResult |  |
|  | Index |  | ActionResult | Display Admin page |
|  | LockUser | int, int | JsonResult | Lock a reported user |
|  | UnlockUser | int | JsonResult | Unlock a locked user |
|  | LockPost | int, int | JsonResult | Lock a reported post |
|  | CancelReportPost | int | JsonResult | Delete a post from report list |
|  | CancelReportUser | int | JsonResult | Delete an user from report list |
|  | ViewPost | int | ActionResult |  |

#### HelpCenterController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | Index |  | ActionResult | Display Help Center page |

#### LoginController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | AuthenFacebook |  |  | User login with Facebok |
|  | AuthenGoogle |  |  | User login with Google+ |
|  | ForgotPassword |  |  | Set user’s password to a random string and send to user |
|  | Login |  |  | User login with registered account |
|  | Logout |  |  | User logout from FAP |
|  | SendMail |  |  | Send mail to user |

#### LookAroundController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | Index |  | ActionResult | Display Look Around page |

#### PostController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | Index |  | ActionResult | Display Post Detail page |
|  | CreatePost | form | ActionResult | Create a post |
|  | EditPost | int, String | void | Edit an own existed post |
|  | DeletePost | int | void | Delete an own existed post |

#### RoomController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | Index | int | ActionResult | Display Room Detail page |
|  | RoomDetail | String | ActionResult | Display room detail |
|  | UpdateEventPlan | String, String, String | void | Update plan of a room |
|  | SaveEvent | String, String, String, String | Boolean |  |
|  | GetPlanEvents | DateTime, DateTime | JsonResult |  |
|  | Add |  | ActionResult | Create a new room |

#### SearchController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | Index |  | ActionResult | Display Search page |
|  | Search | String | ActionResult | Search a keyword |
|  | SearchDetail |  | ActionResult | Display Search Result page |

#### UserController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Parameter | Return | Description |
|  | AddFriend | int, int | JsonResult | Add other users to friend list to get news, notification and messages |
|  | AddToWishlist | String | JsonResult | Add a post to wish list |
|  | Comment | int, String | ActionResult | Create a comment |
|  | CreateMessage | int, String | JsonResult | Send message to others |
|  | CreateMessageInRoom | int, String | JsonResult | Create message in room |
|  | DeleteComment | int | JsonResult | Delete an owned comment |
|  | Dislike | int | JsonResult | Mark a post as dislike |
|  | EditComment | int, String | JsonResult | Edit content of an owned comment |
|  | EditProfile | user | JsonResult | Edit personal information |
|  | Like | int | JsonResult | Mark a post as liked |
|  | RemoveFromWishlist | int | JsonResult | Remove a post from wish list |
|  | ReportPost | int, int, int | JsonResult | Report a rule violation post |
|  | ReportUser | int, int | JsonResult | Report a rule violation user |
|  | Unfriend | int, int | JsonResult | Remove an user from friend list |

# Function

## Search

### Class Diagram

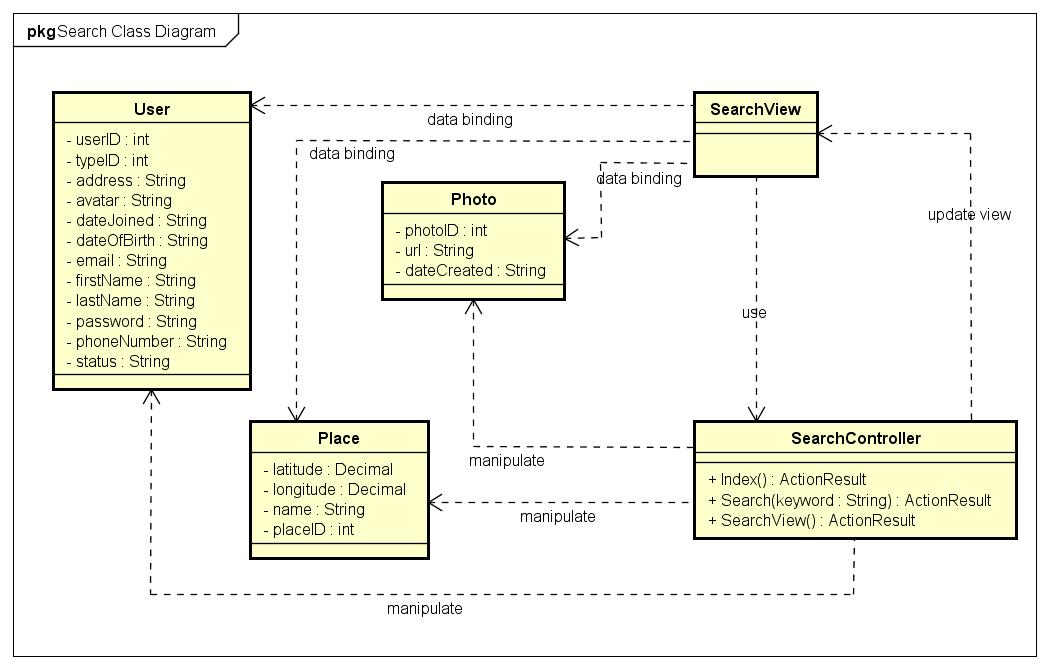
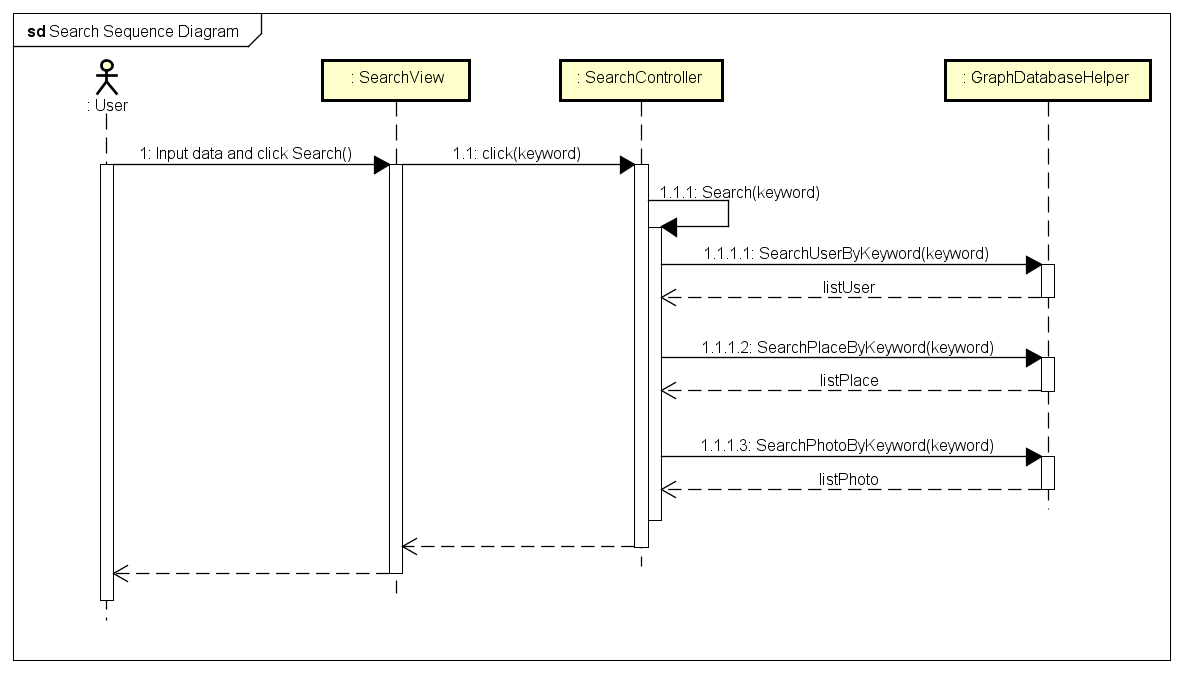


Figure 1: Search class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | Photo | Include method interact with Database |
|  | Place | Include method interact with Database |
|  | Search | Include method interact with Controller |
|  | Search Controller | Include method interact with Model |

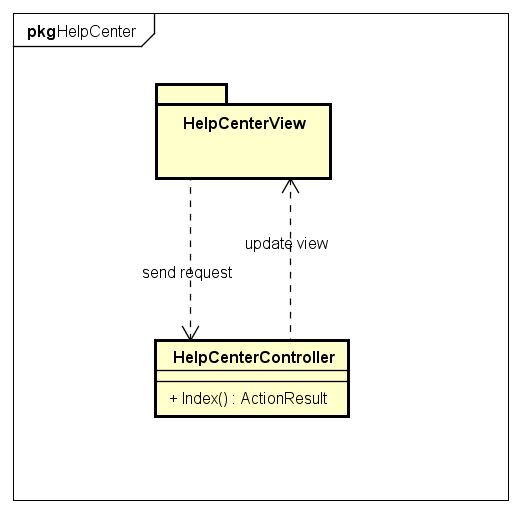
### Sequence Diagram



*Figure 2: Search sequence diagram*

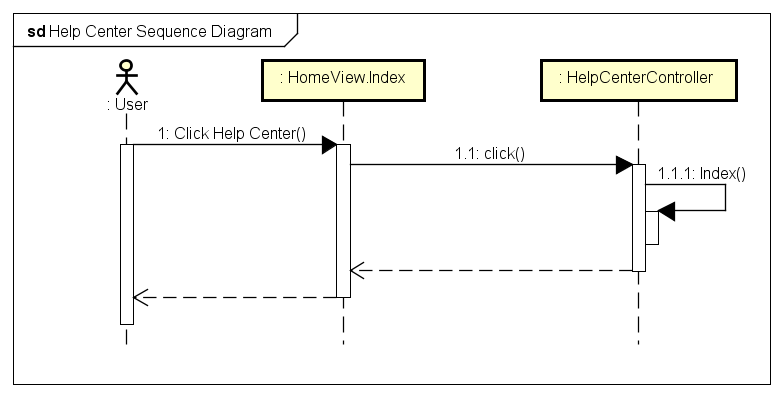
## Help Center

### Class Diagram



*Figure 3: Help Center class diagram*

### Sequence Diagram



*Figure 4: Help Center sequence diagram*

## Suggest

### Class Diagram

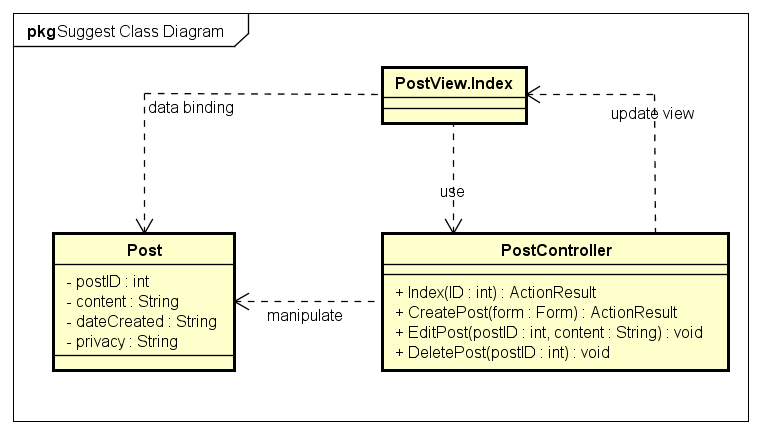


Figure 5: Suggest class diagram

### Sequence Diagram

#### Suggest Friend

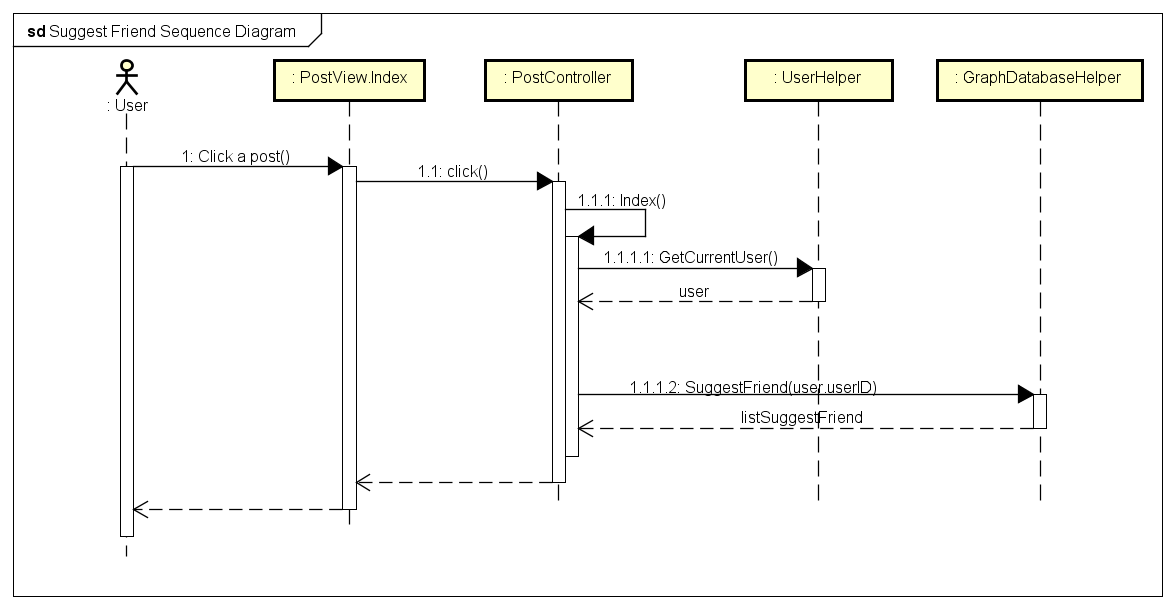


Figure 6: Suggest Friend sequence diagram

#### Suggest Place

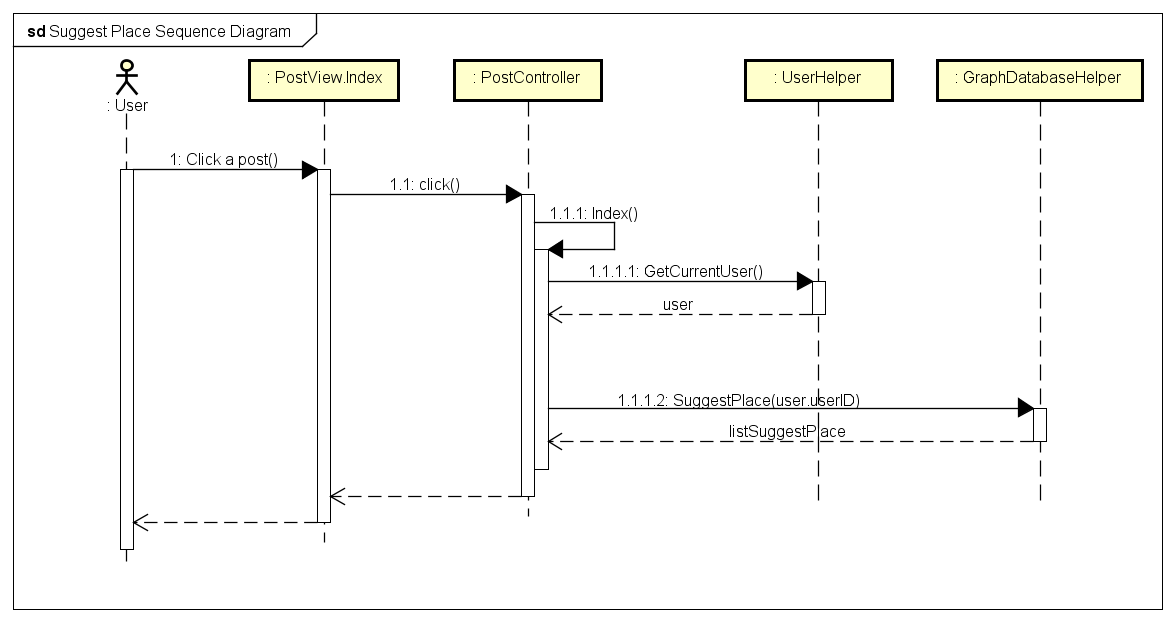
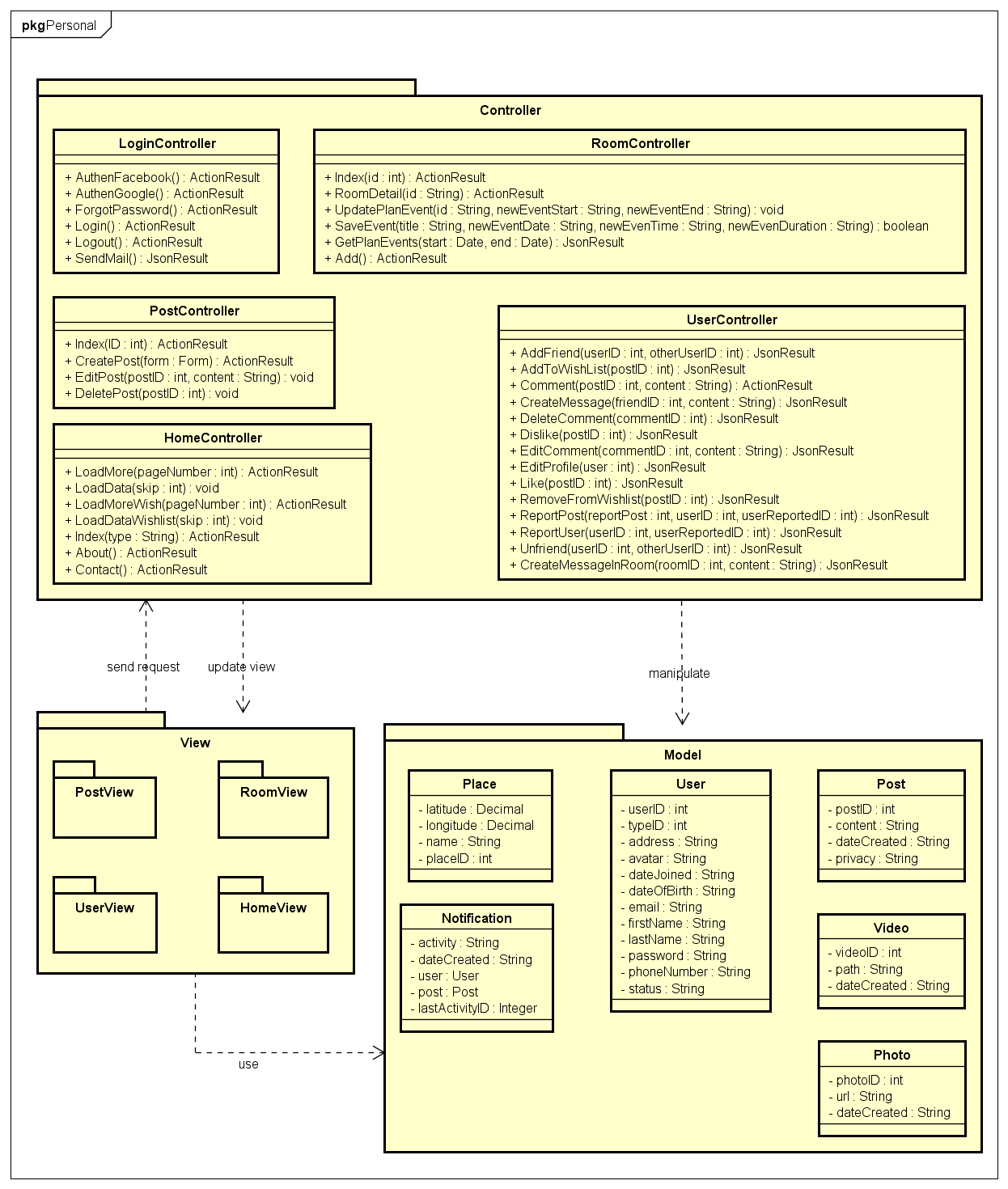


Figure 7: Suggest Place sequence diagram

## Personal Page

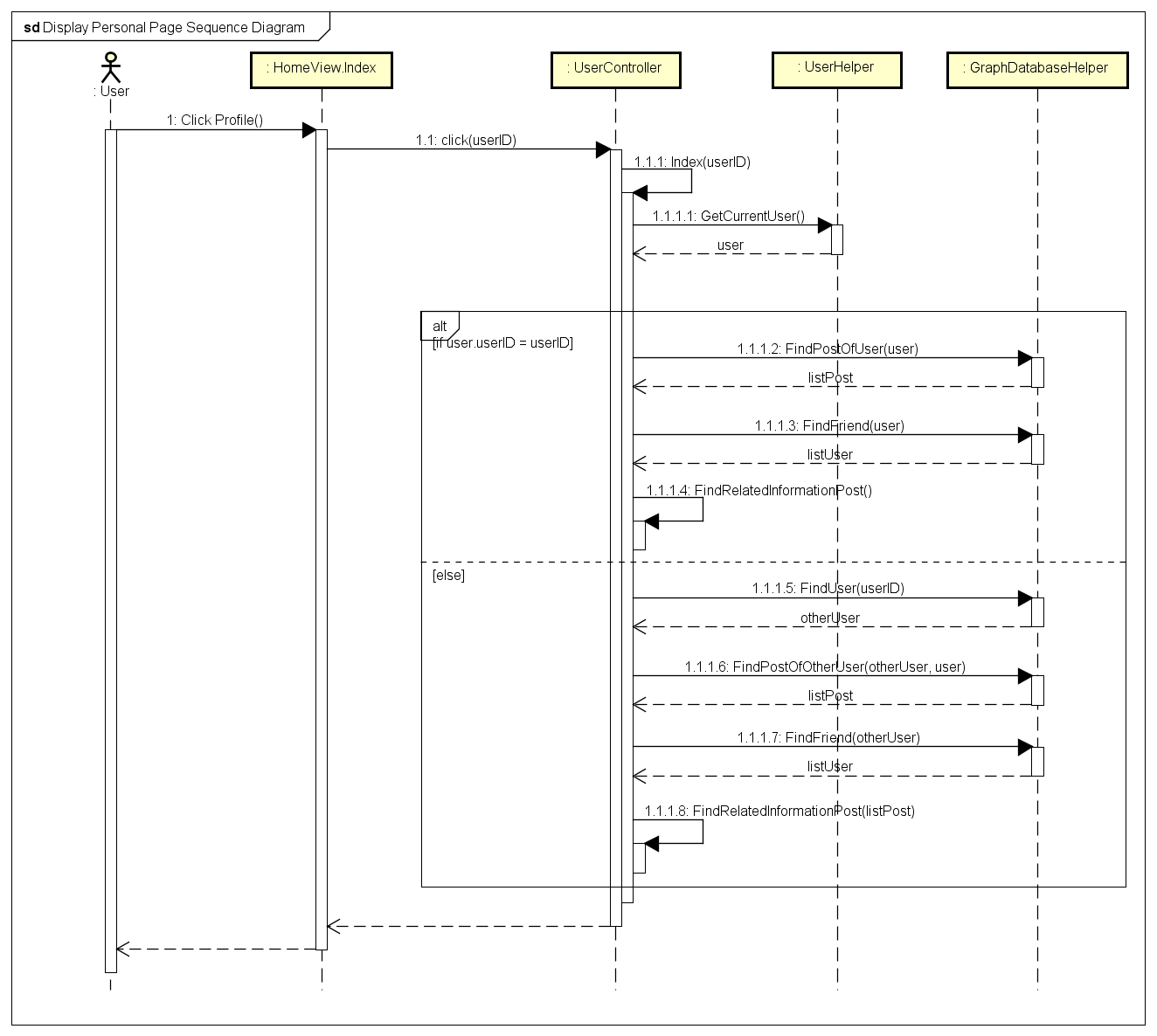
### Class diagram



*Figure 8: Personal Page sequence diagram*

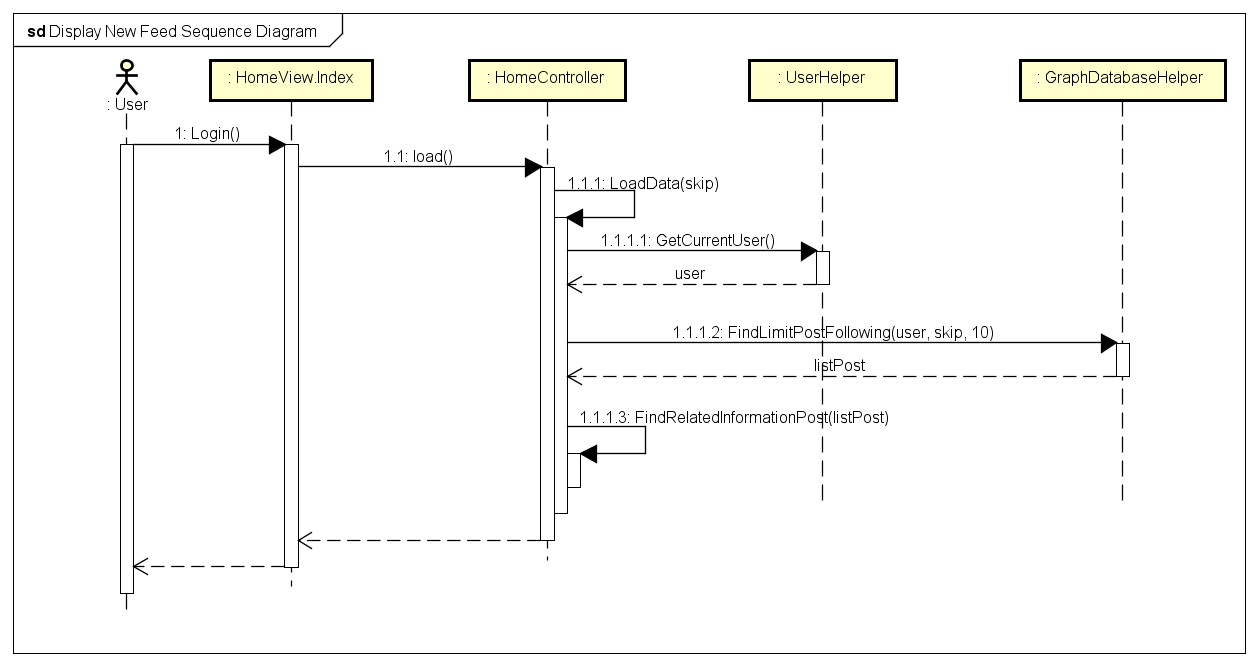
### Sequence Diagram

#### Display User’s Personal Page



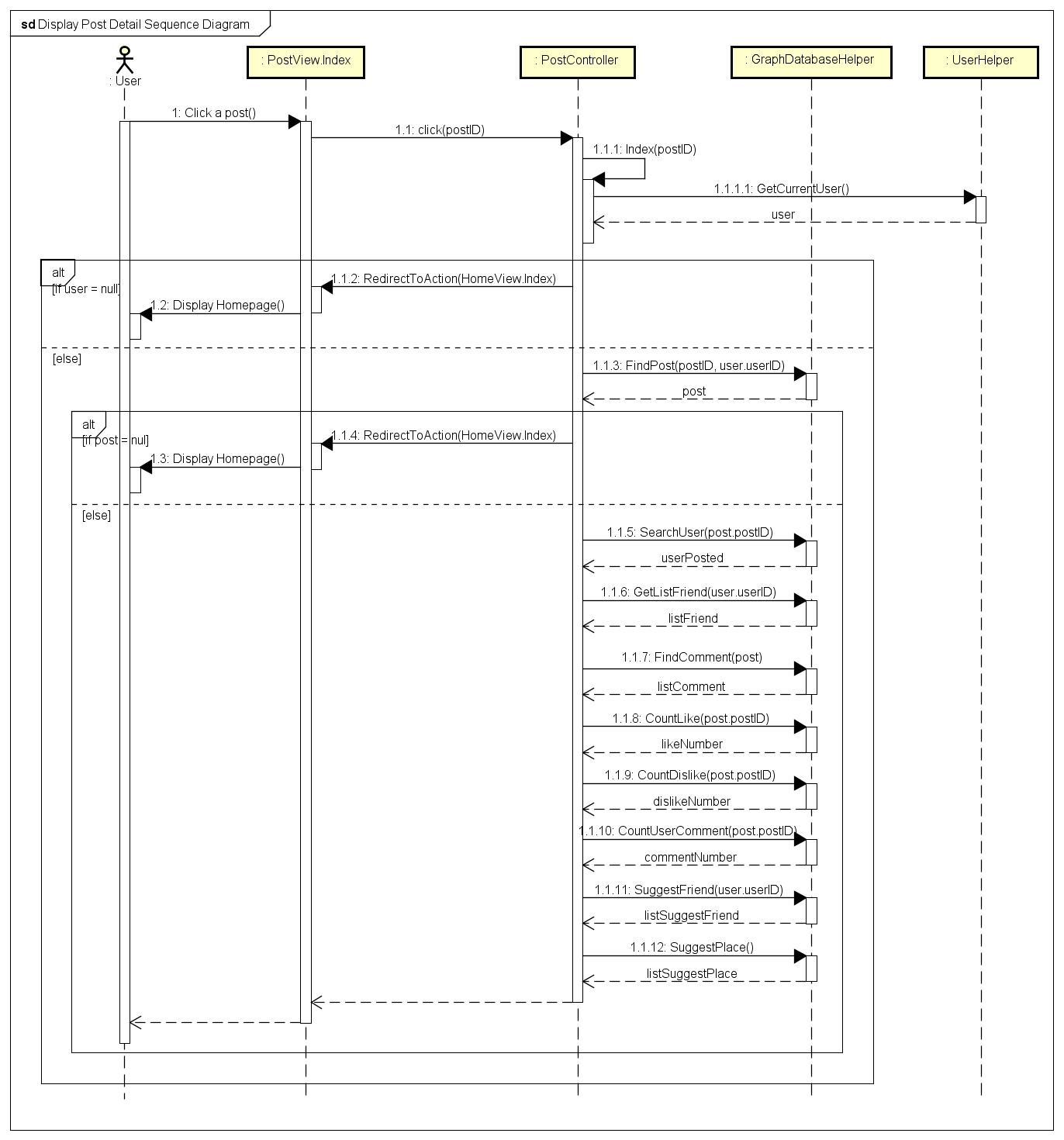
*Figure 9: Display User's Personal Page sequence diagram*

#### Display New Feed



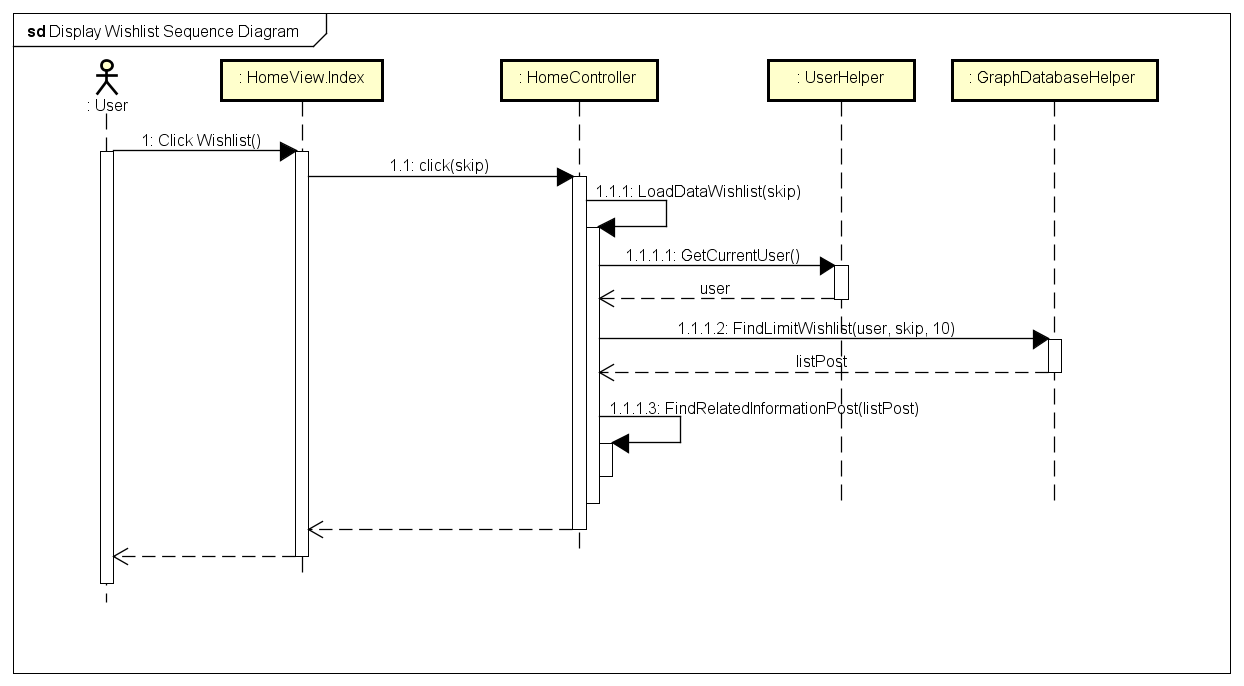
*Figure 10: Display New Feed sequence diagram*

#### Display Post Detail



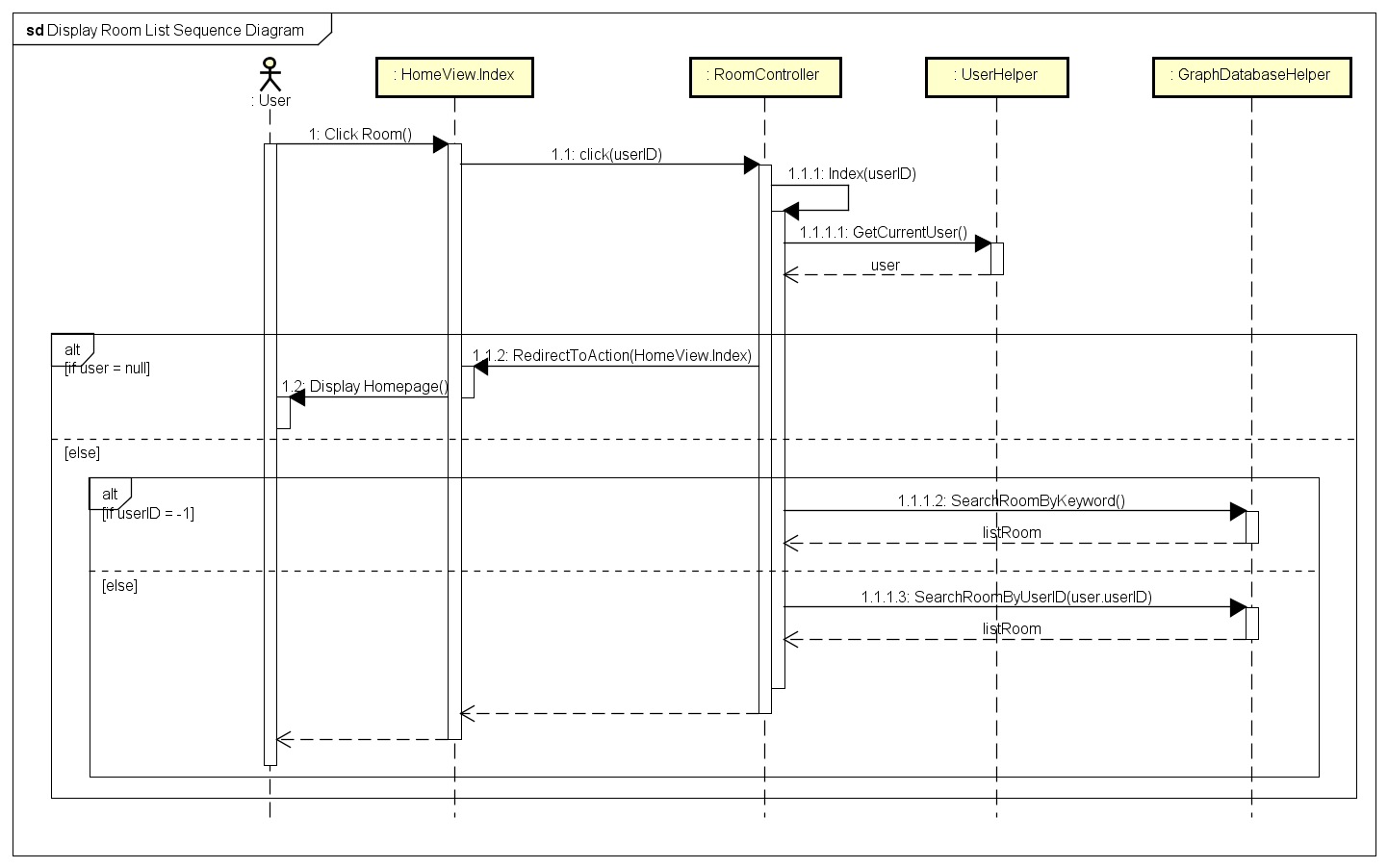
*Figure 11: Display Post Detail sequence diagram*

#### Display Wish List



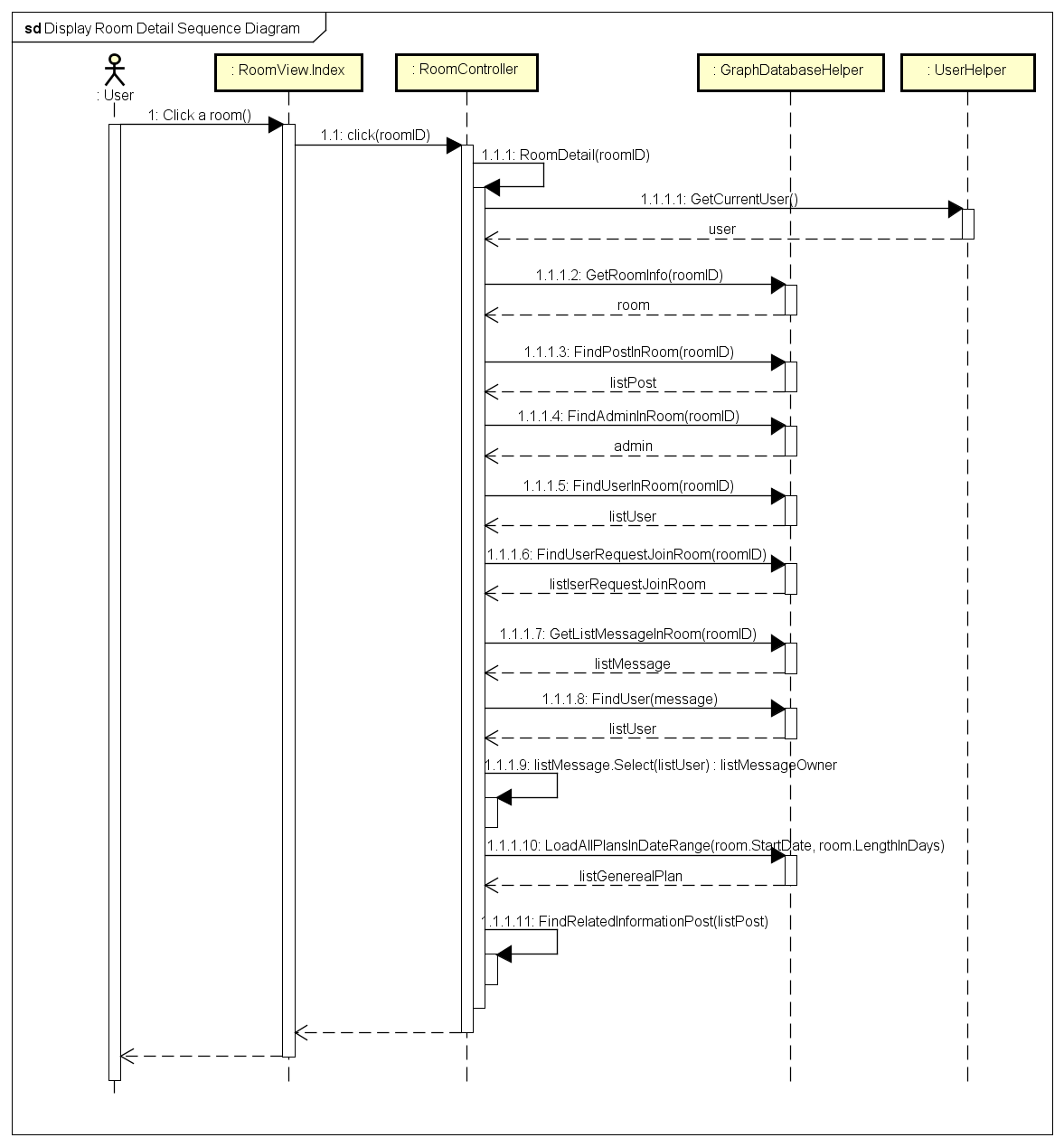
*Figure 12: Display Wish List sequence diagram*

#### Display Room List



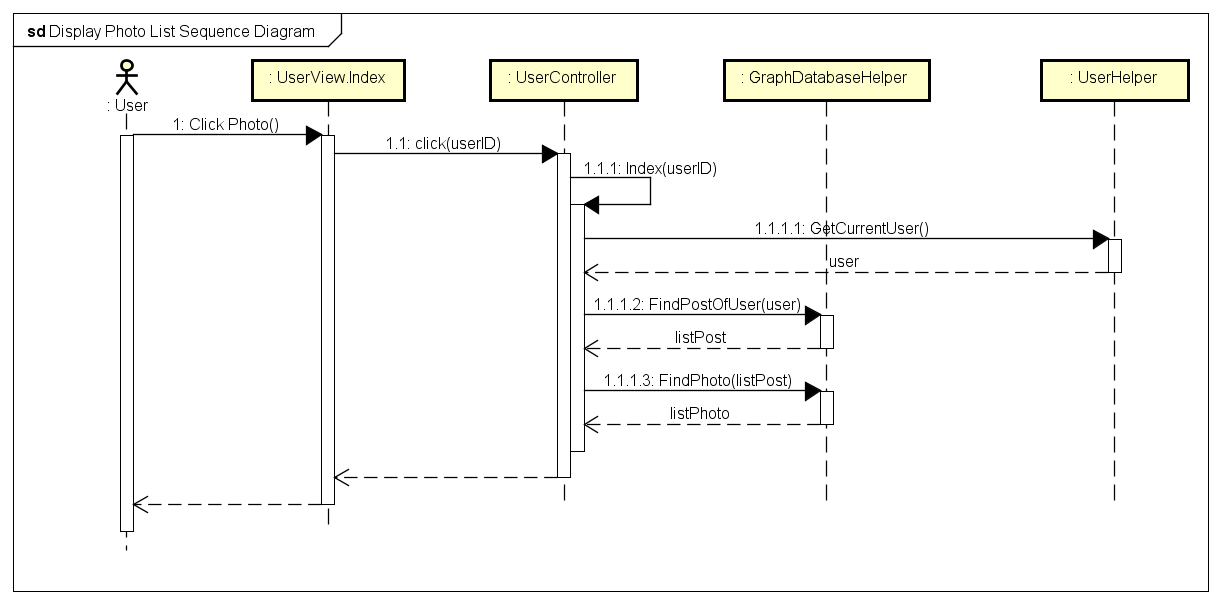
*Figure 13: Display Room List sequence diagram*

#### Display Room Detail



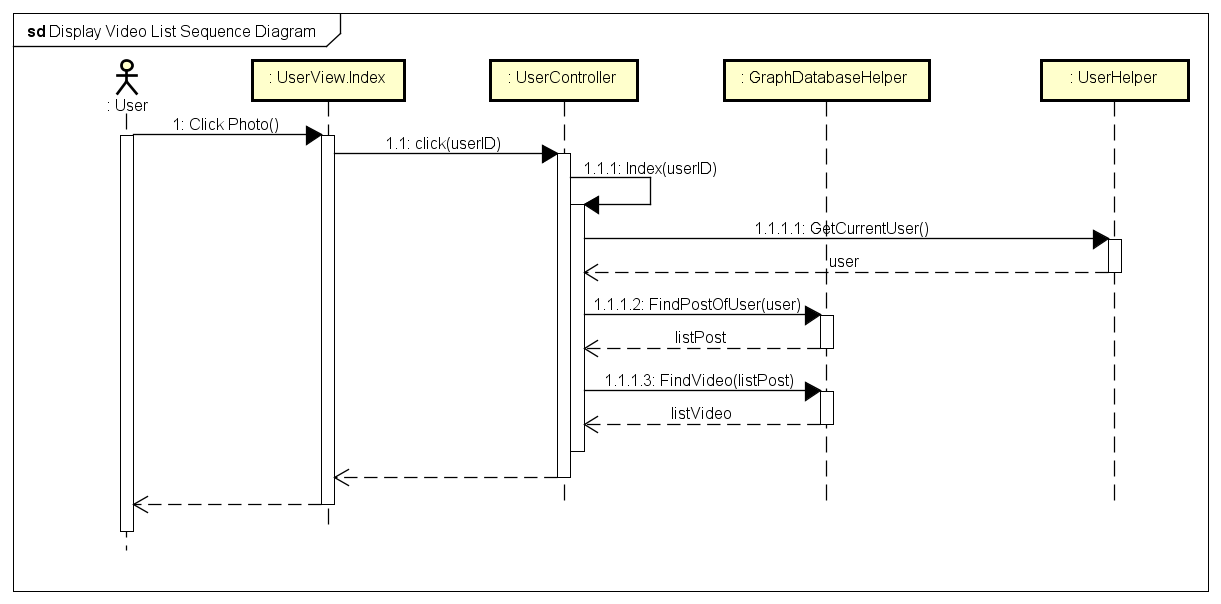
*Figure 14: Display Room Detail sequence diagram*

#### Display Photo List



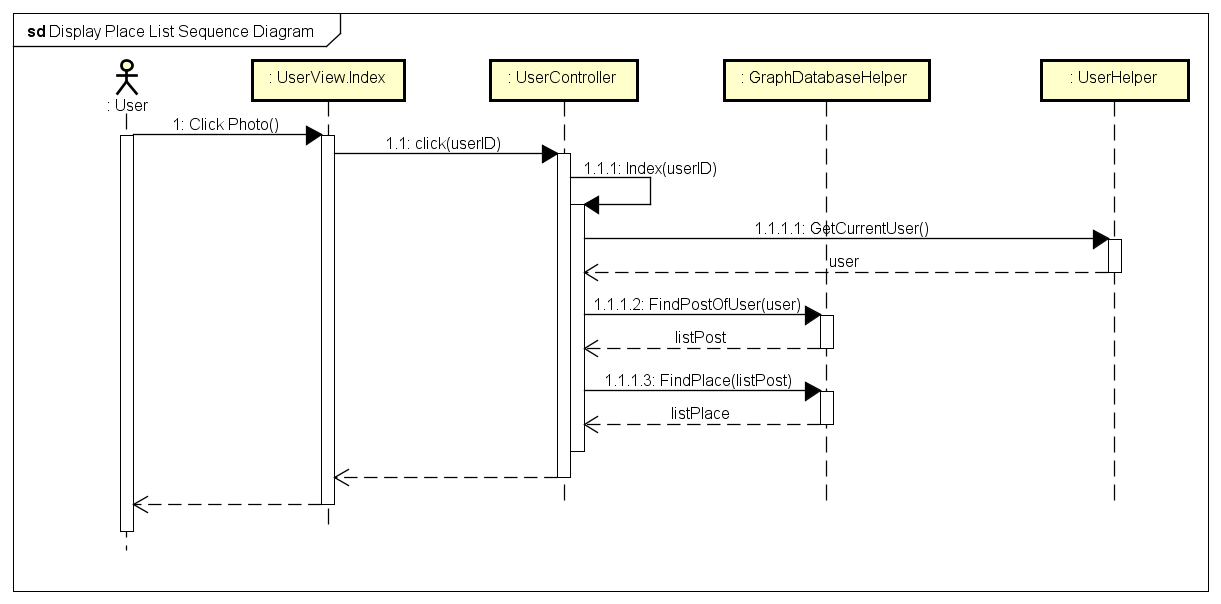
*Figure 15: Display Photo List sequence diagram*

#### Display Video List



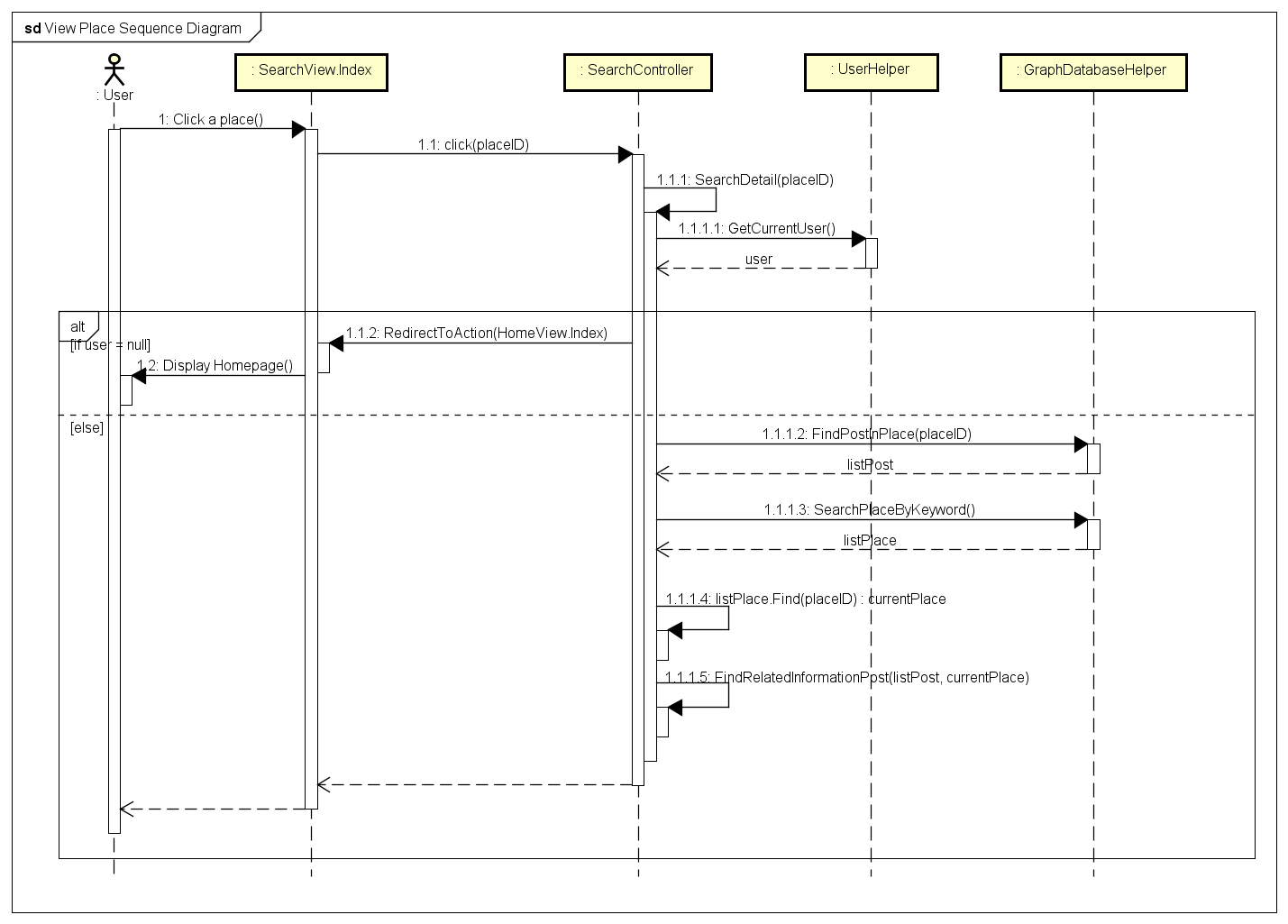
*Figure 16: Display Video List sequence diagram*

#### Display Place List



*Figure 17: Display Place List sequence diagram*

#### View Place



*Figure 18: View Place sequence diagram*

## Post Management

### Class Diagram

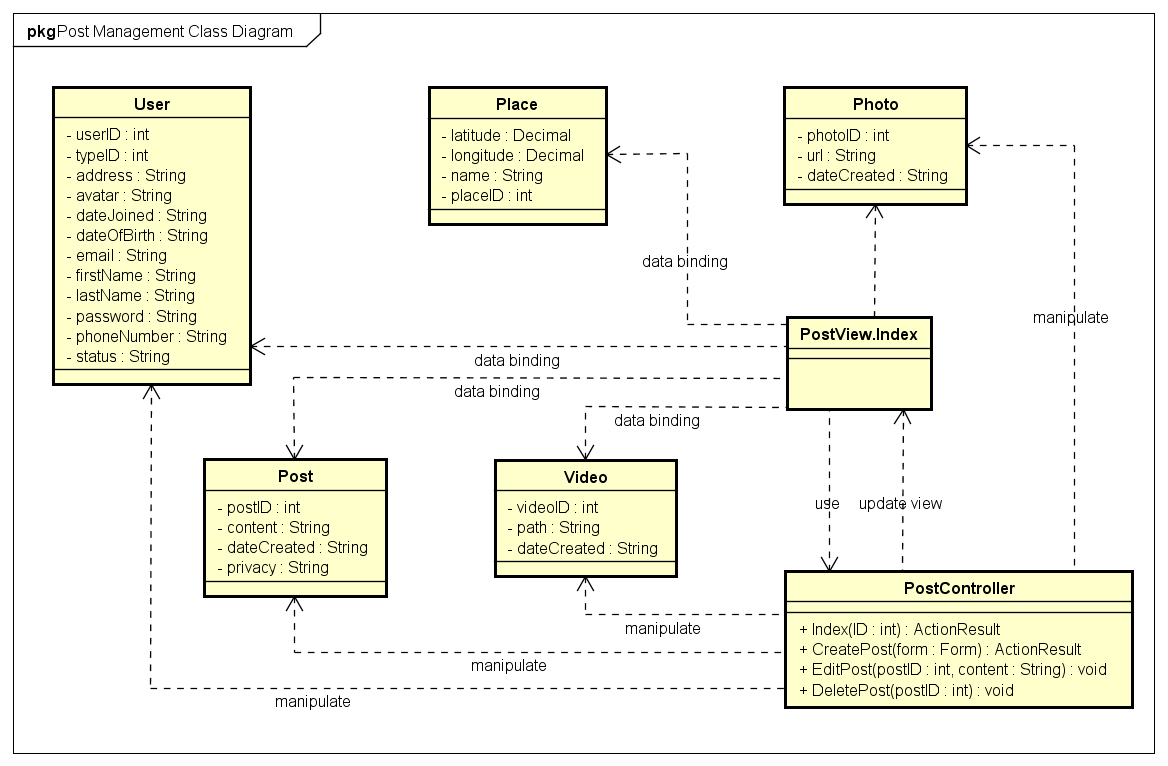


Figure 19: Post Management class diagram

|  |  |  |
| --- | --- | --- |
| No. | Class Name | Description |
|  | User | Include method interact with Database |
|  | Photo | Include method interact with Database |
|  | Place | Include method interact with Database |
|  | Index | Include method interact with Controller |
|  | Post Controller | Include method interact with Model |

### Sequence Diagram

#### Add Post

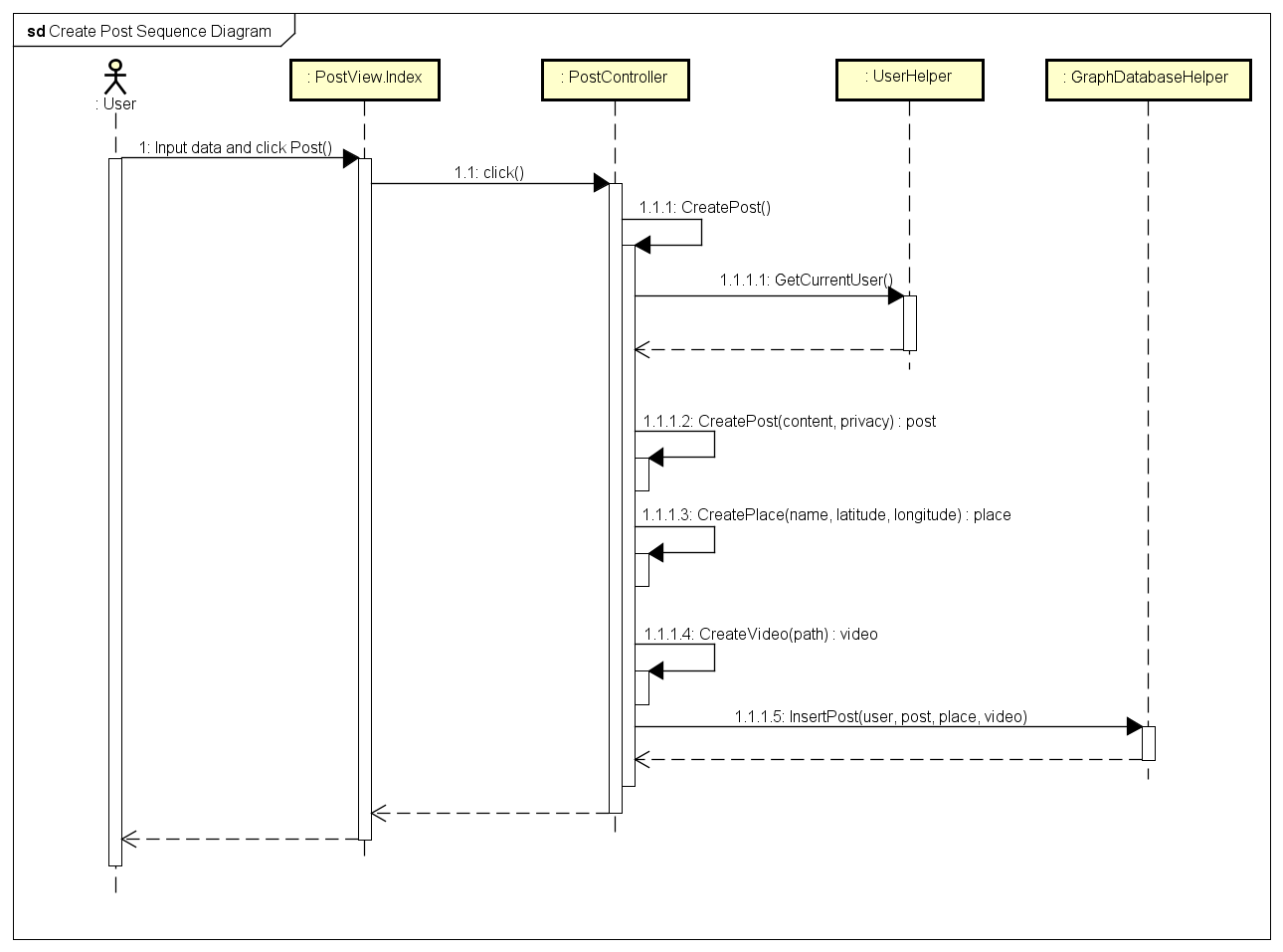


Figure 20: Add Post sequence diagram

#### Edit Post

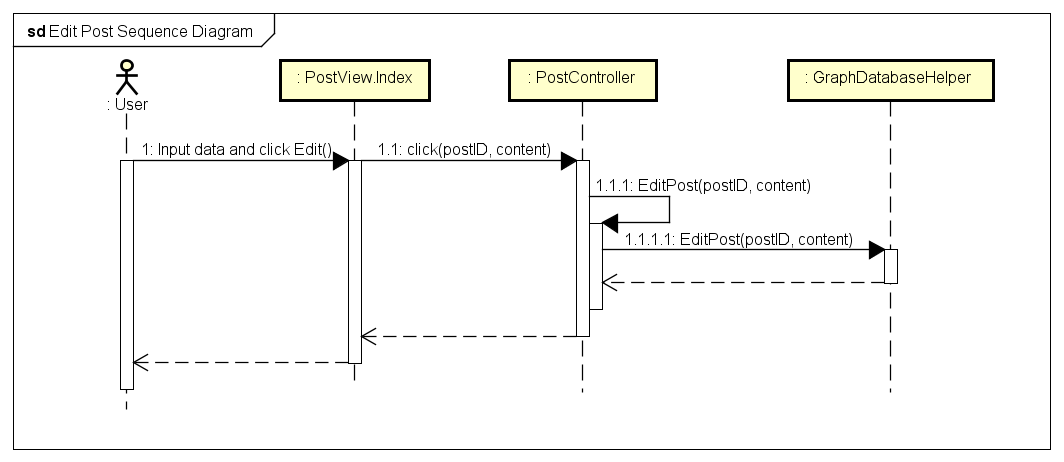


Figure 22: Edit Post sequence diagram

#### Delete Post

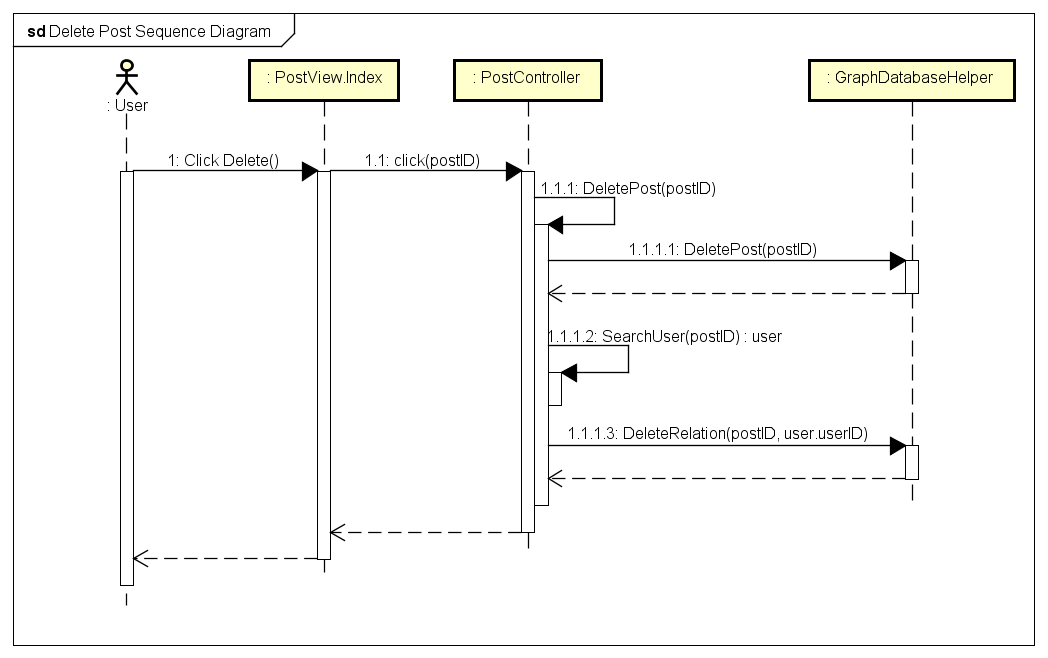
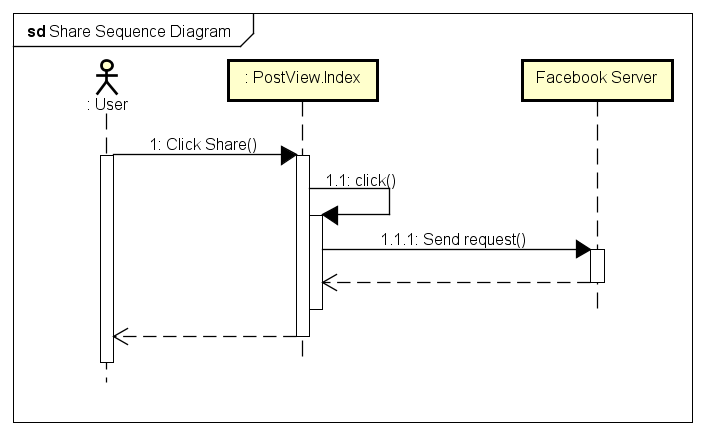


Figure 23: Delete Post sequence diagram

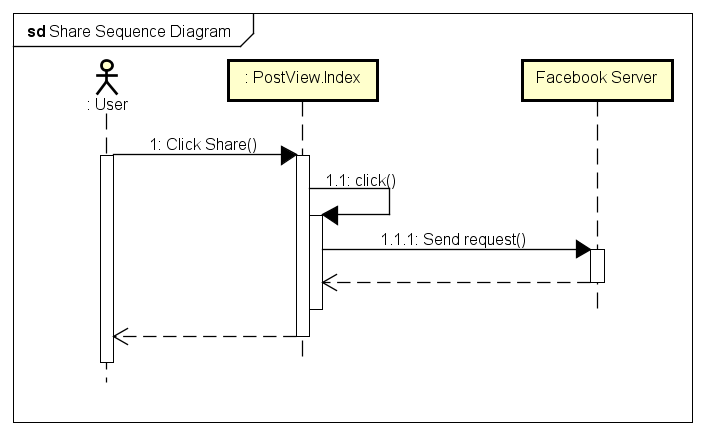
## Share Management

### Class Diagram



*Figure 24: Share sequence diagram*

### Sequence Diagram



*Figure 25: Share sequence diagram*

## Comment Management

### Class Diagram

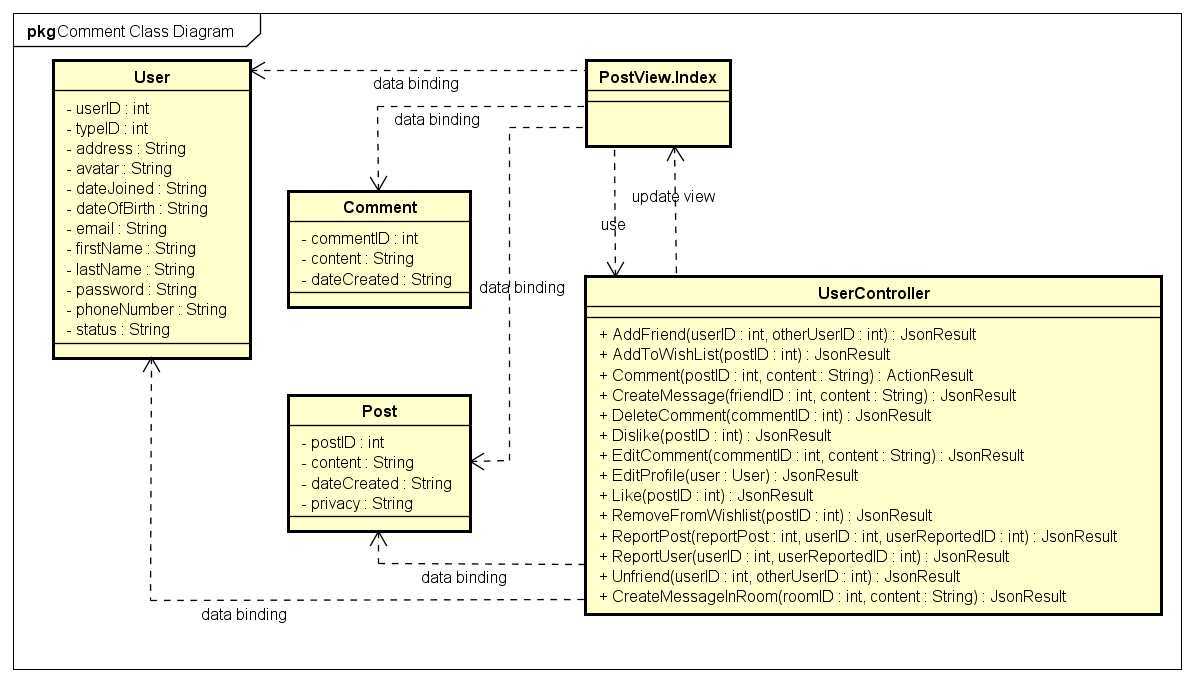


Figure 26: Comment Management class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | Post | Include method interact with Database |
|  | Comment | Include method interact with Database |
|  | Index | Include method interact with Controller |
|  | User Controller | Include method interact with Model |

### Sequence Diagram

#### Add Comment

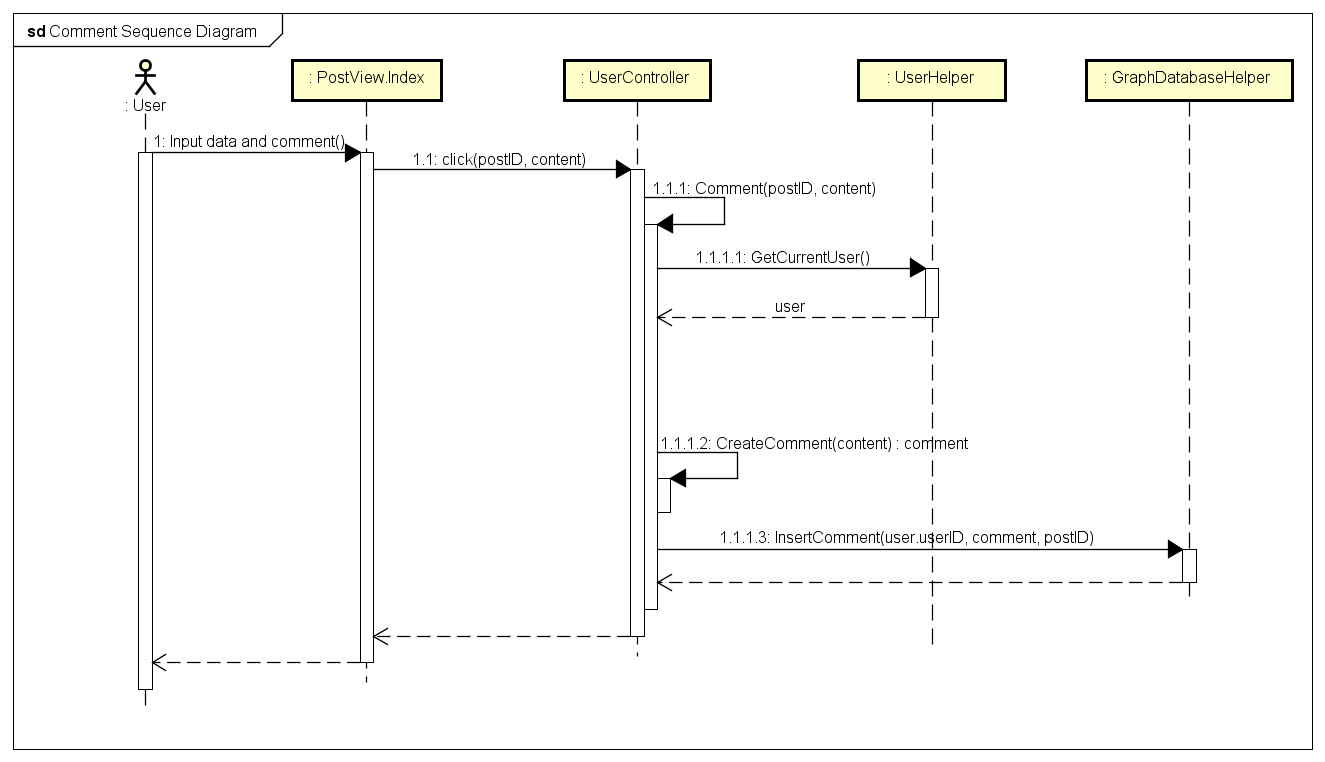


Figure 27: Add Comment sequence diagram

#### Edit Comment

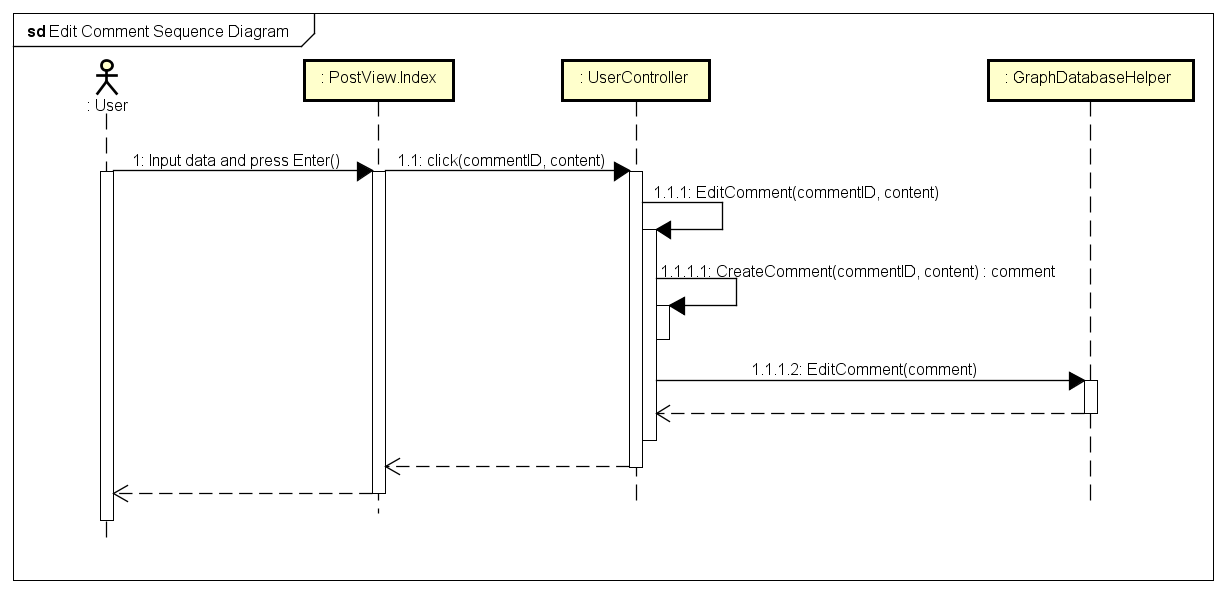


Figure 28: Edit Comment sequence diagram

#### Delete Comment

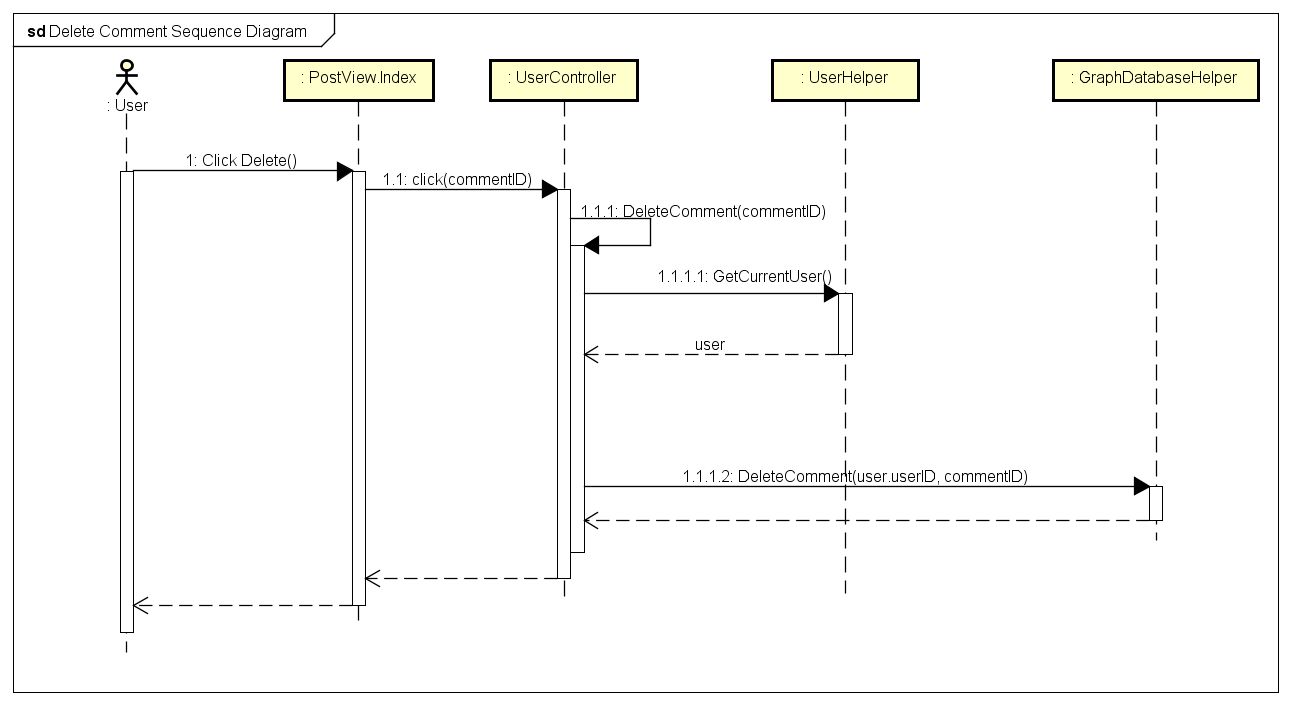


Figure 29: Delete Comment sequence diagram

## Like Management

### Class Diagram

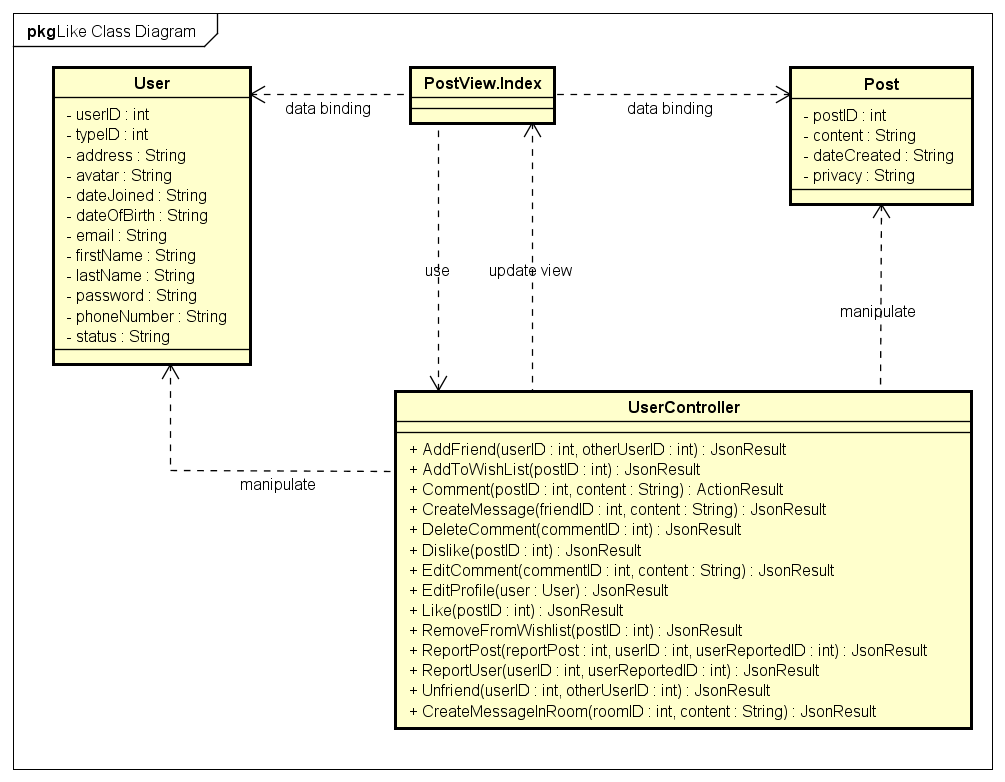


Figure 30: Like class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | Post | Include method interact with Database |
|  | Index | Include method interact with Controller |
|  | User Controller | Include method interact with Model |

### Sequence Diagram

#### Like

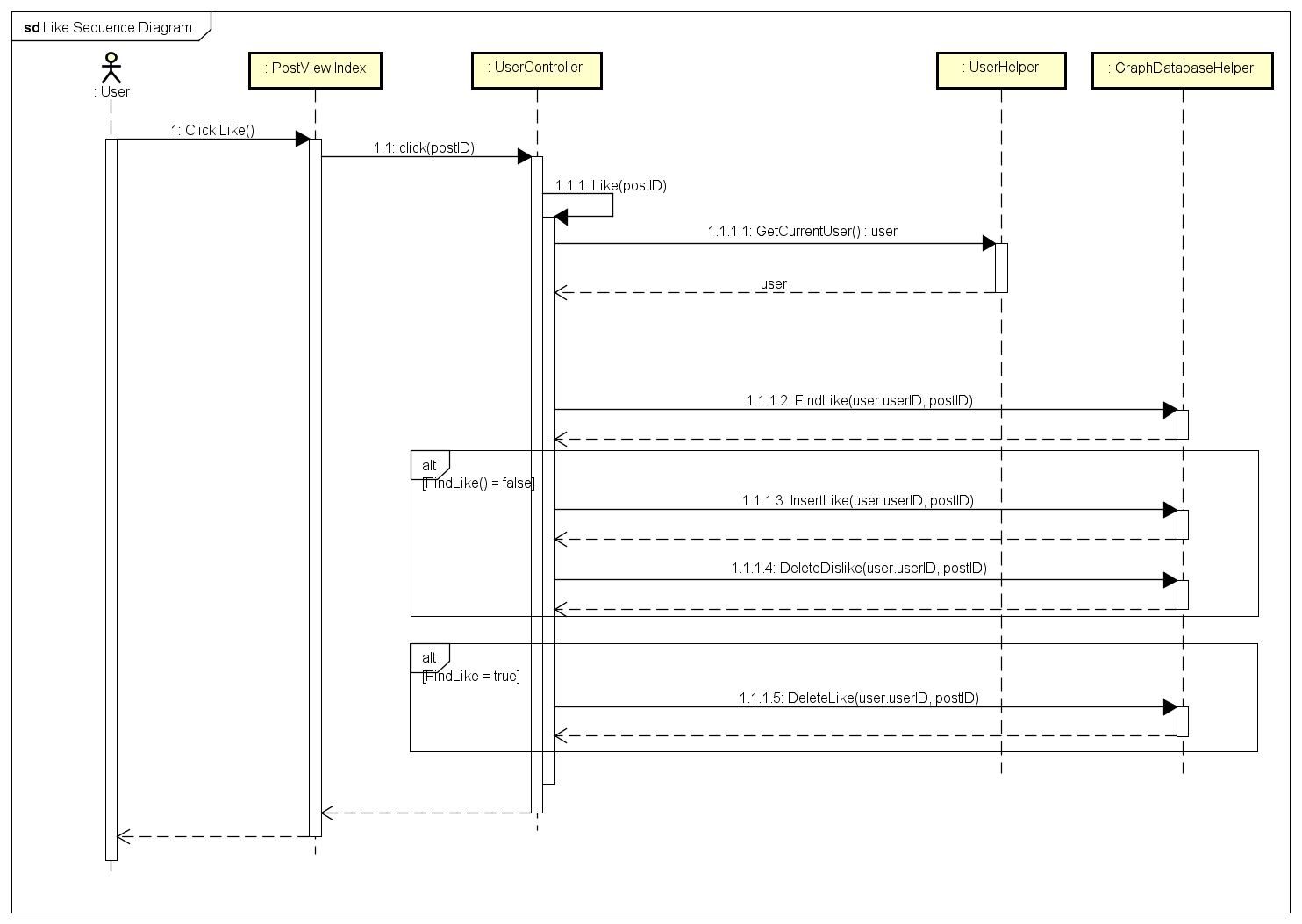


Figure 31: Like sequence diagram

#### Dislike

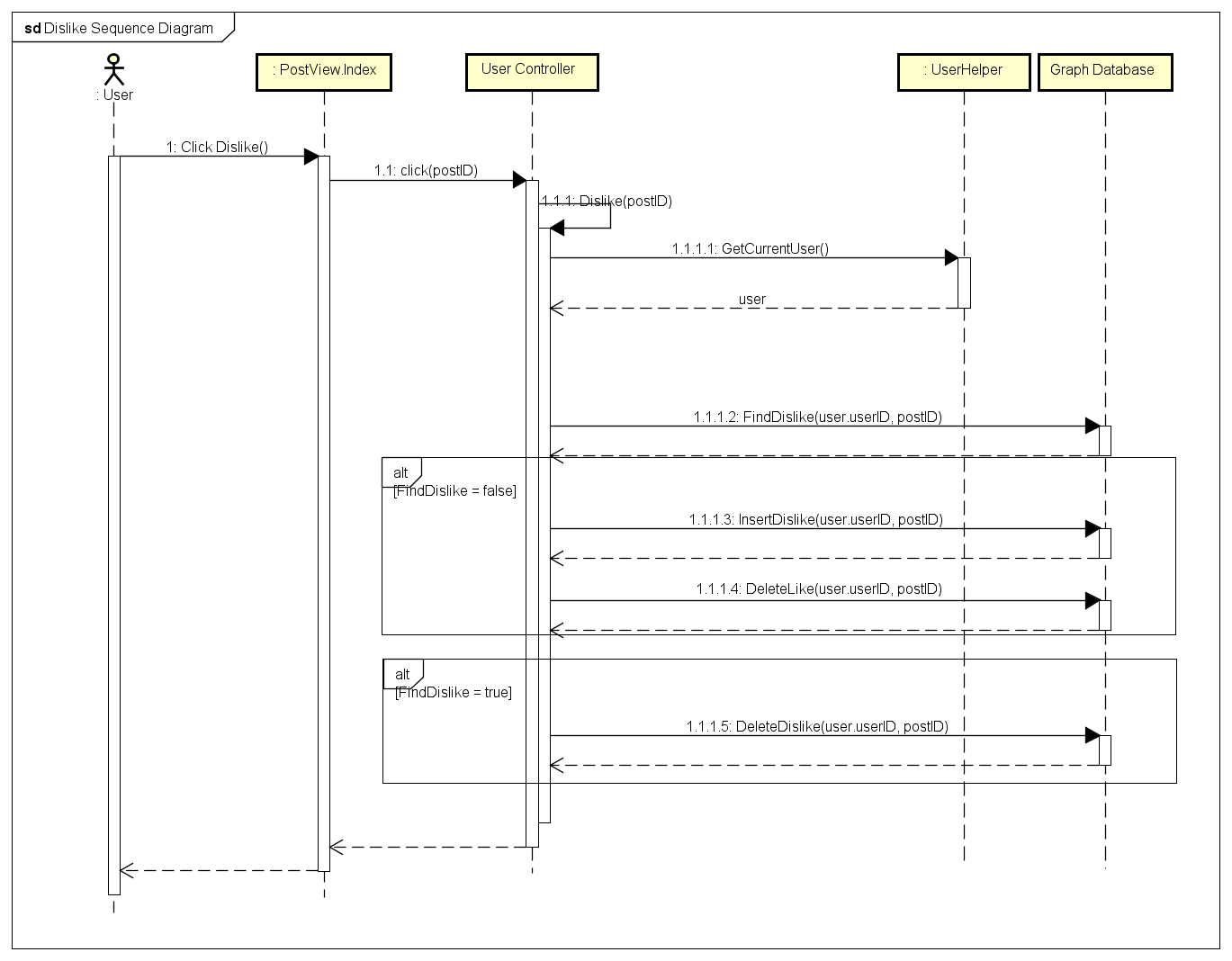


Figure 32: Dislike sequence diagram

## Report

### Class Diagram

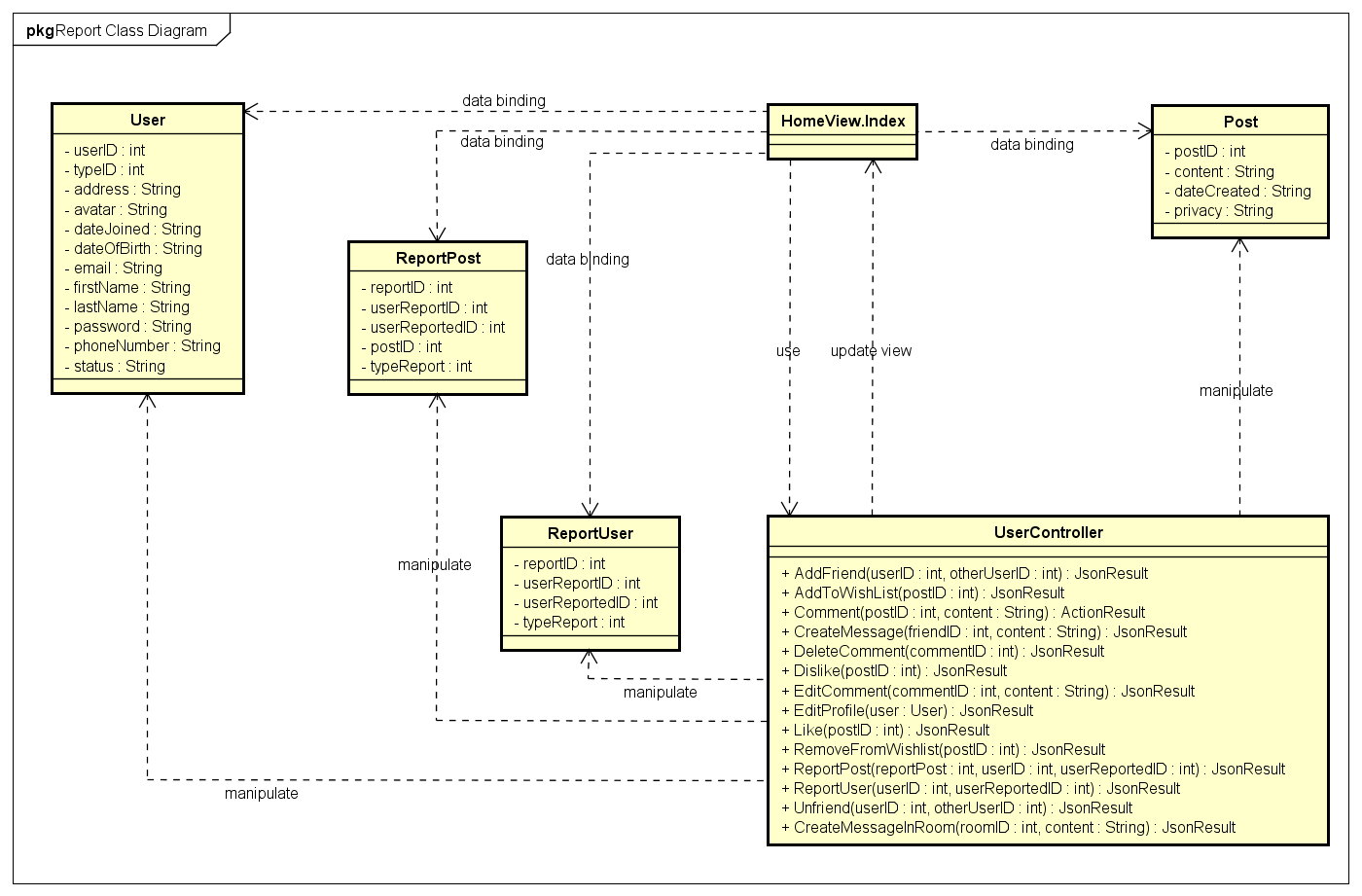


Figure 33: Report class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | ReportPost | Include method interact with Database |
|  | ReportUser | Include method interact with Database |
|  | Index | Include method interact with Controller |
|  | User Controller | Include method interact with Model |

### Sequence Diagram

#### Report a post

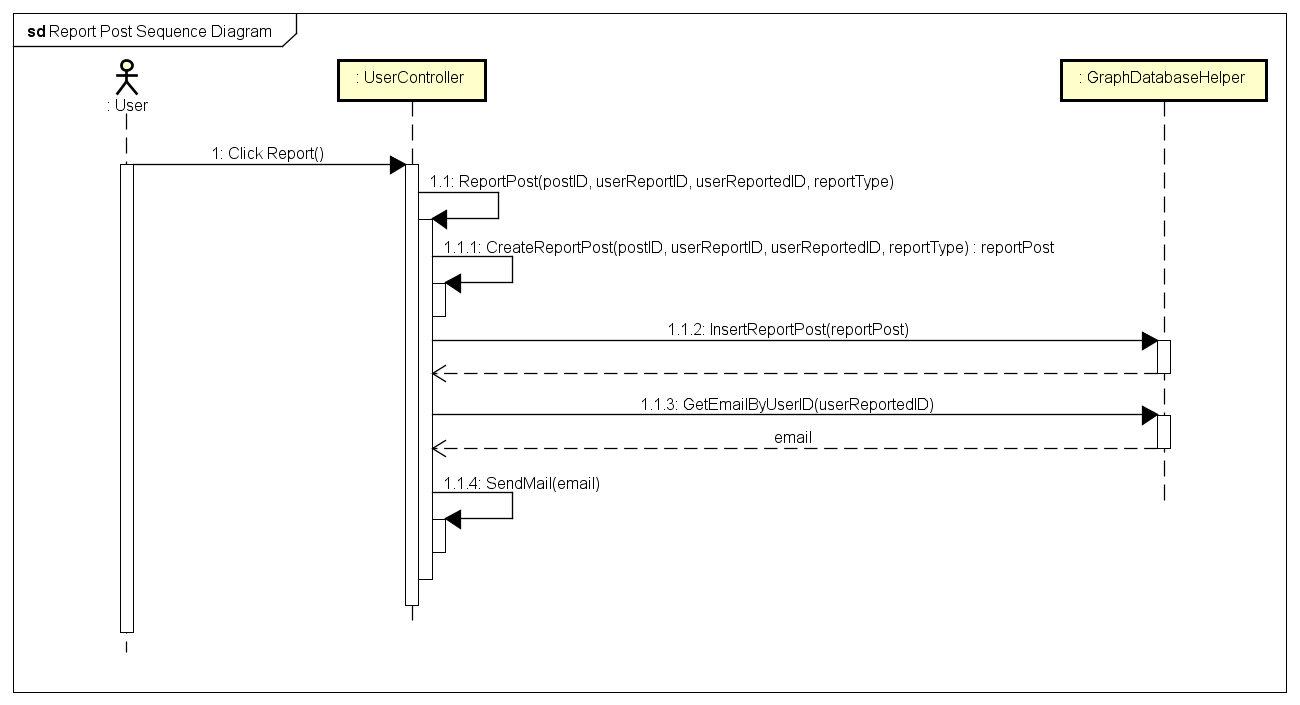


Figure 34: Report a Post sequence diagram

#### Report an user

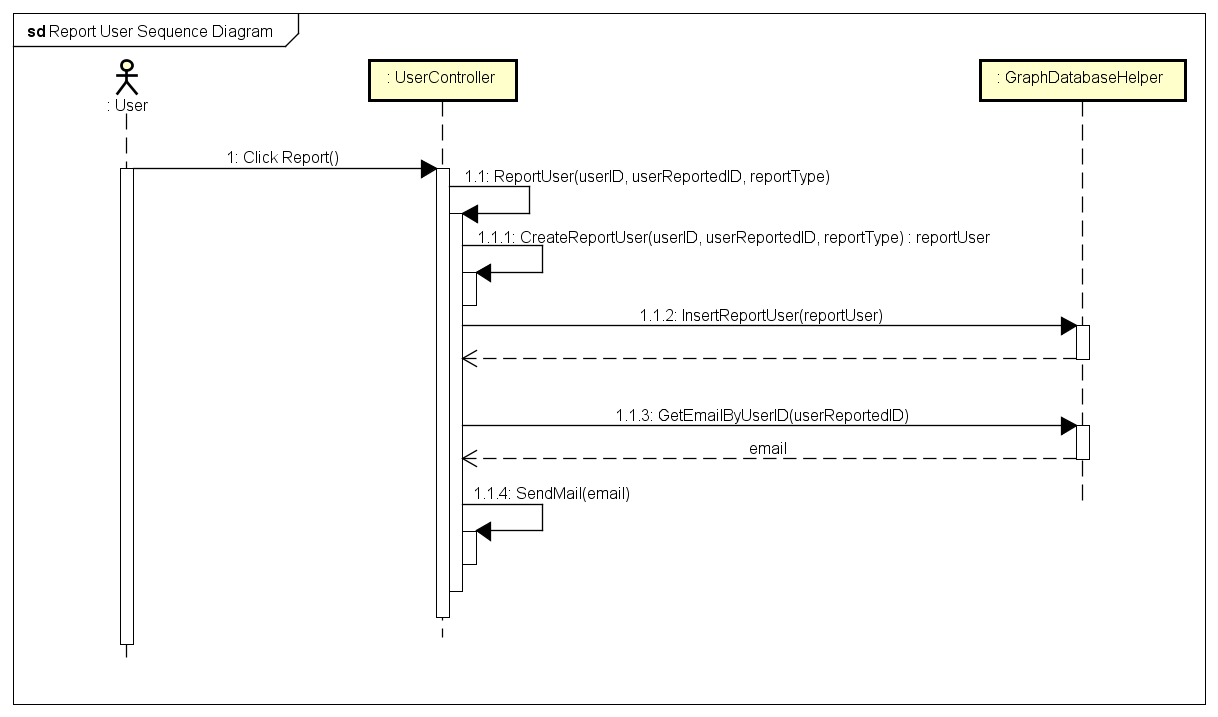


Figure 35: Report a User sequence diagram

## Chat

### Class Diagram

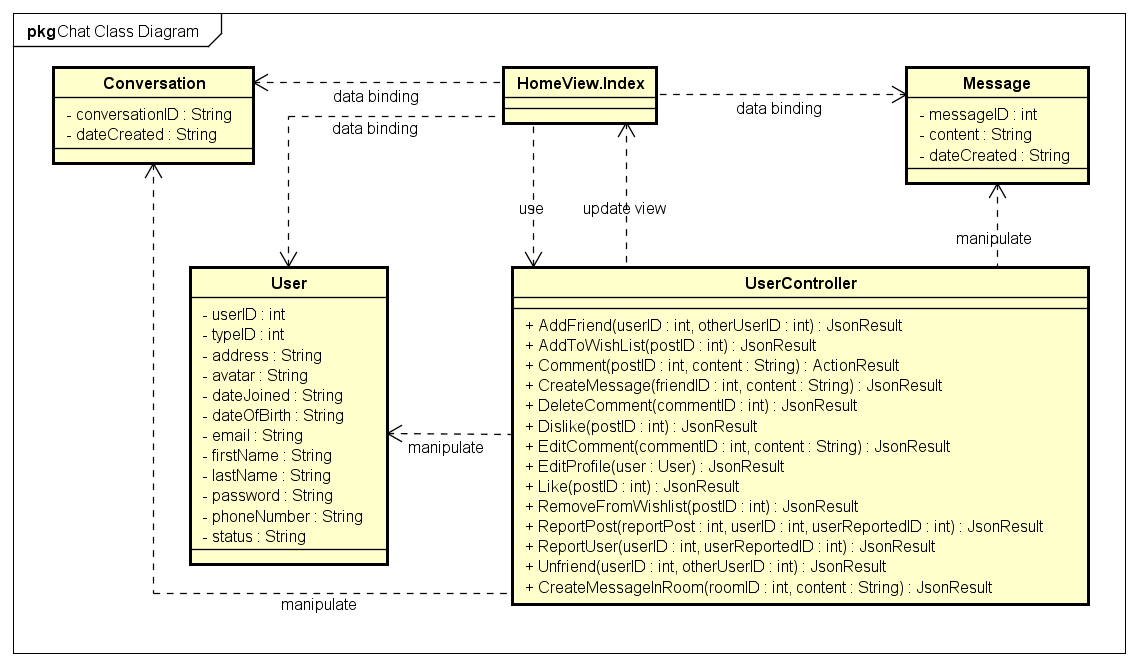


Figure 36: Chat class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | ReportPost | Include method interact with Database |
|  | ReportUser | Include method interact with Database |
|  | Index | Include method interact with Controller |
|  | User Controller | Include method interact with Model |

### Sequence Diagram

#### Chat

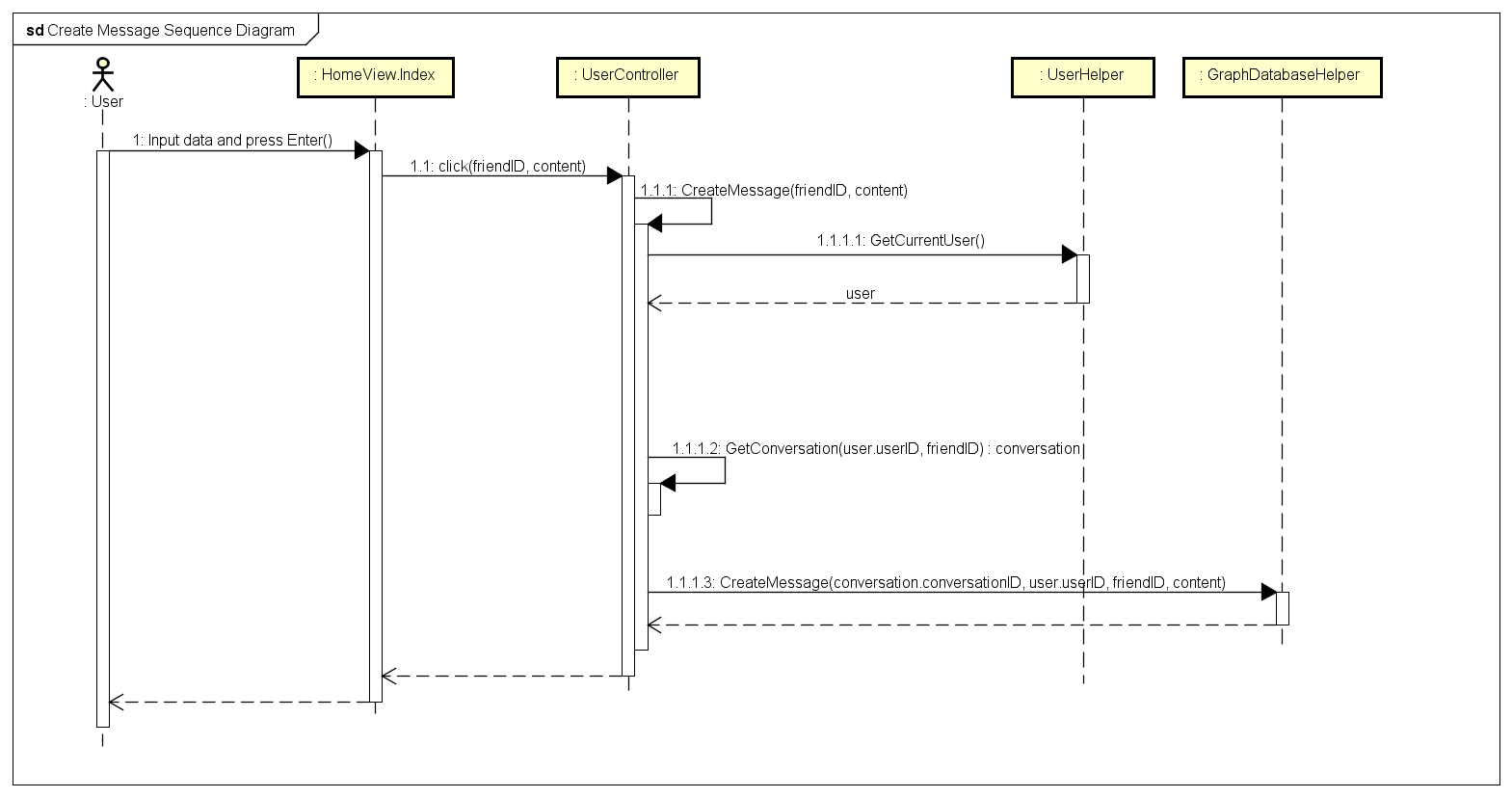


Figure 37: Chat sequence diagram

## Friend Management

### Class Diagram

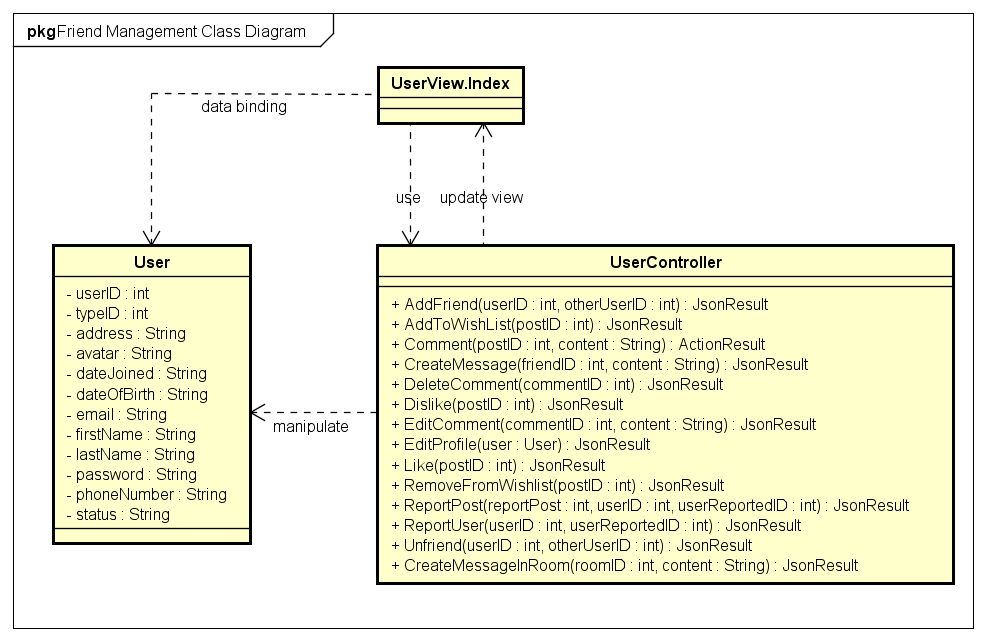


Figure 38: Friend Management class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | Index | Include method interact with Controller |
|  | User Controller | Include method interact with Model |

### Sequence Diagram

#### Add Friend

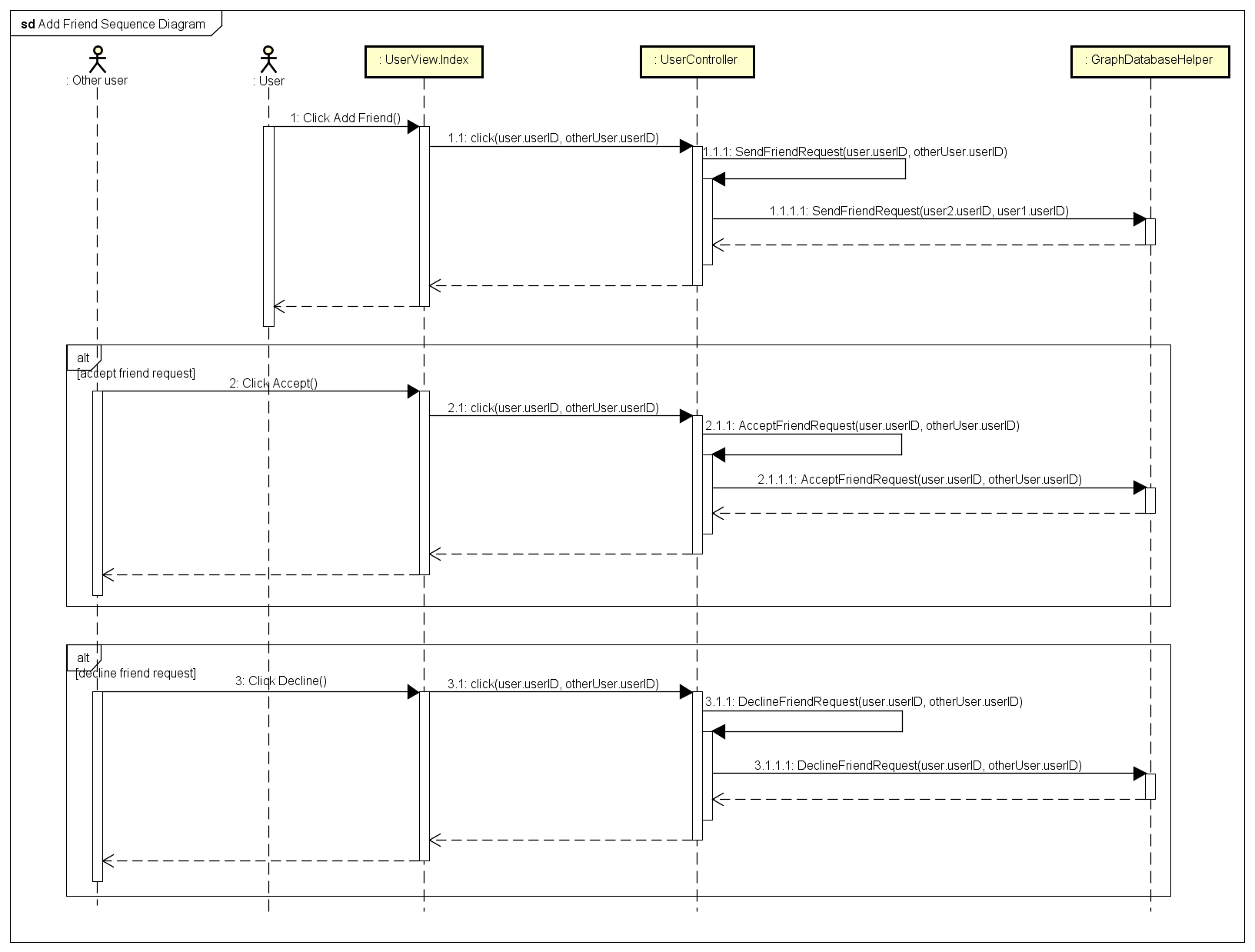


Figure 39: Add Friend sequence diagram

#### Unfriend

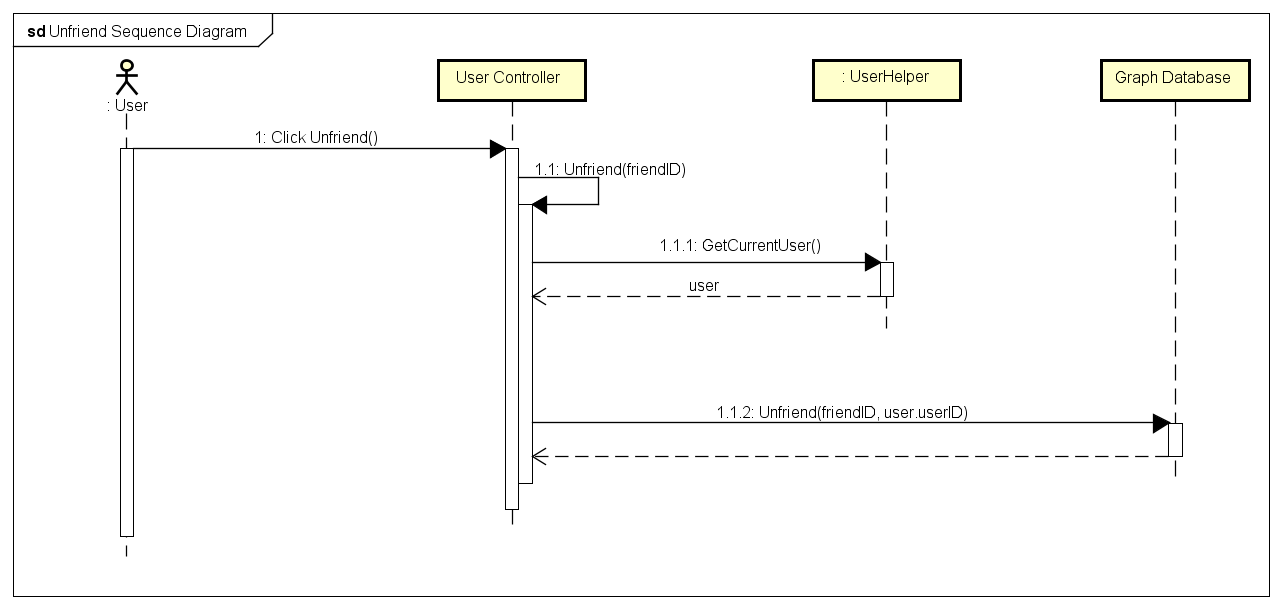


Figure 40: Unfriend sequence diagram

## Wish List

### Class Diagram

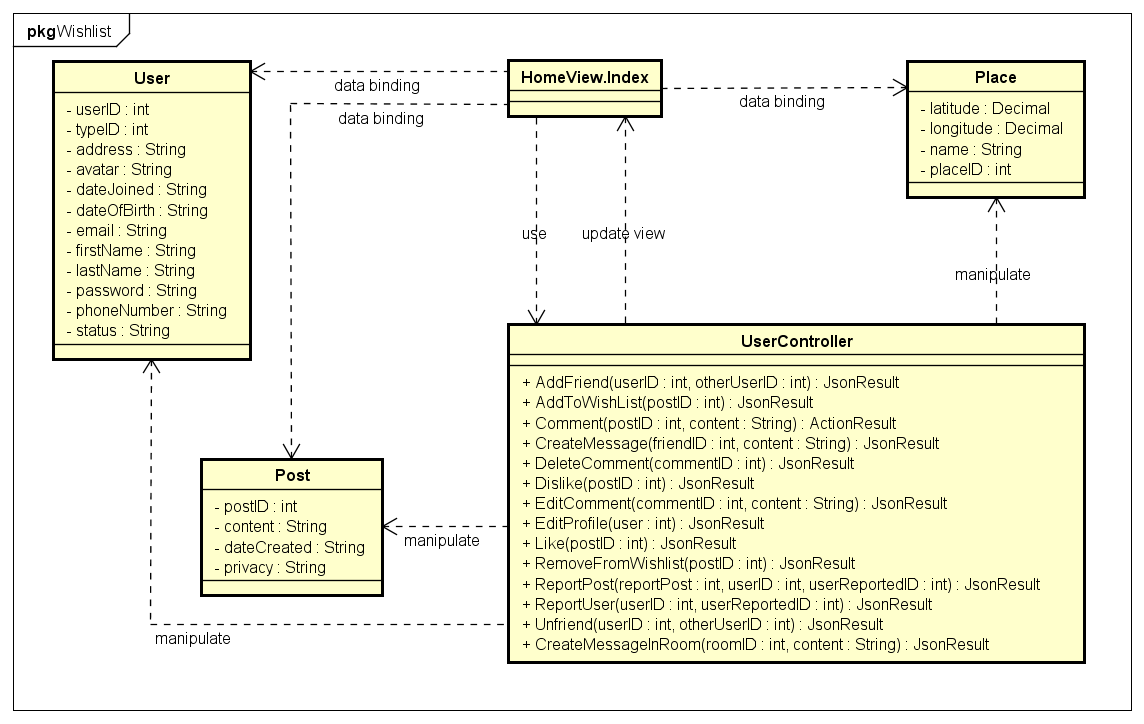


Figure 41: Wish List class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | Index | Include method interact with Controller |
|  | User Controller | Include method interact with Model |

### Sequence Diagram

#### Add to Wish List

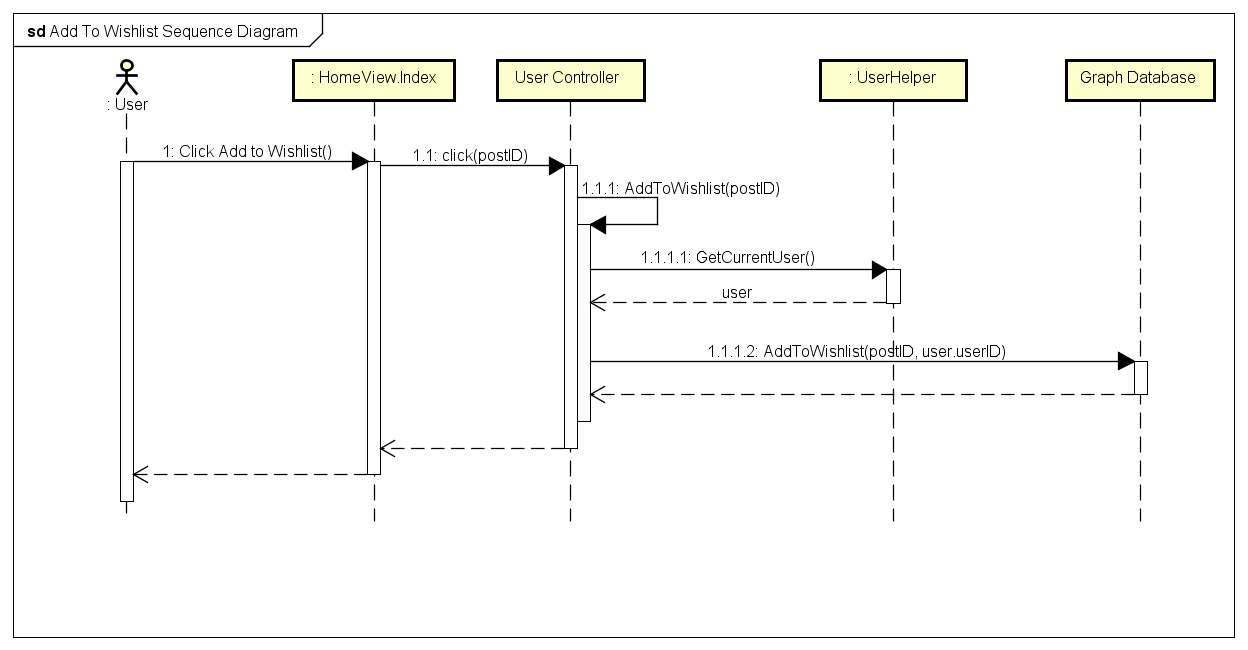


Figure 42: Add to Wish List sequence diagram

#### Remove From Wish List

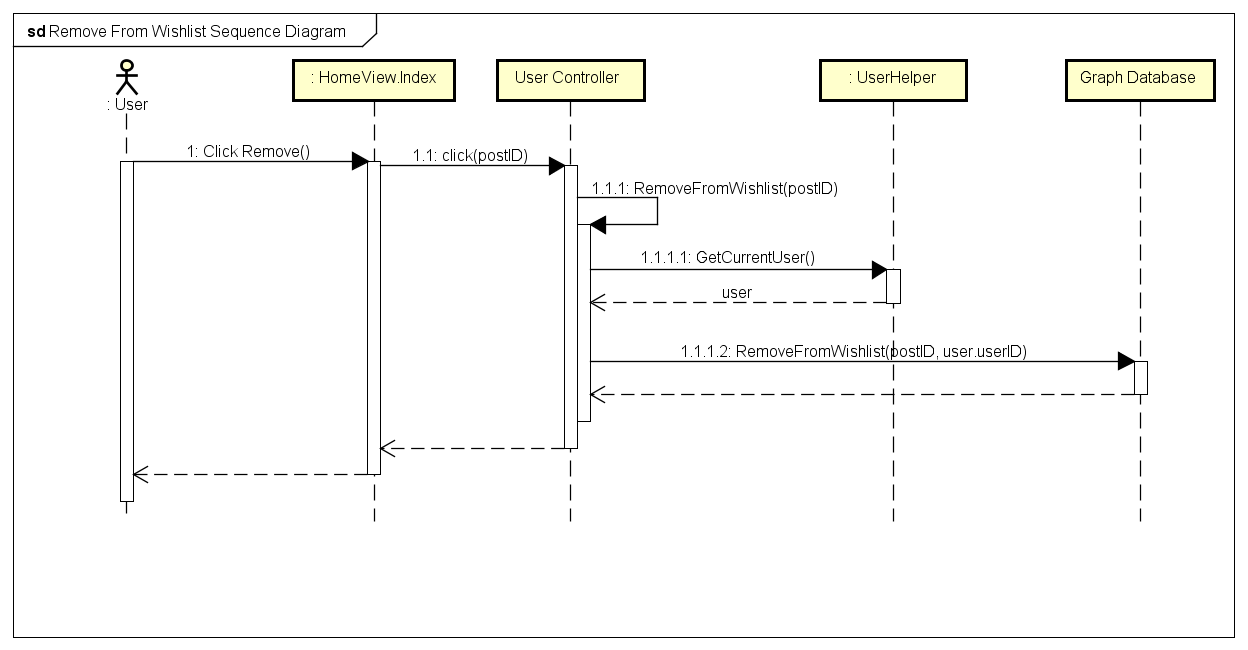
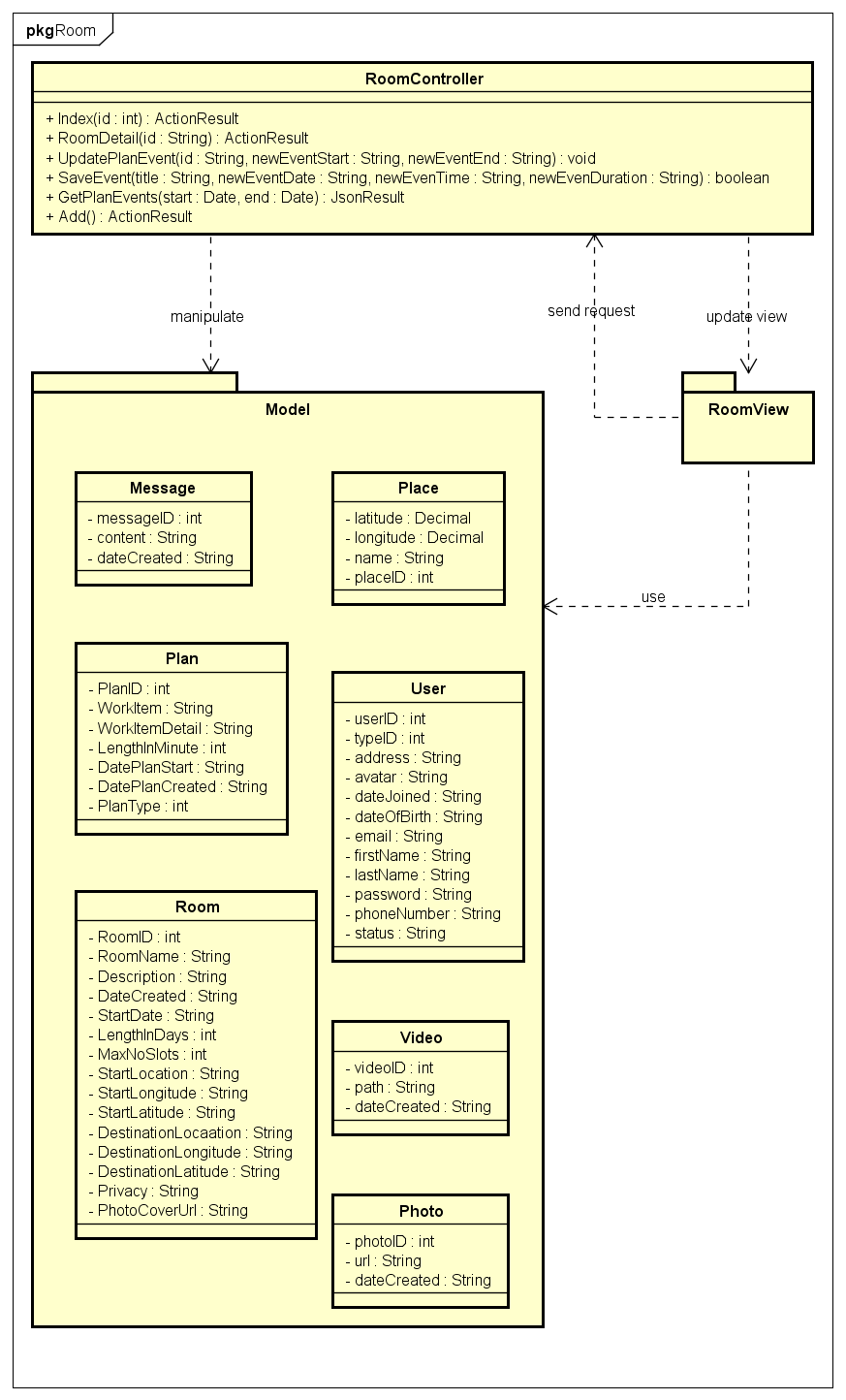


Figure 43: Remove From Wish List sequence diagram

## Room

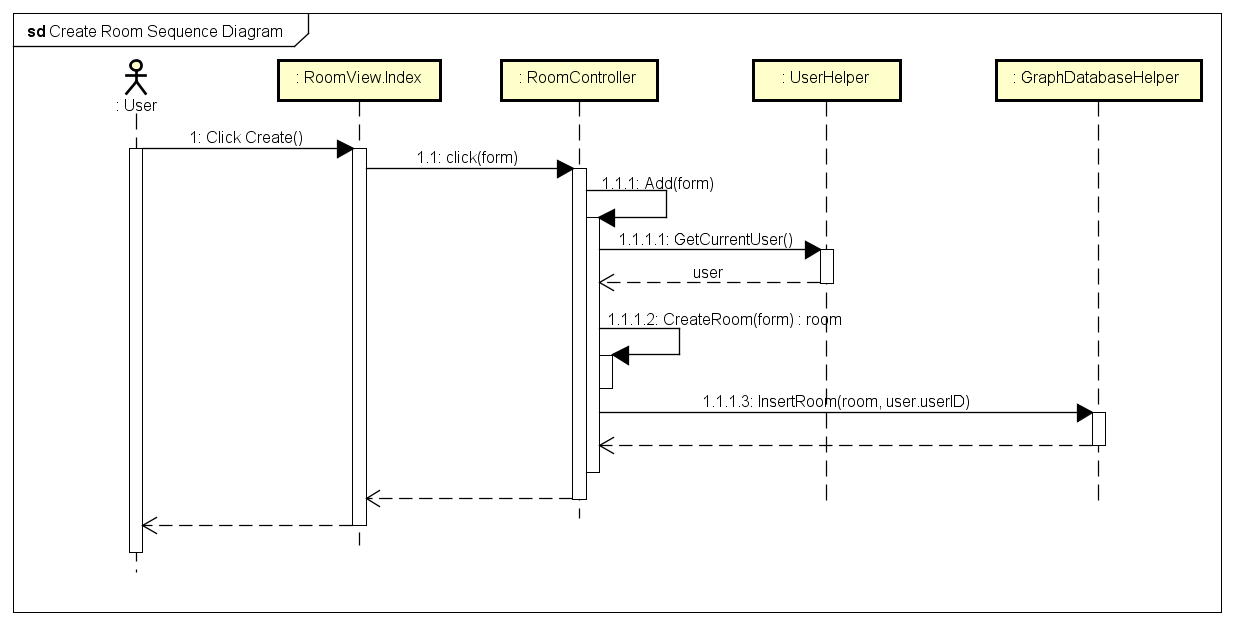
### Class Diagram



*Figure 44: Room class diagram*

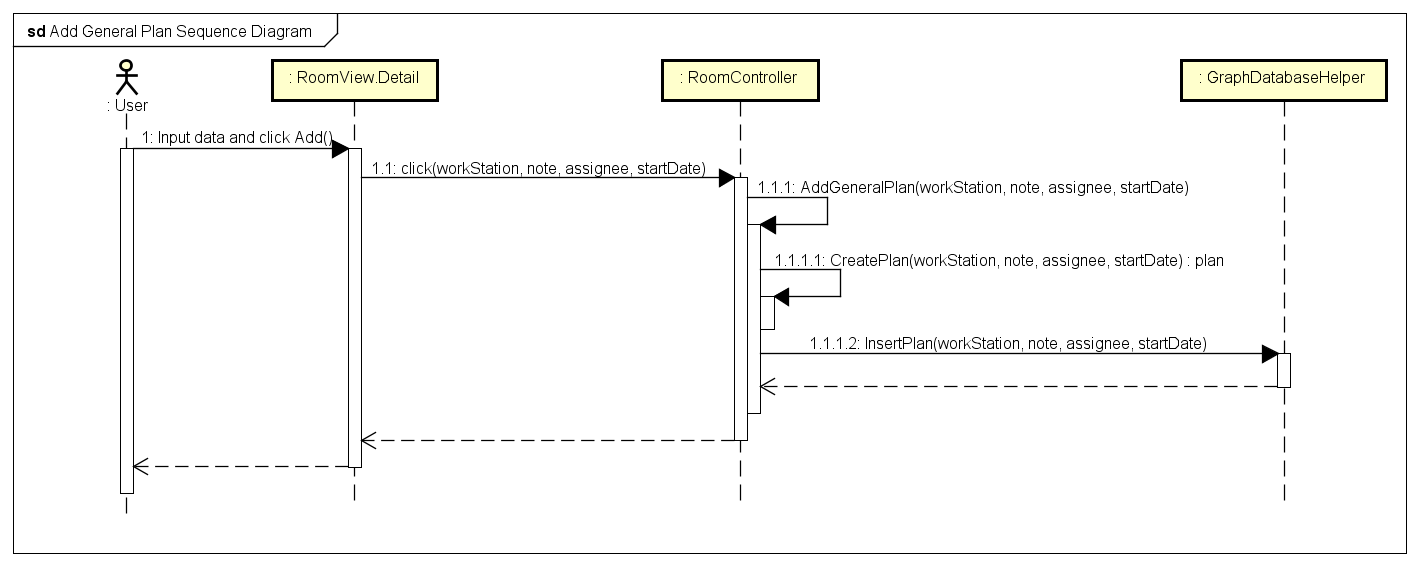
### Sequence Diagram

#### Create Room



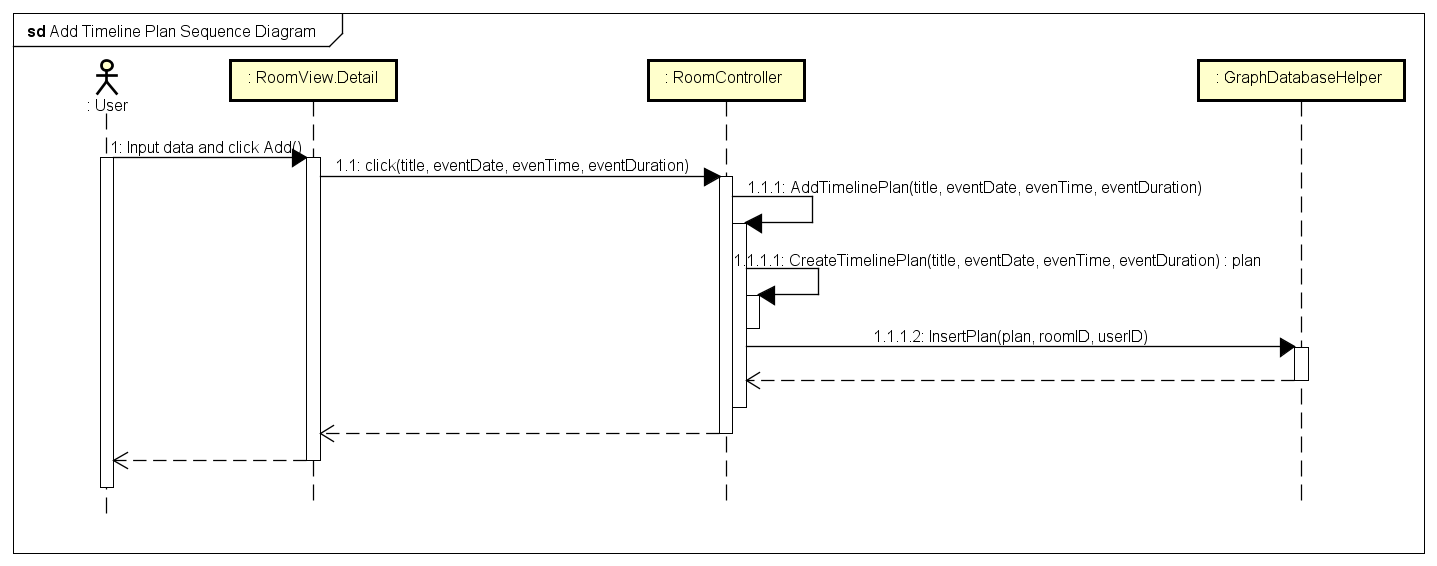
*Figure 45: Create Room sequence diagram*

#### Add General Plan



*Figure 46: Add General Plan sequence diagram*

#### Add Timeline Plan



*Figure 47: Add Timeline Plan sequence diagram*

## Account Management

### Class Diagram

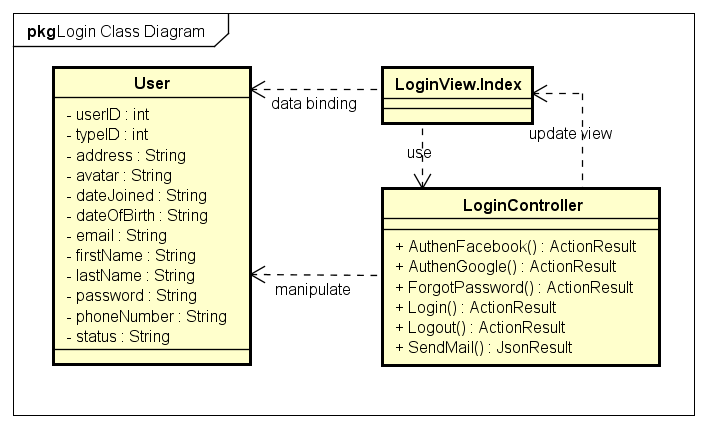


Figure 48: Account Management class diagram

|  |  |  |
| --- | --- | --- |
| **No.** | **Class Name** | **Description** |
|  | User | Include method interact with Database |
|  | Login | Include method interact with Controller |
|  | Login Controller | Include method interact with Model |

### Sequence Diagram

#### Login

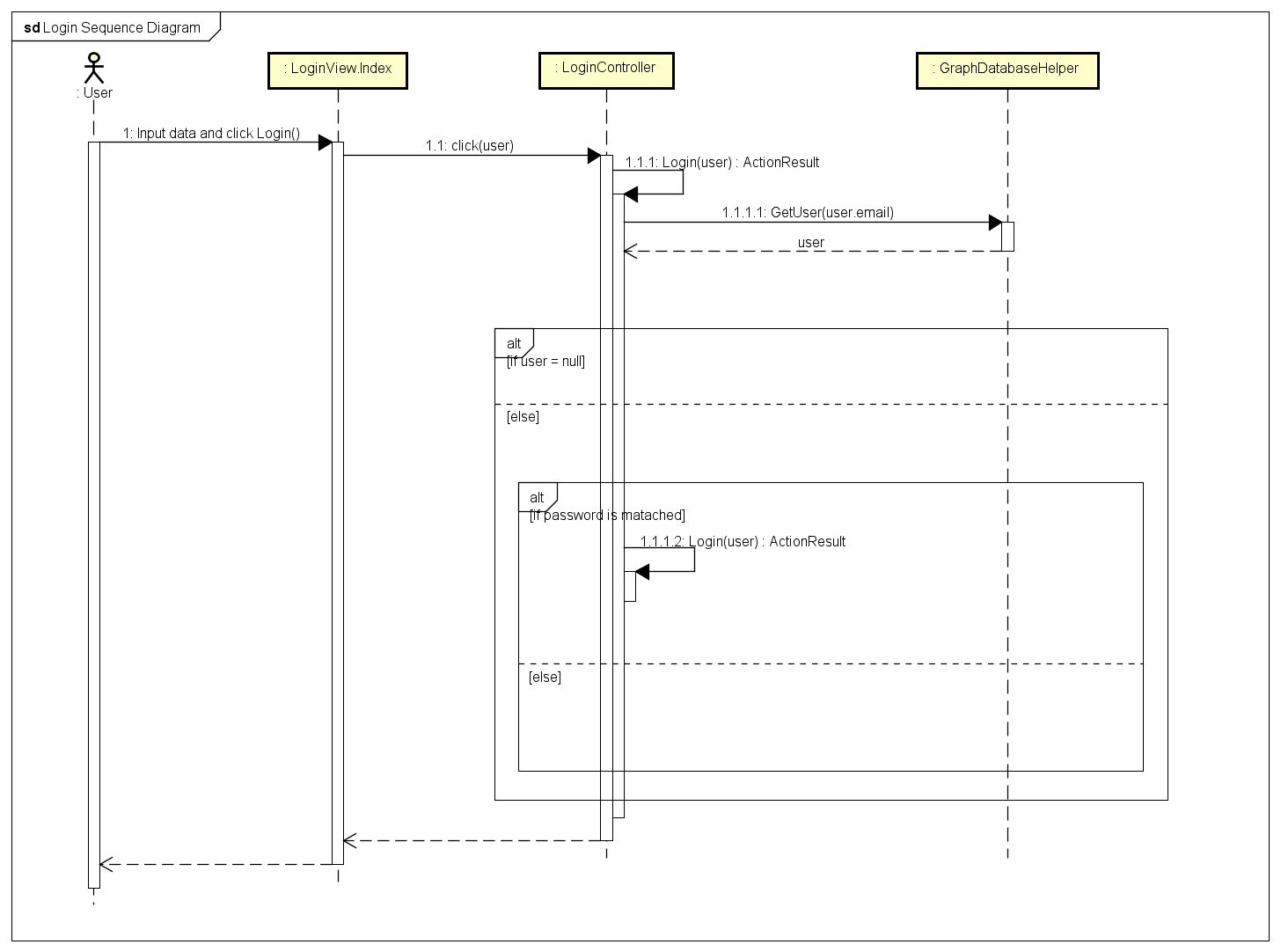


Figure 49: Login sequence diagram

#### Logout

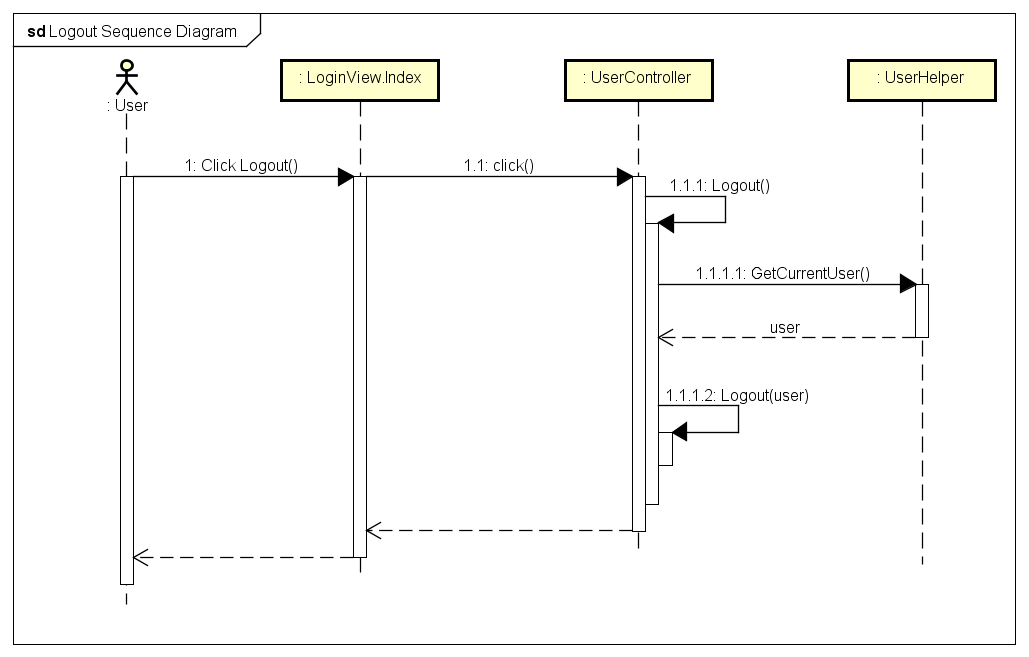
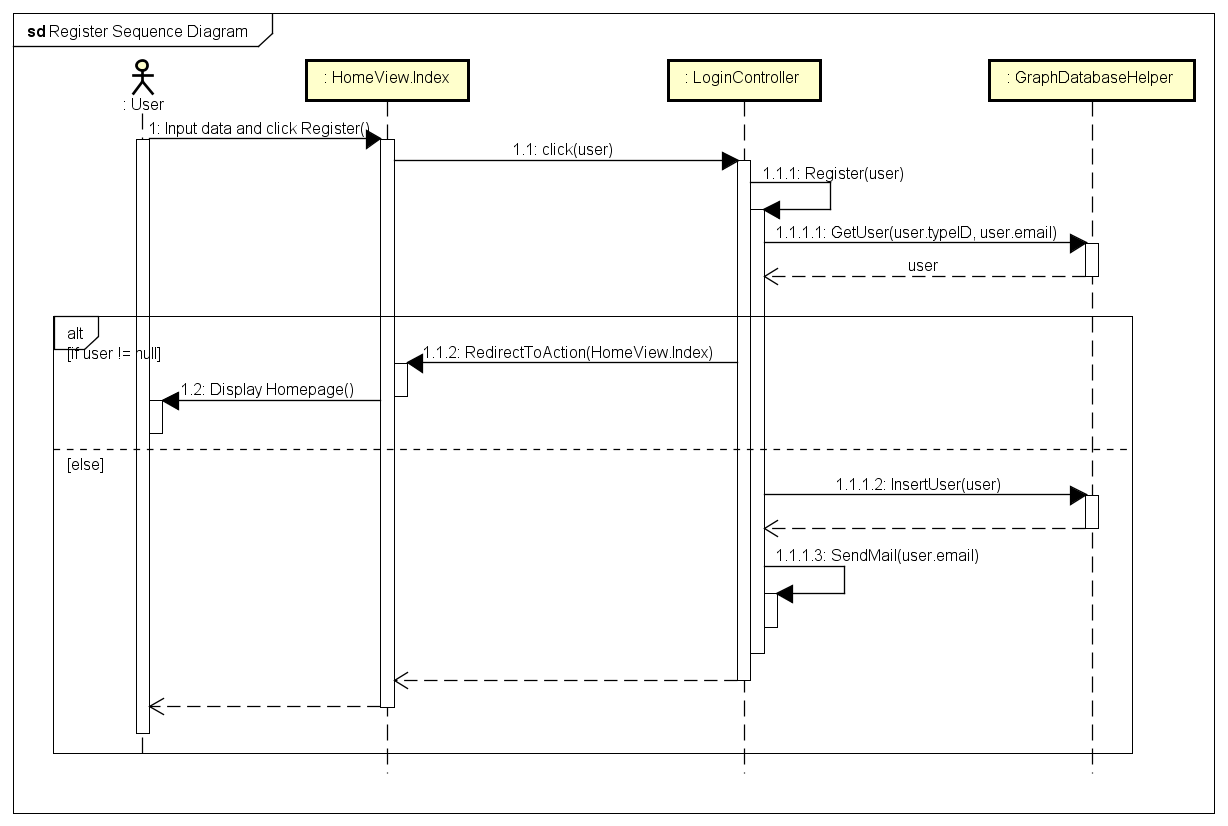


Figure 50: Logout sequence diagram

#### Register



*Figure 51: Register sequence diagram*

#### Edit Profile

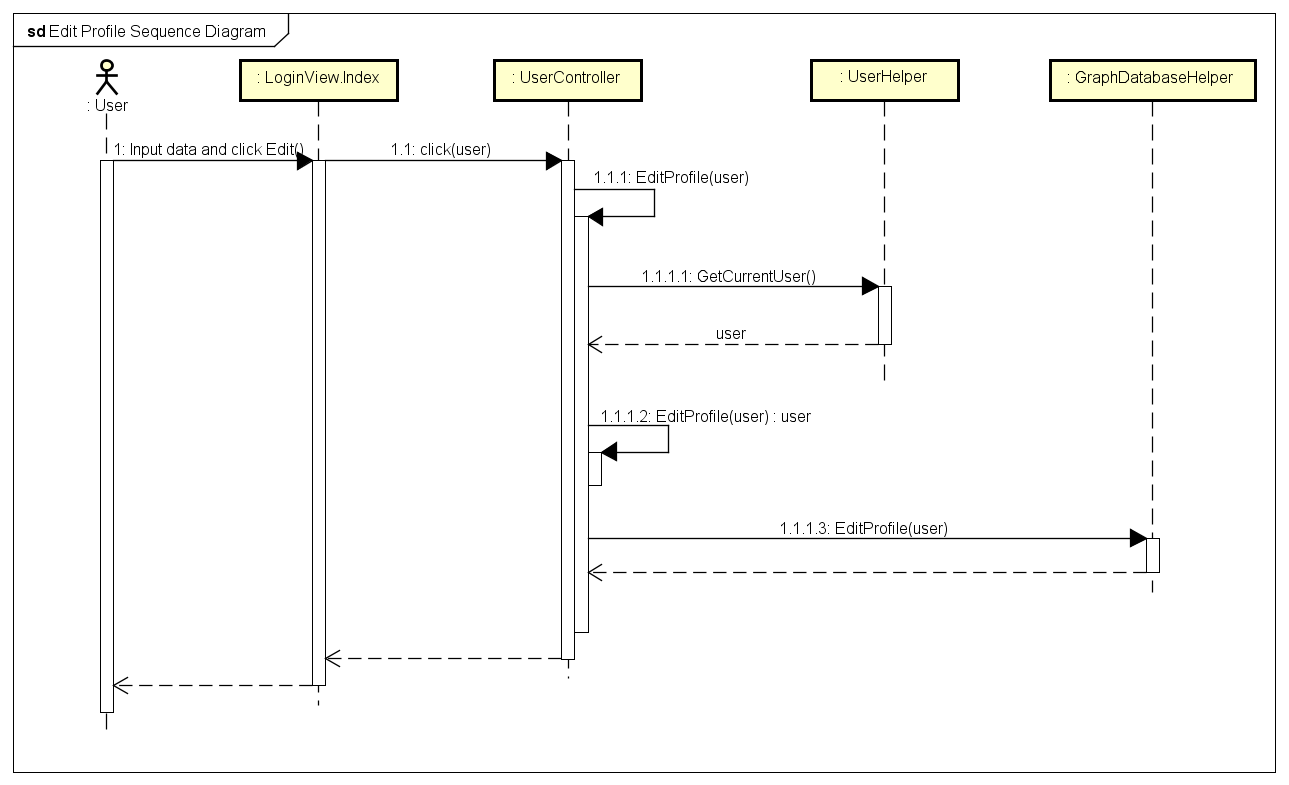


Figure 52: Edit Profile sequence diagram

#### Forgot Password

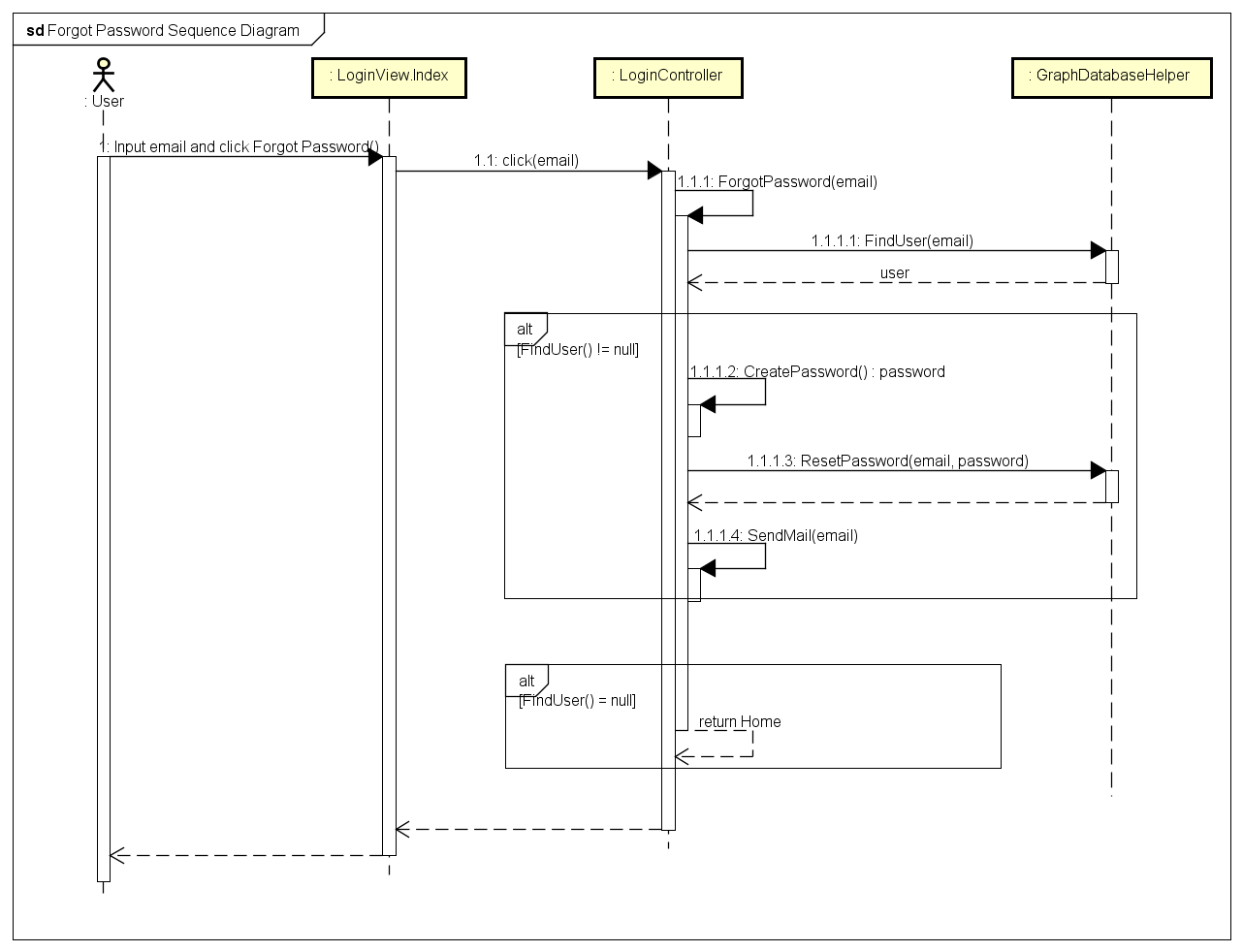


Figure 53: Forgot Password sequence diagram