

**FLY AWAY PLUS**

**DETAIL DESIGN DOCUMENT**

**Class Design**

**Project Code: FAP**

**Document Code: FAP\_Class Design\_v1.0\_EN**

**Record of Change**

\*A-Added M-Modified D-Deleted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Item | A, M, D\* | Change Description | Version |
| 2015/08/14 | Add new | A |  | V1.0 |
| 2015/08/20 | Package Diagram  Package Description | M |  | V1.1 |

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# Introduction

## Purpose

Fly Away Plus class design document contains descriptions of all classes of the Fly Away Plus. It includes:

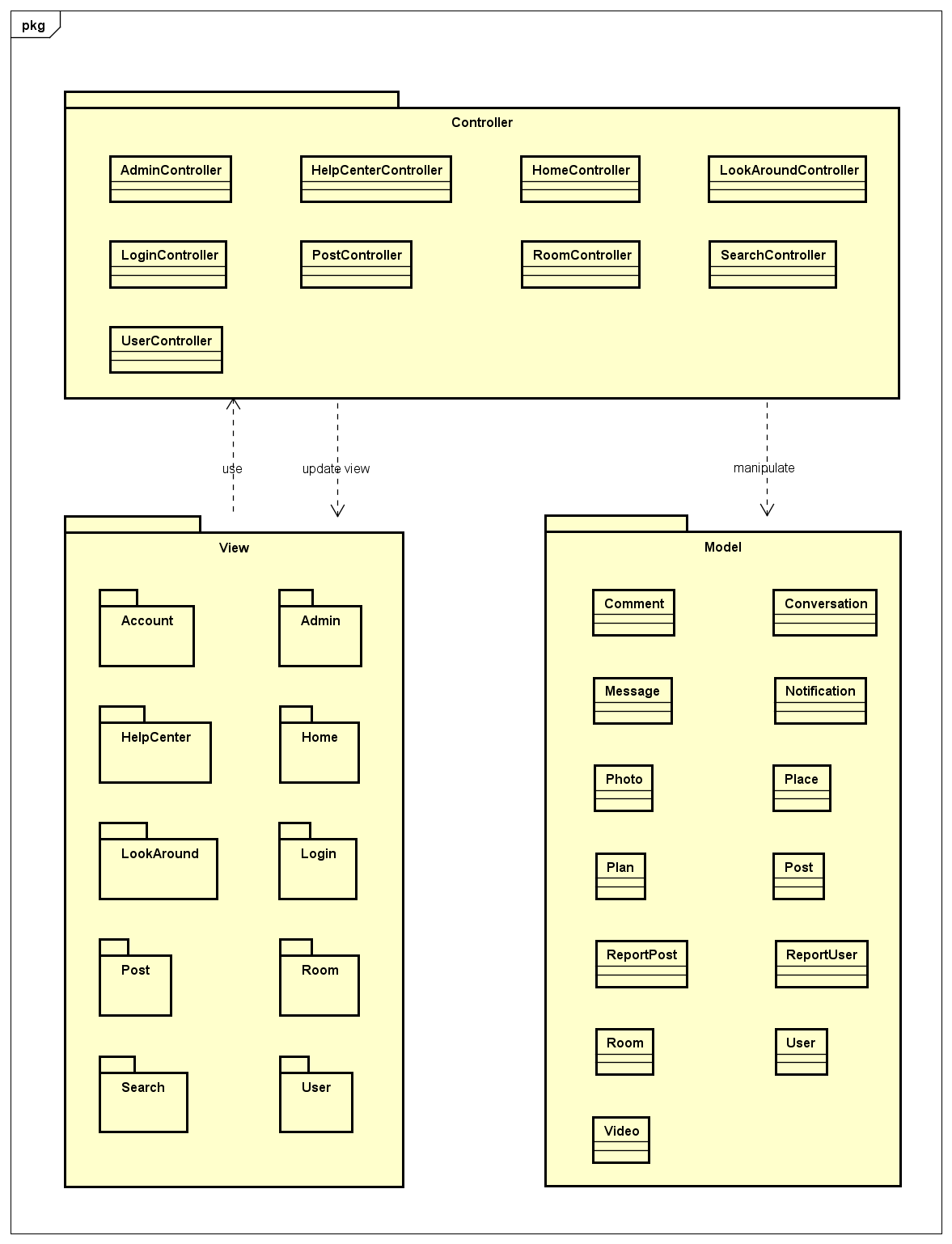
* Class diagrams that describe the static relation of all classes in the system.

## 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 |

#### ReportPost

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | reportID | int |  | public | Report’s ID |
|  | userReportID | int |  | public | ID of report created user |
|  | userReportedID | int |  | public | ID of be reported user |
|  | postID | int |  | public | ID of be reported post |
|  | typeReport | int |  | public | Report’s type |

#### ReportUser

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Attributes | Type | Default | Note | Description |
|  | reportID | int |  | public | Report’s ID |
|  | userReportID | int |  | public | ID of report created user |
|  | userReportedID | int |  | public | ID of be reported user |
|  | typeReport | int |  | public | Report’s type |

#### 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 |  |  | Start date of room’s plan |
|  | LengthInDays | int |  |  | Length of room’s plan |
|  | MaxNoSlot | int |  |  | Number of room’s member |
|  | StartLocation | String |  |  | Start location of room’s plan |
|  | StartLatitude | String |  |  | Latitude of start location |
|  | StartLongitude | String |  |  | Longitude of start location |
|  | DestinationLocation | String |  |  | Destination location of room’s plan |
|  | DestinationLatitude | String |  |  | Latitude of destination location |
|  | DestinationLongitude | String |  |  | Longitude of destination location |
|  | Privacy | String |  |  | Room’s privacy |
|  | PhotoCoverUrl | String |  |  | 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 | Input | 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 | Input | Return | Description |
|  | Index |  | ActionResult | Display Help Center page |

#### HomeController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Input | Return | Description |
|  | LoadMore | int | ActionResult | Load more posts thumbnail when user scrolls down |
|  | LoadData | int | void | Load all posts |
|  | LoadMoreWish | int | ActionResult | Load more items in wish list when user scrolls down |
|  | FindRelatedInformationPost | list | ActionResult | Find all information related to a post |
|  | LoadDataWishlist | int | ActionResult | Load all items in wish list |
|  | Index | string | ActionResult | Display Homepage |
|  | About |  | ActionResult | Display About page |
|  | Contact |  | ActionResult | Display Contact page |

#### LoginController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Input | Return | Description |
|  | AuthenFacebook |  | ActionResult | User login with Facebok |
|  | AuthenGoogle |  | ActionResult | User login with Google+ |
|  | ForgotPassword |  | ActionResult | Set user’s password to a random string and send to user |
|  | IsImage | HttpPostedFileBase | boolean | Check if user uploaded an image |
|  | SaveImage | String, String, String, String, String, int | ActionResult | Save an uploaded image to database |
|  | Login |  | ActionResult | User login with registered account |
|  | LoginPartial |  |  | Display Login form |
|  | Logout |  | ActionResult | User logout from FAP |
|  | SendMail |  | ActionResult | Send mail to user |
|  | Register |  | ActionResult | Create a new account |
|  | UploadAvatar | IEnumerable | ActionResult | Upload avatar |

#### LookAroundController

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

#### PostController

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

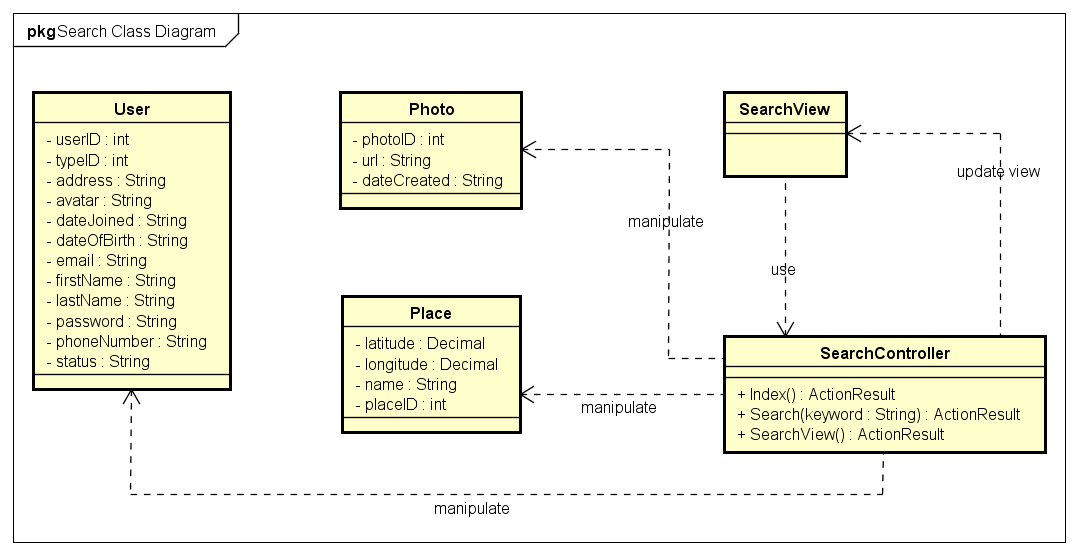
#### UserController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Method | Input | 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 |
|  | Index | int | ActionResult | Display User Detail page |
|  | FindRelatedInformationPost | list | void | Find all information related to a post |
|  | AddWishPlace | int, int | JsonResult | Add a place to wish list |
|  | DeclineRequestFriend | int, int | JsonResult | Decline a friend request |
|  | SendRequestFriend | int, int | JsonResult | Send friend request to other |
|  | RemoveWishPlace | int, int | JsonResult | Remove a place from Wish list |
|  | GetMessage | int | JsonResult | Receive messages from other |
|  | EditProfile | String[] | JsonResult | Edit profile |

# Function

## Search

### Class Diagram

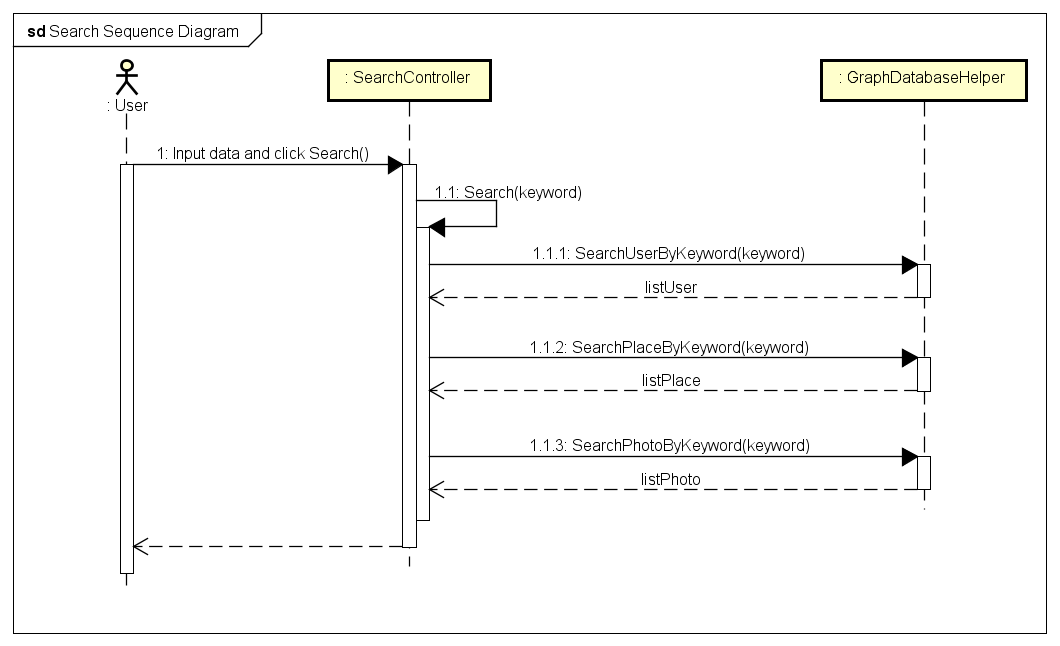


*Search Class Diagram*

|  |  |  |
| --- | --- | --- |
| 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

#### Search by name

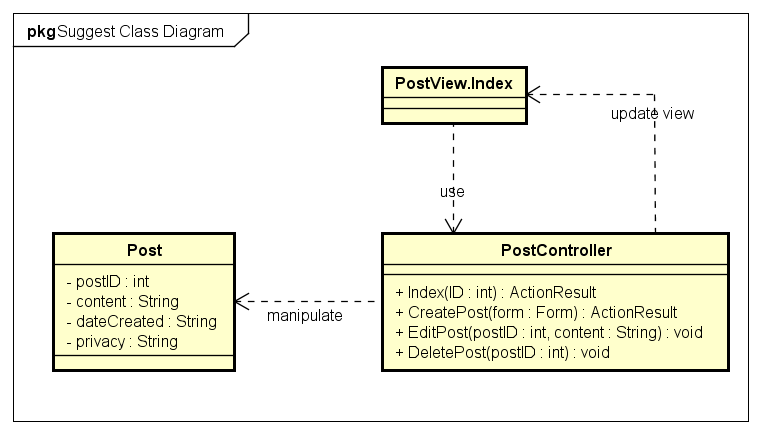


*Search Sequence Diagram*

## Help Center (Undone)

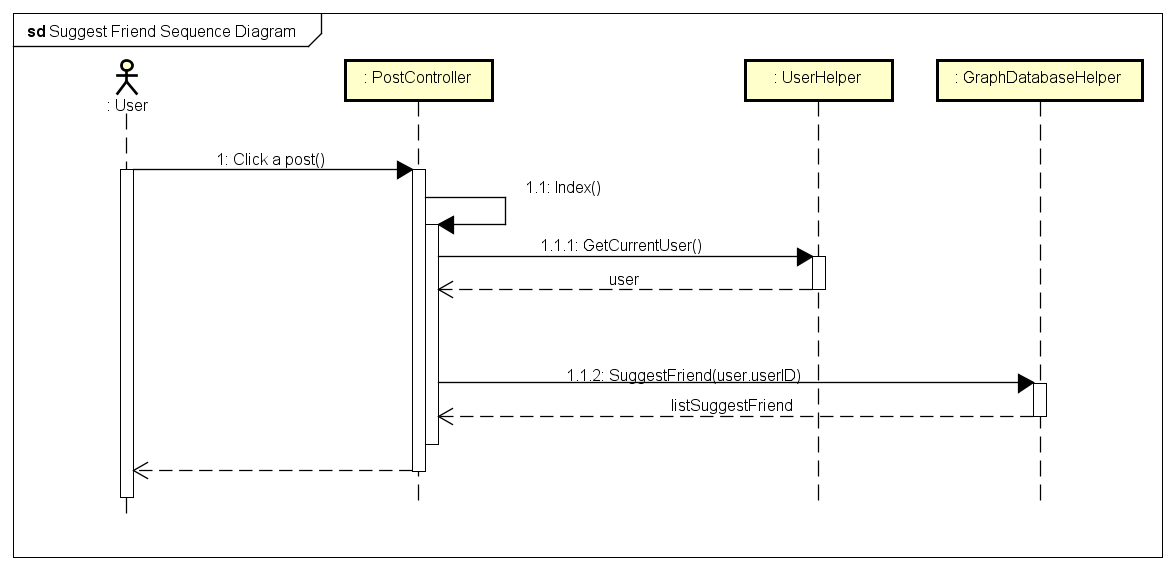
## Suggest

### Class Diagram

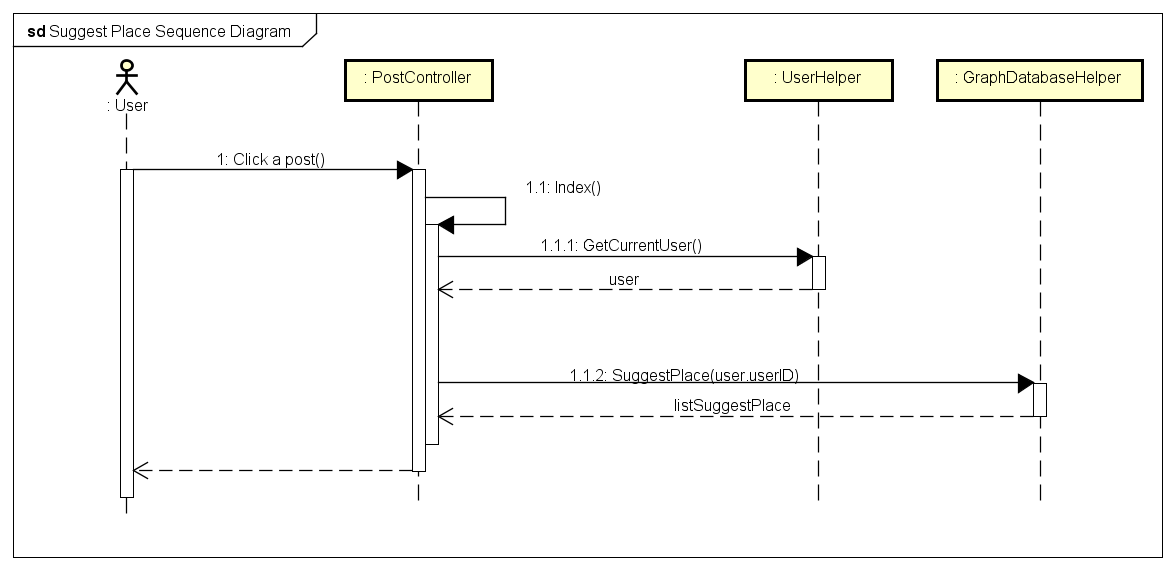


### Sequence Diagram

#### Suggest Friend

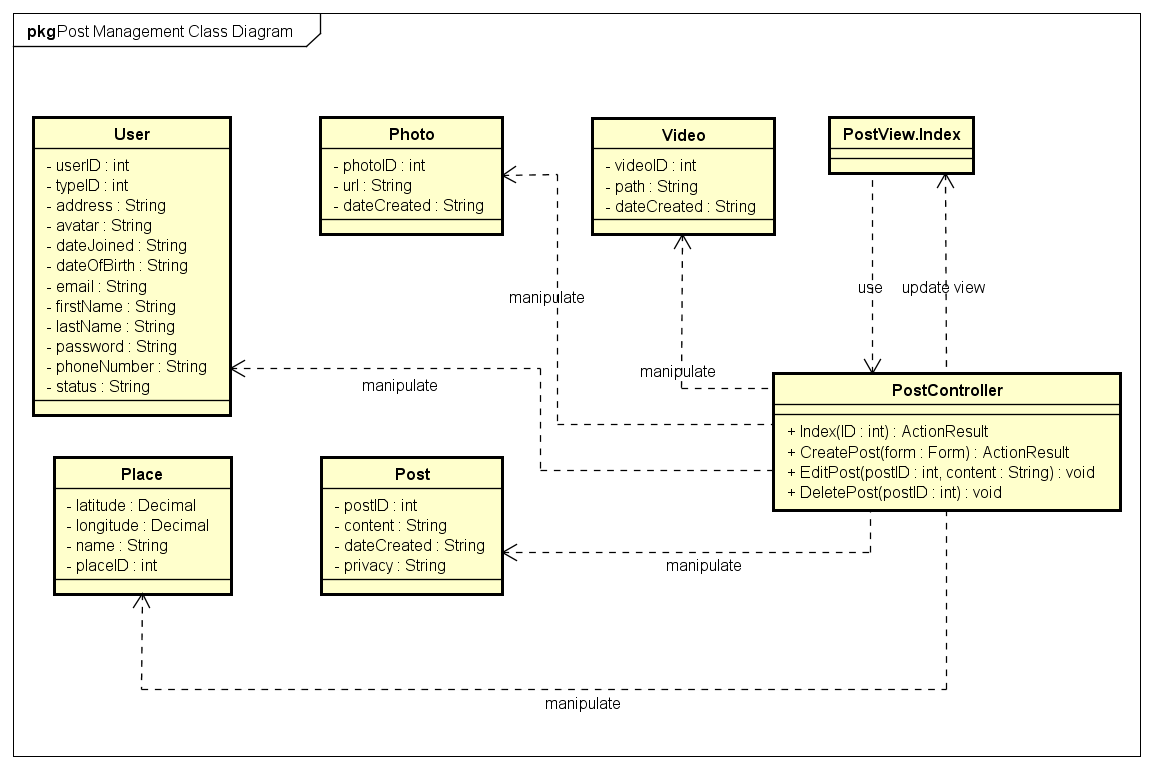


#### Suggest Place



## Post Management

### Class Diagram

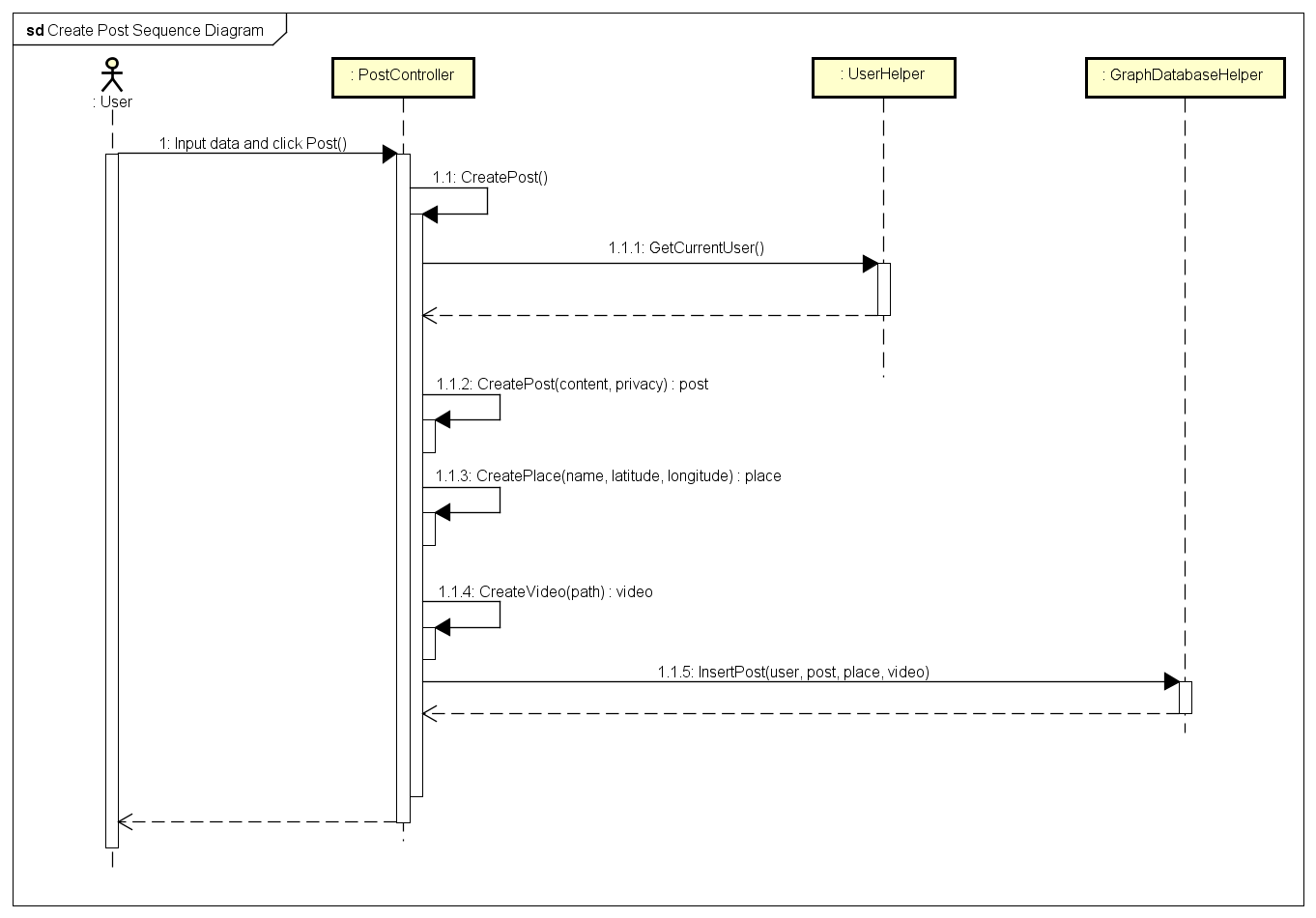


*Post Management Class Diagram*

|  |  |  |
| --- | --- | --- |
| 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 |

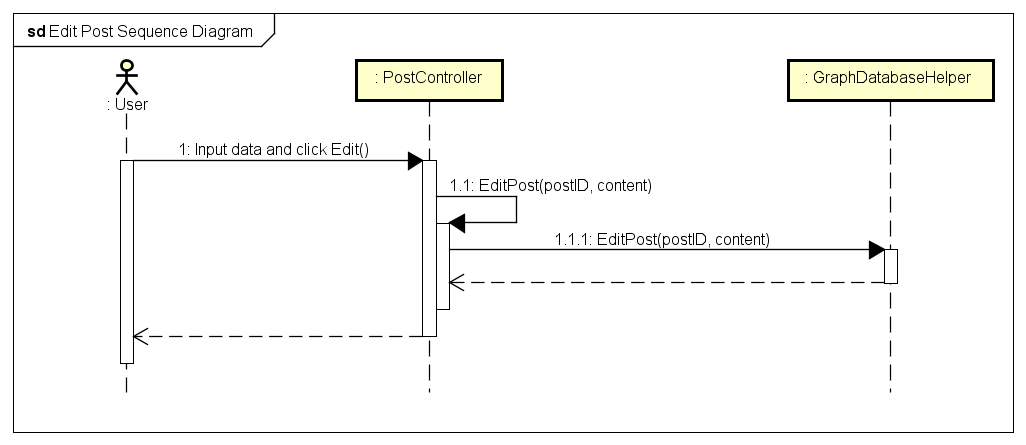
### Sequence Diagram

#### Add Post



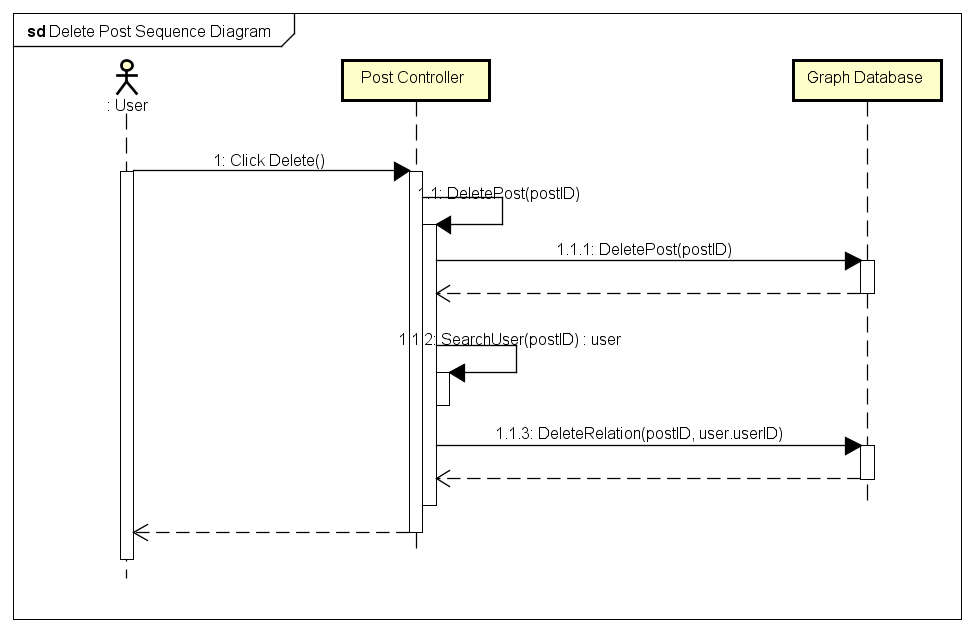
*Add Post Sequence Diagram*

#### Edit Post



*Edit Post Sequence Diagram*

#### Delete Post

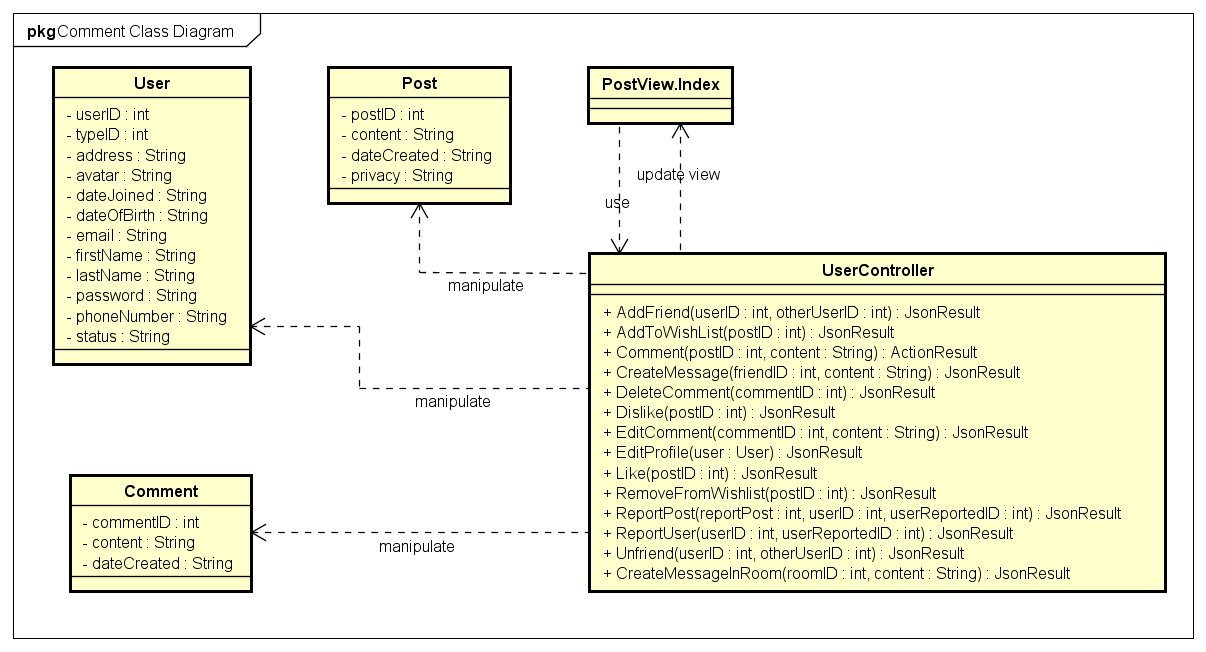


*Delete Post Sequence Diagram*

## Share Management (Undone)

## Comment Management

### Class Diagram

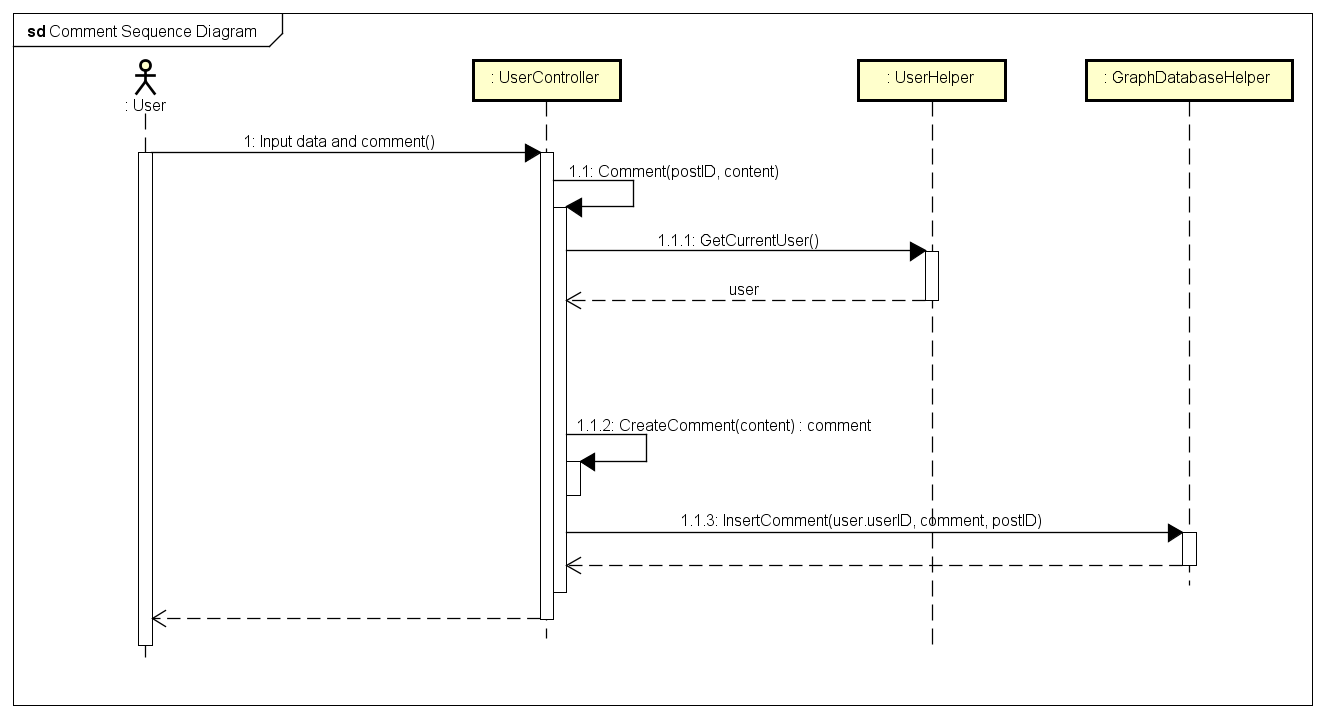


*Comment Management Class Diagram*

|  |  |  |
| --- | --- | --- |
| 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 |

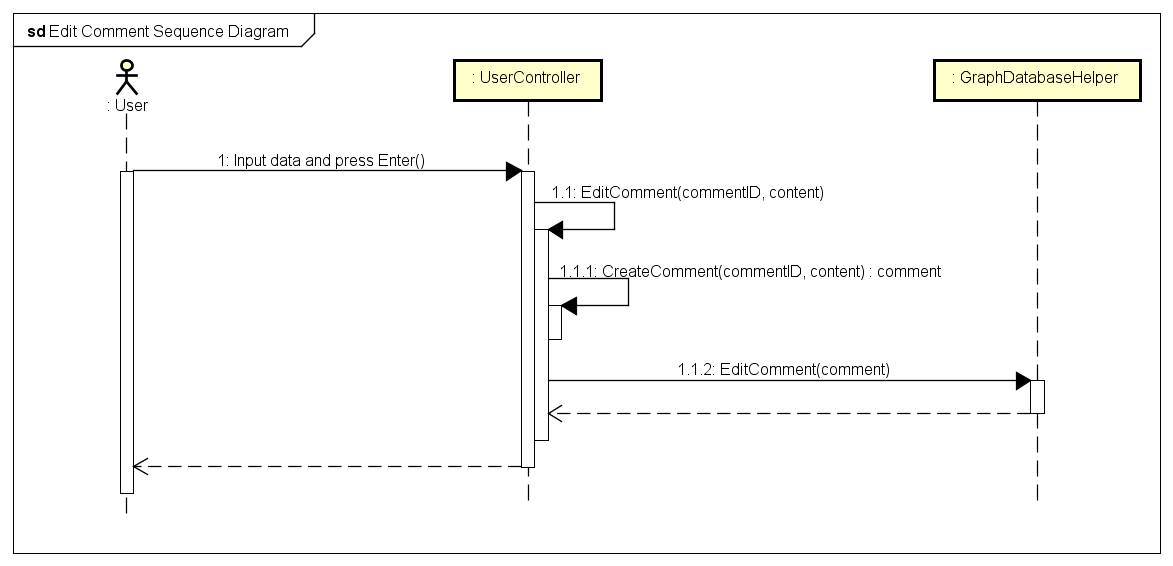
### Sequence Diagram

#### Add Comment



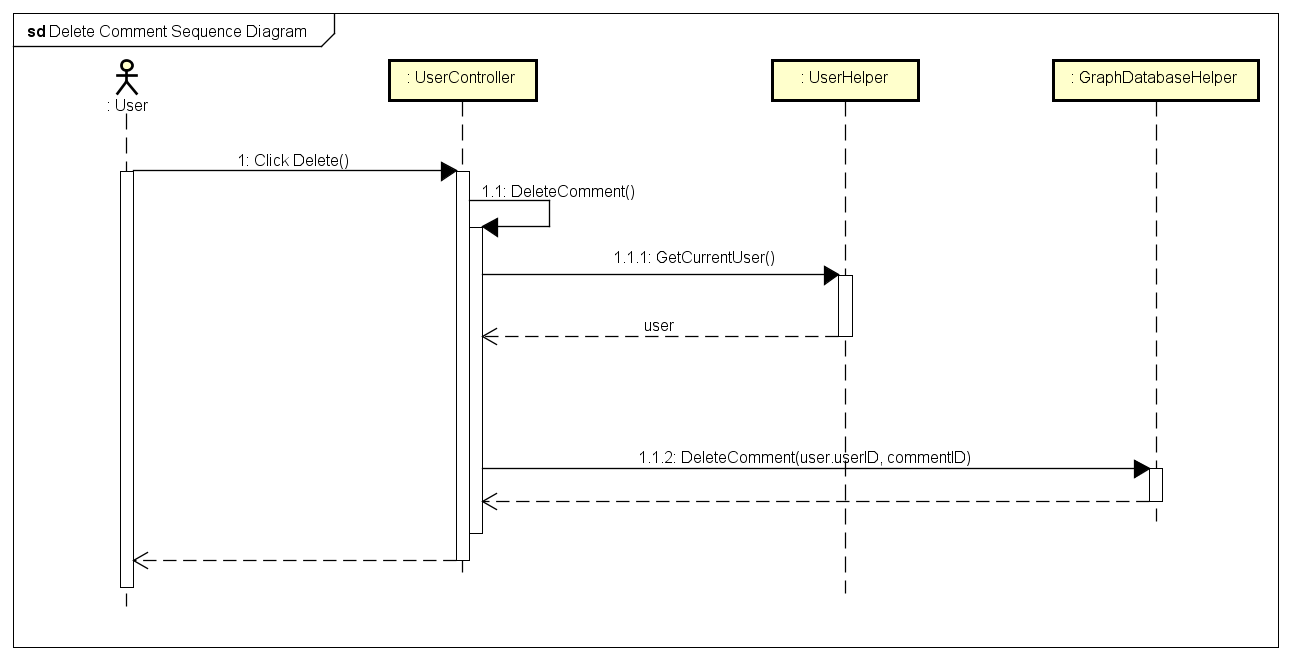
*Add Comment Sequence Diagram*

#### Edit Comment



*Edit Comment Sequence Diagram*

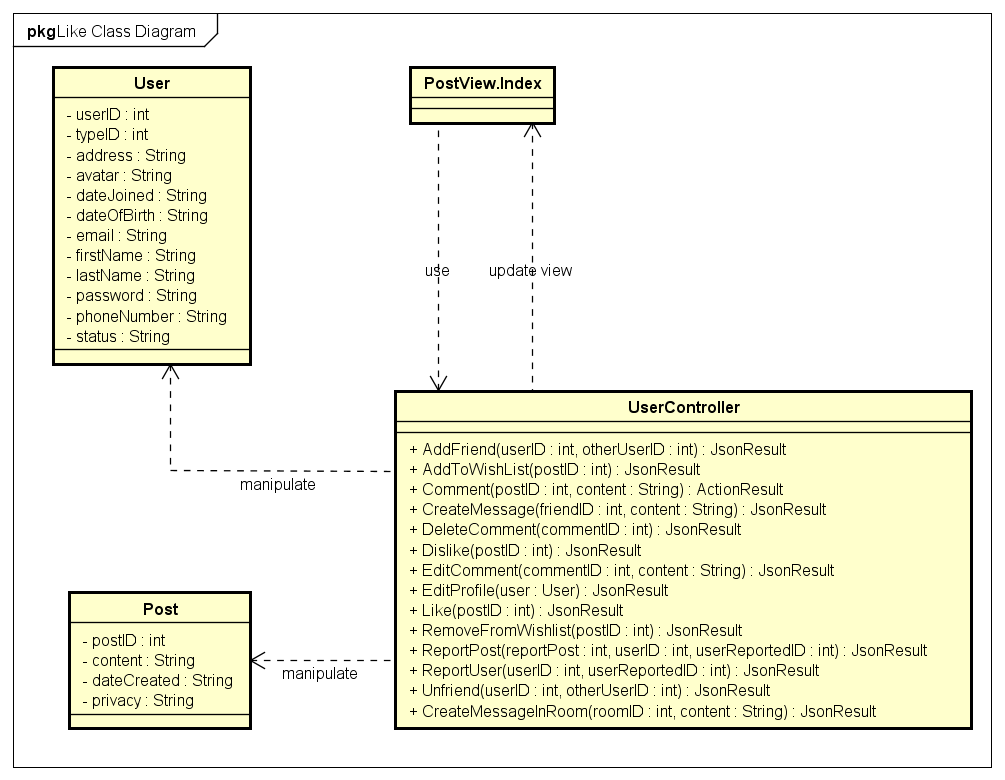
#### Delete Comment



*Delete Comment Sequence Diagram*

## Like Management

### Class Diagram

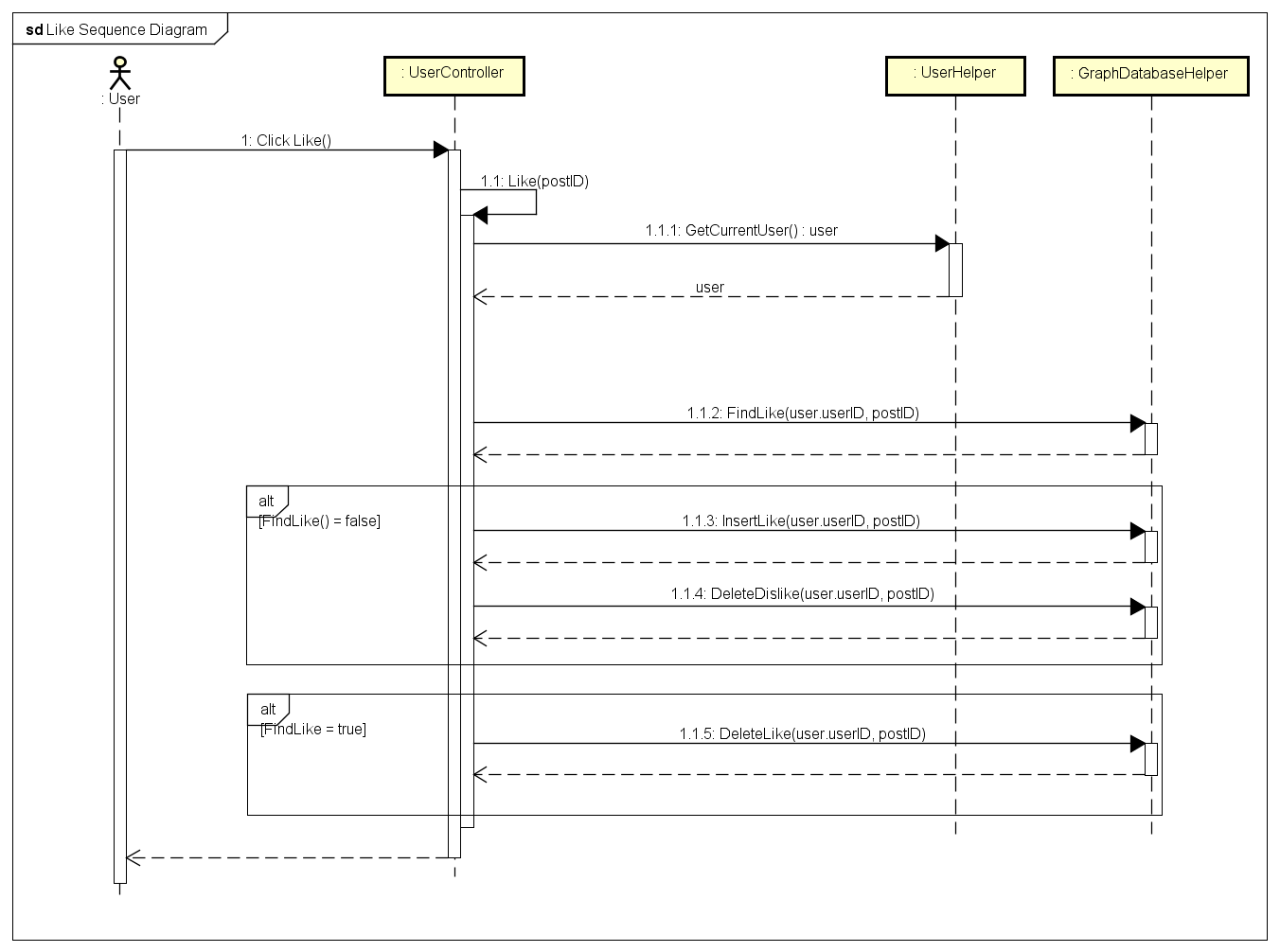


*Like Management Class Diagram*

|  |  |  |
| --- | --- | --- |
| 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 |

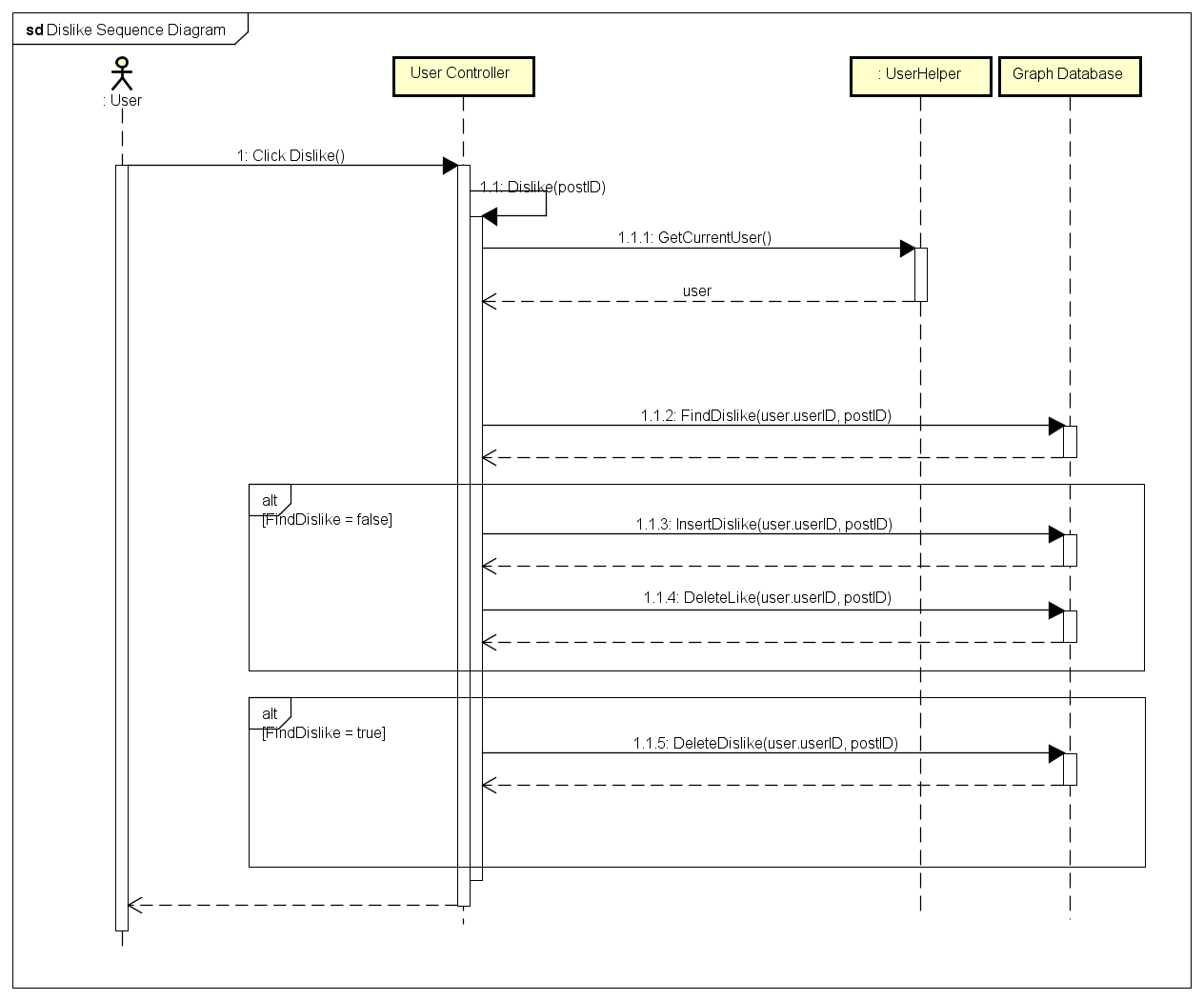
### Sequence Diagram

#### Like



*Like Sequence Diagram*

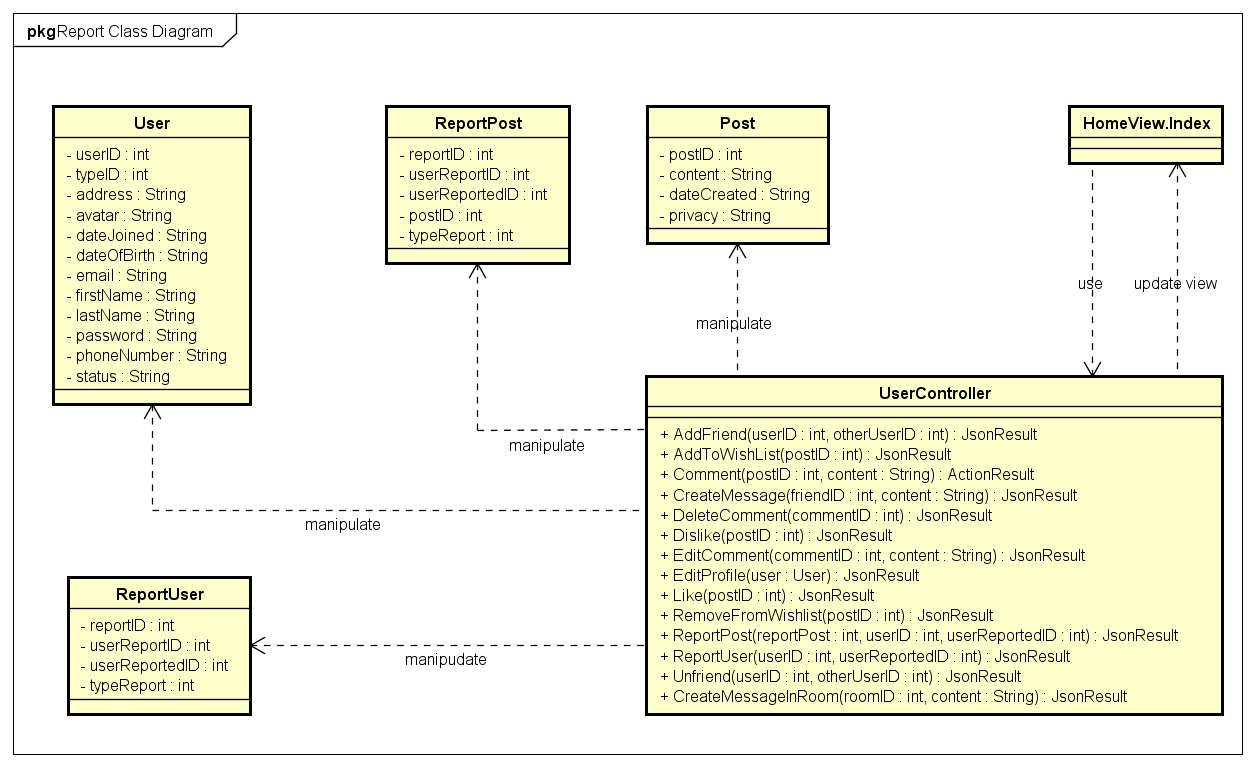
#### Dislike



*Dislike Sequence Diagram*

## Report

### Class Diagram

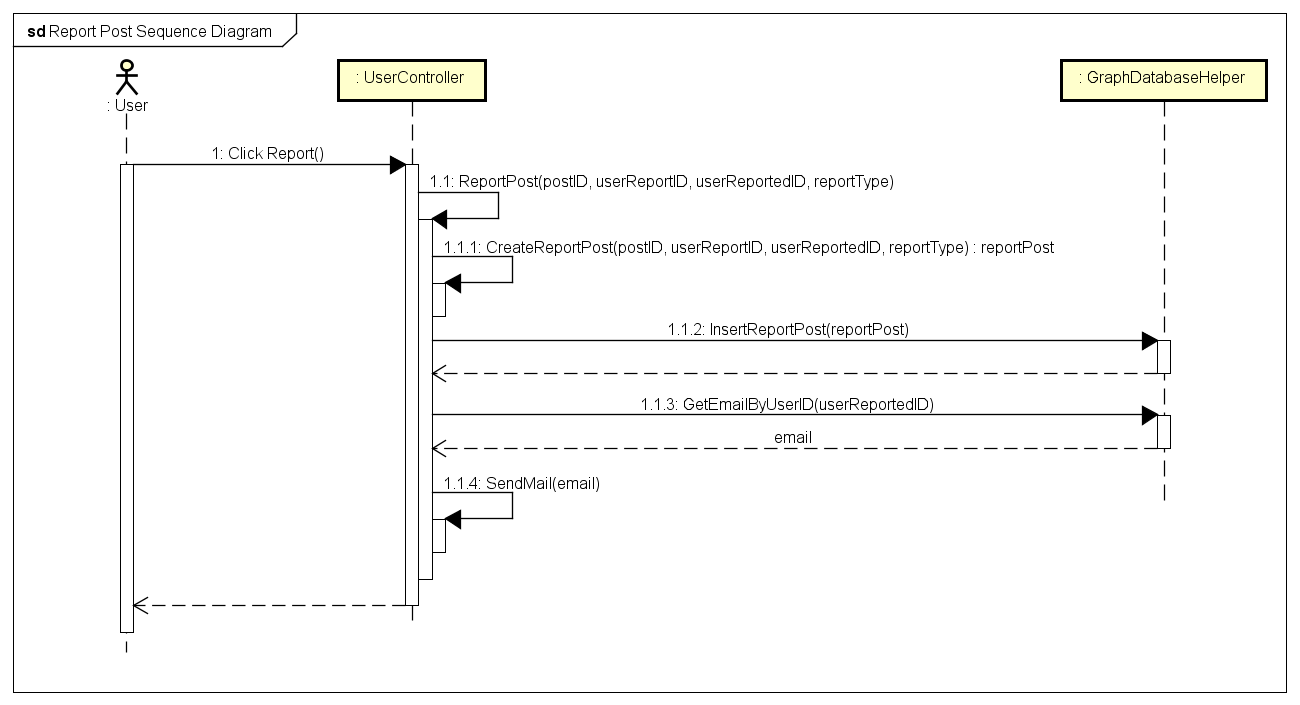


*Report Class Diagram*

|  |  |  |
| --- | --- | --- |
| 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 |

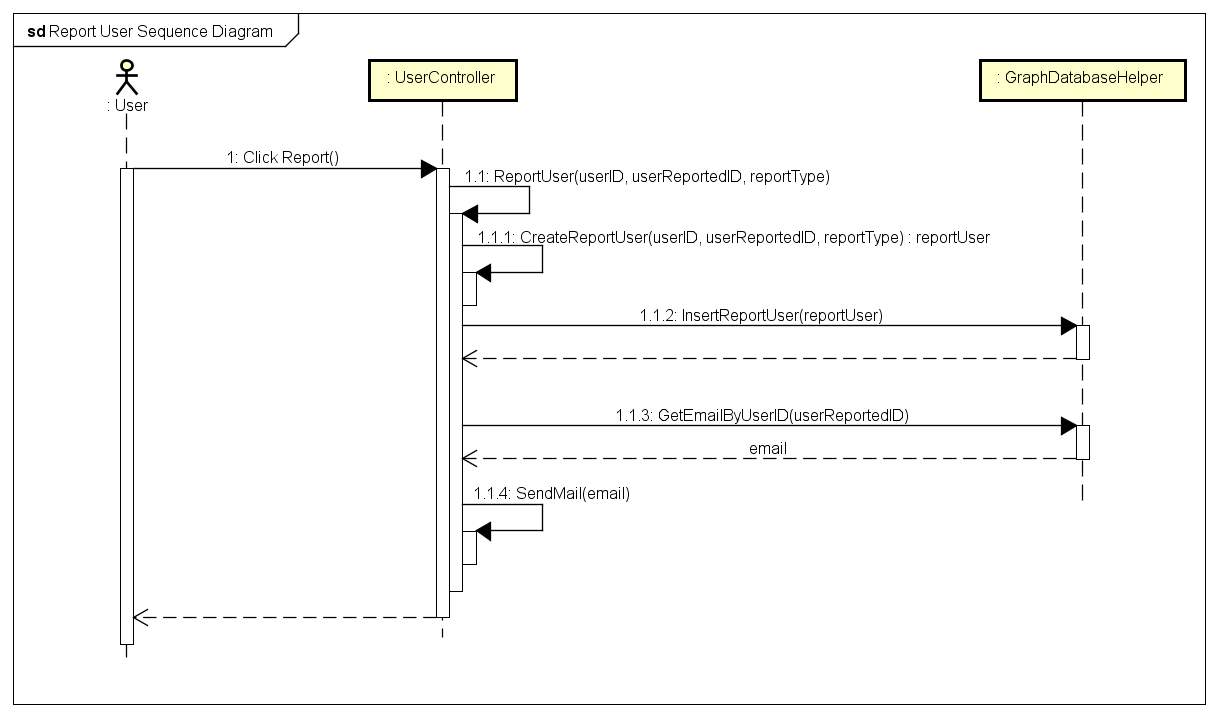
### Sequence Diagram

#### Report a post



*Report a Post Sequence Diagram*

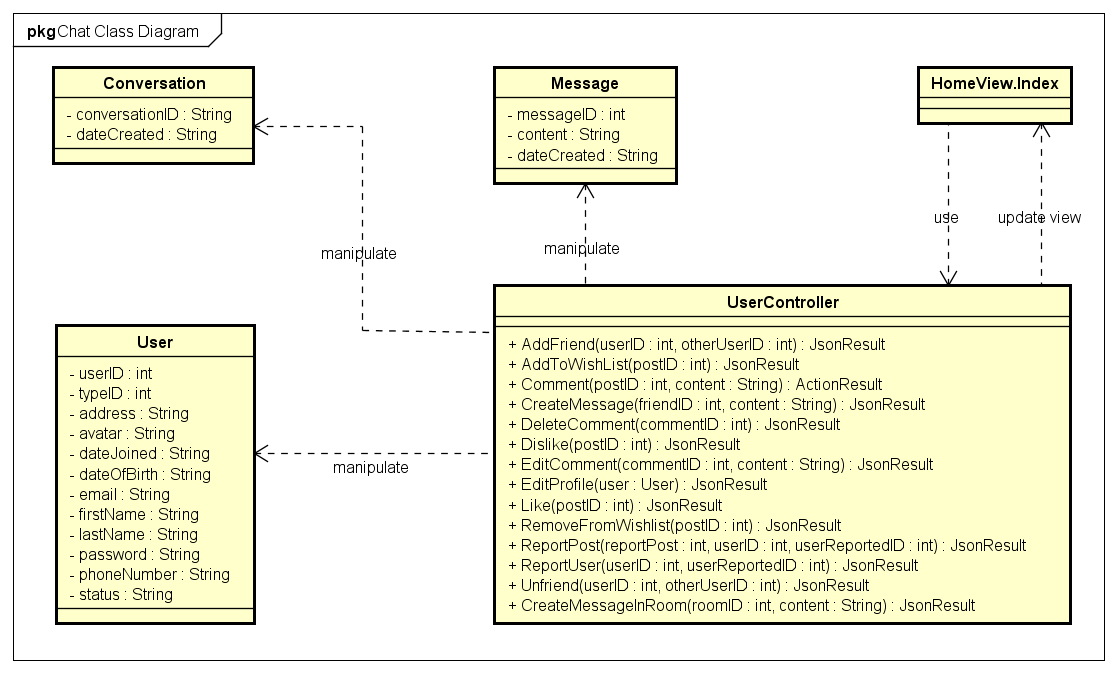
#### Report an user



*Report an User Sequence Diagram*

## Chat

### Class Diagram

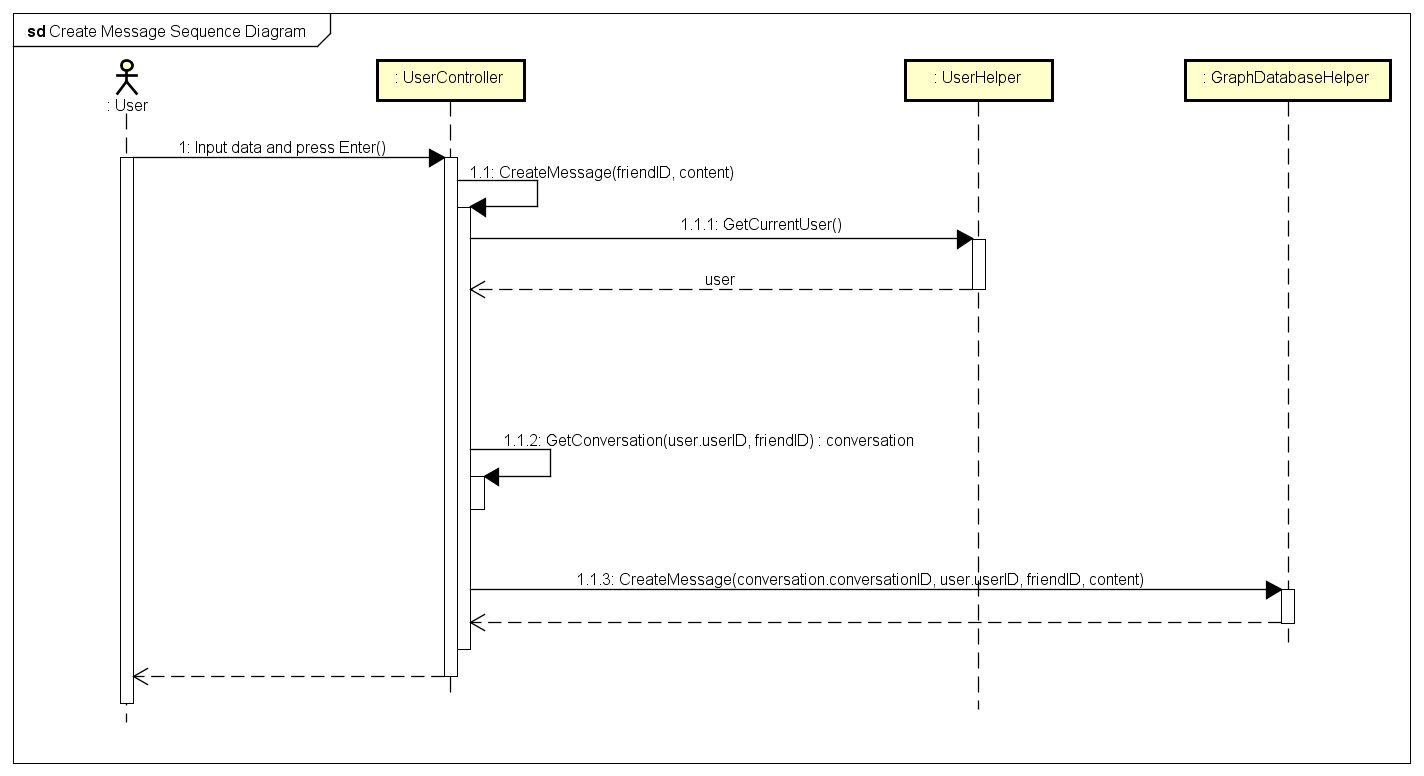


*Chat Class Diagram*

|  |  |  |
| --- | --- | --- |
| 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

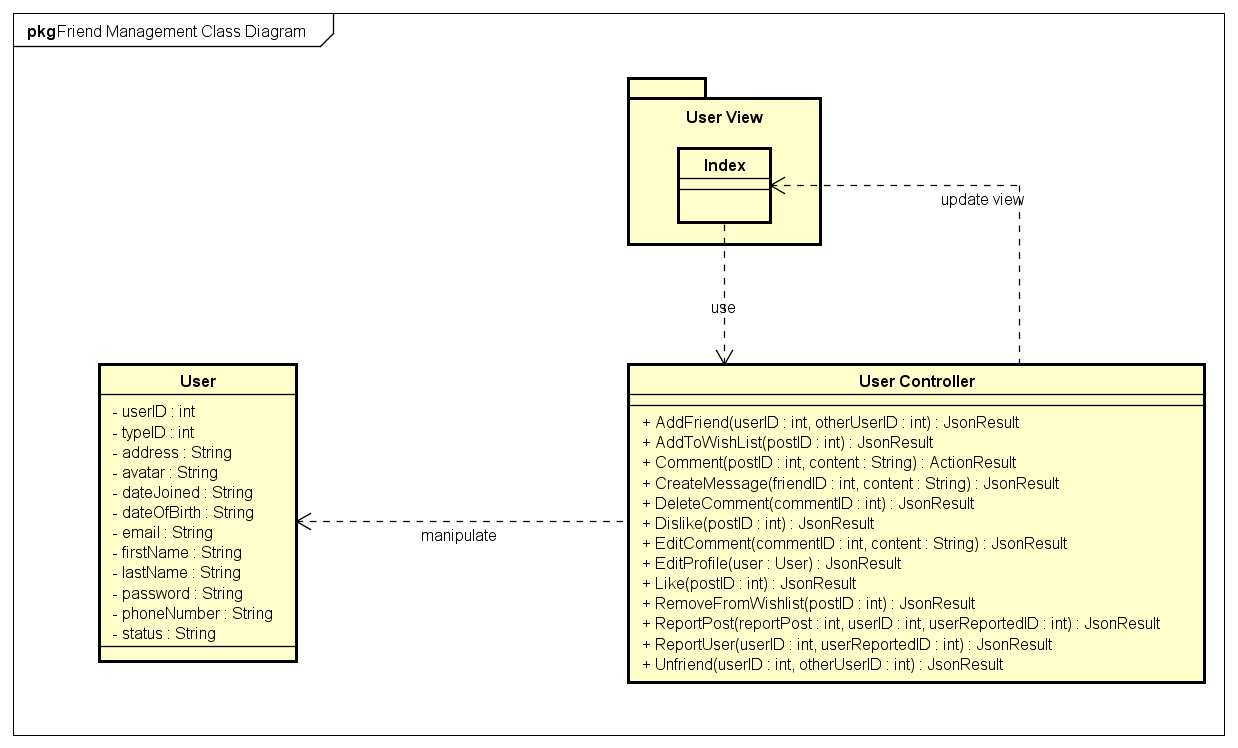
#### Chat



*Chat Sequence Diagram*

## Friend Management

### Class Diagram

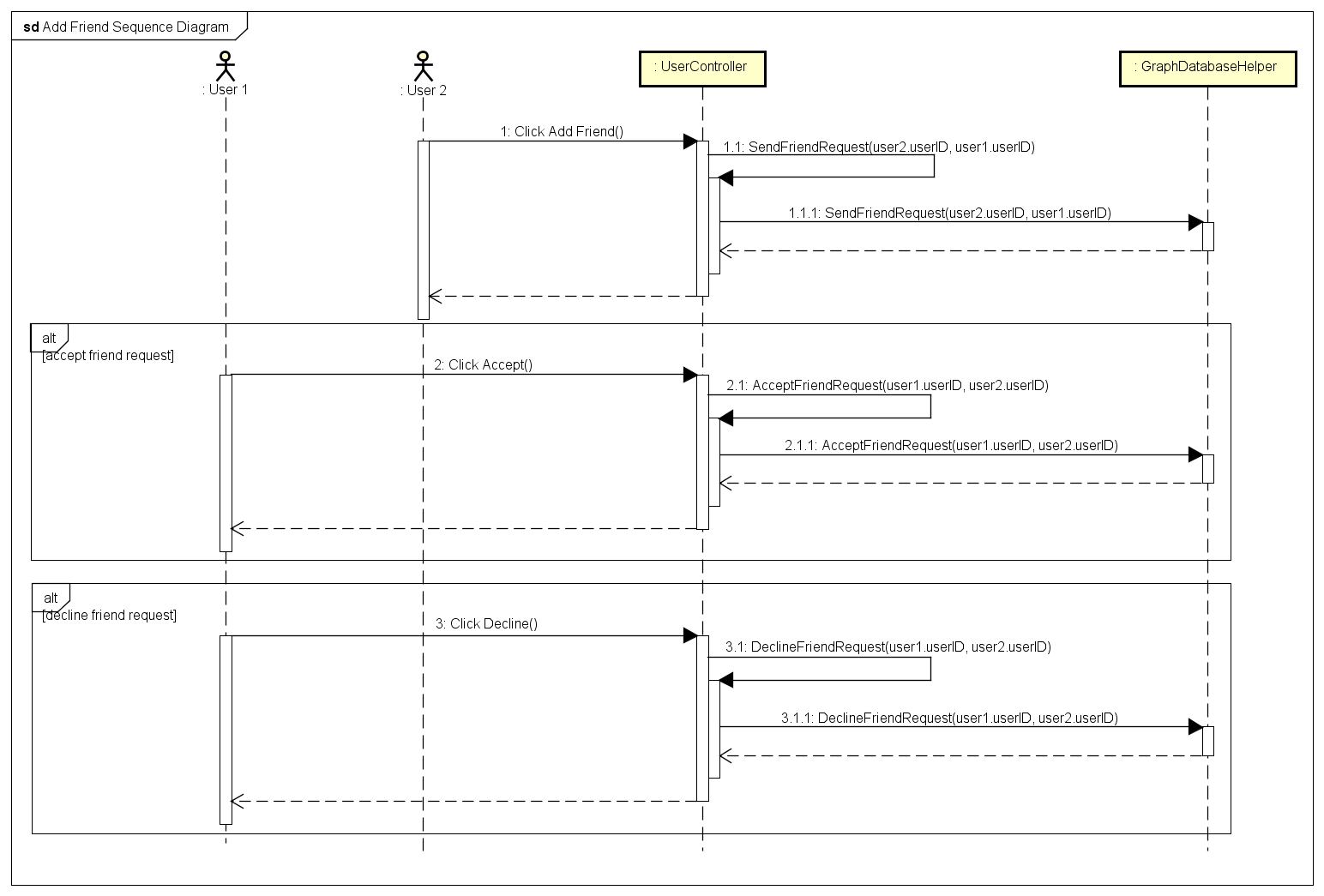


*Friend Management Class Diagram*

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

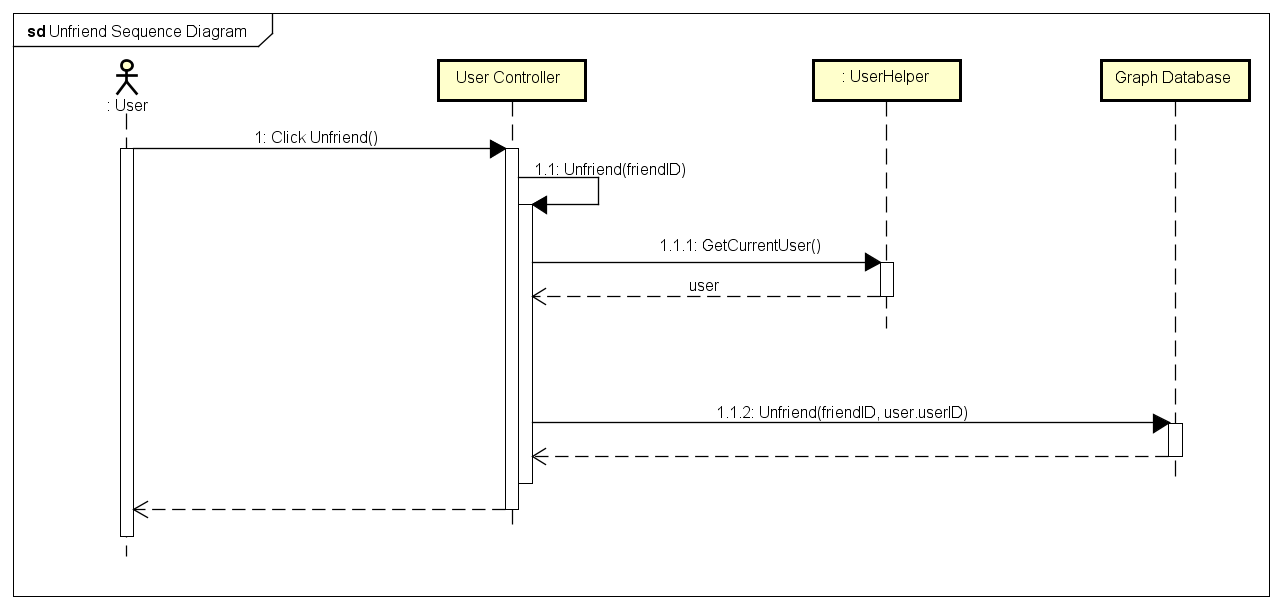
### Sequence Diagram

#### Add Friend



*Add Friend Sequence Diagram*

#### Unfriend

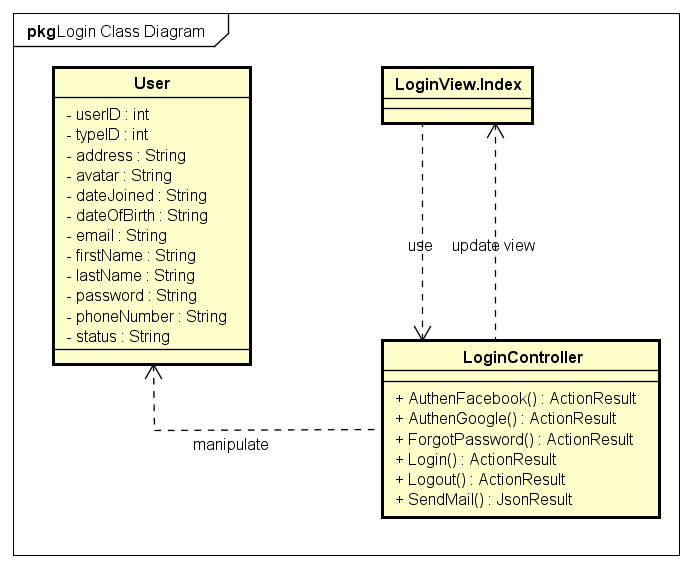


*Unfriend Sequence Diagram*

## Room (Undone)

## Account Management

### Class Diagram



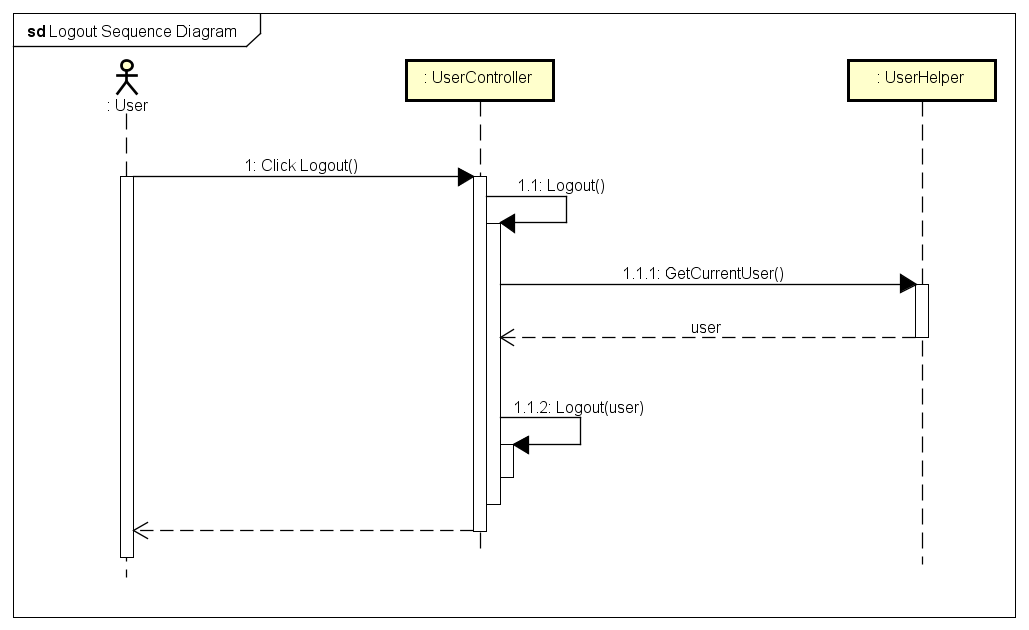
*Account Management Class Diagram*

|  |  |  |
| --- | --- | --- |
| 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 (Undone)

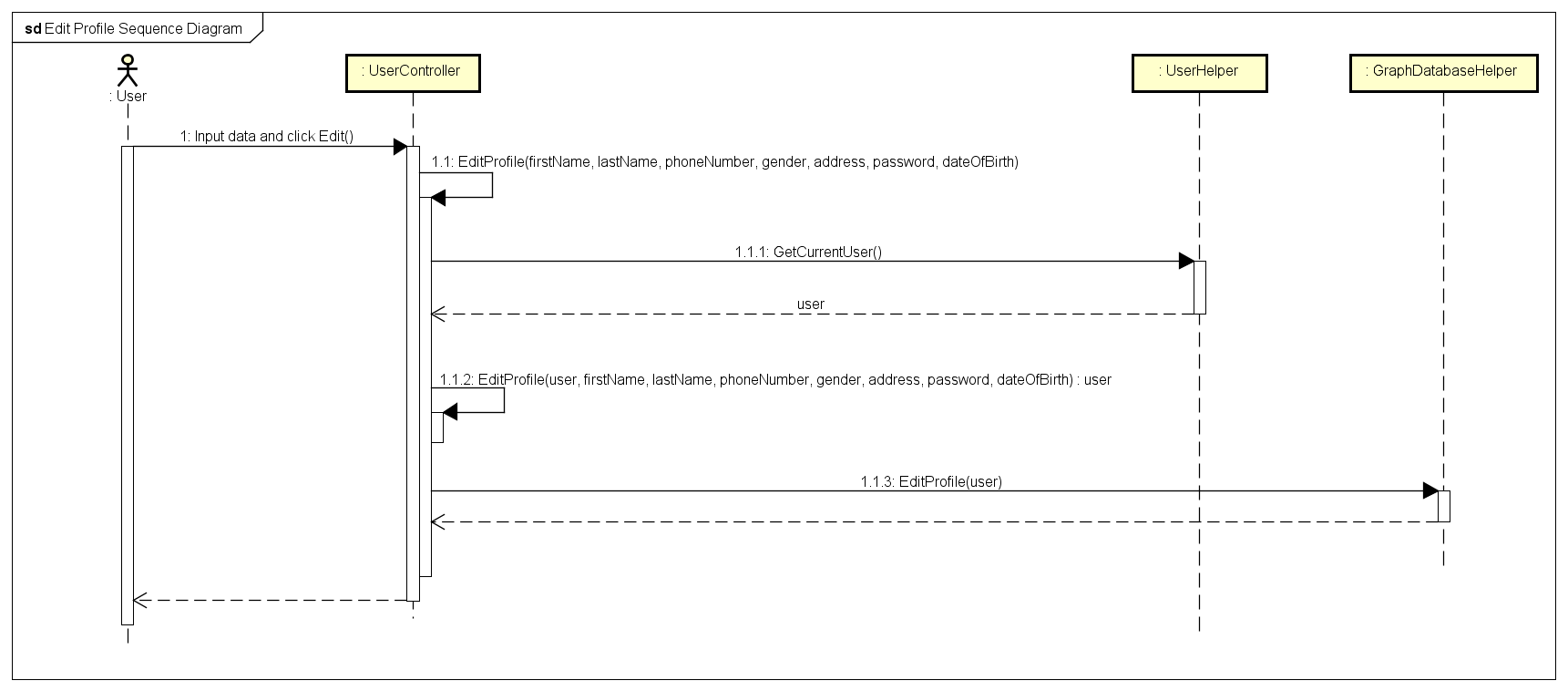
#### Logout



*Logout Sequence Diagram*

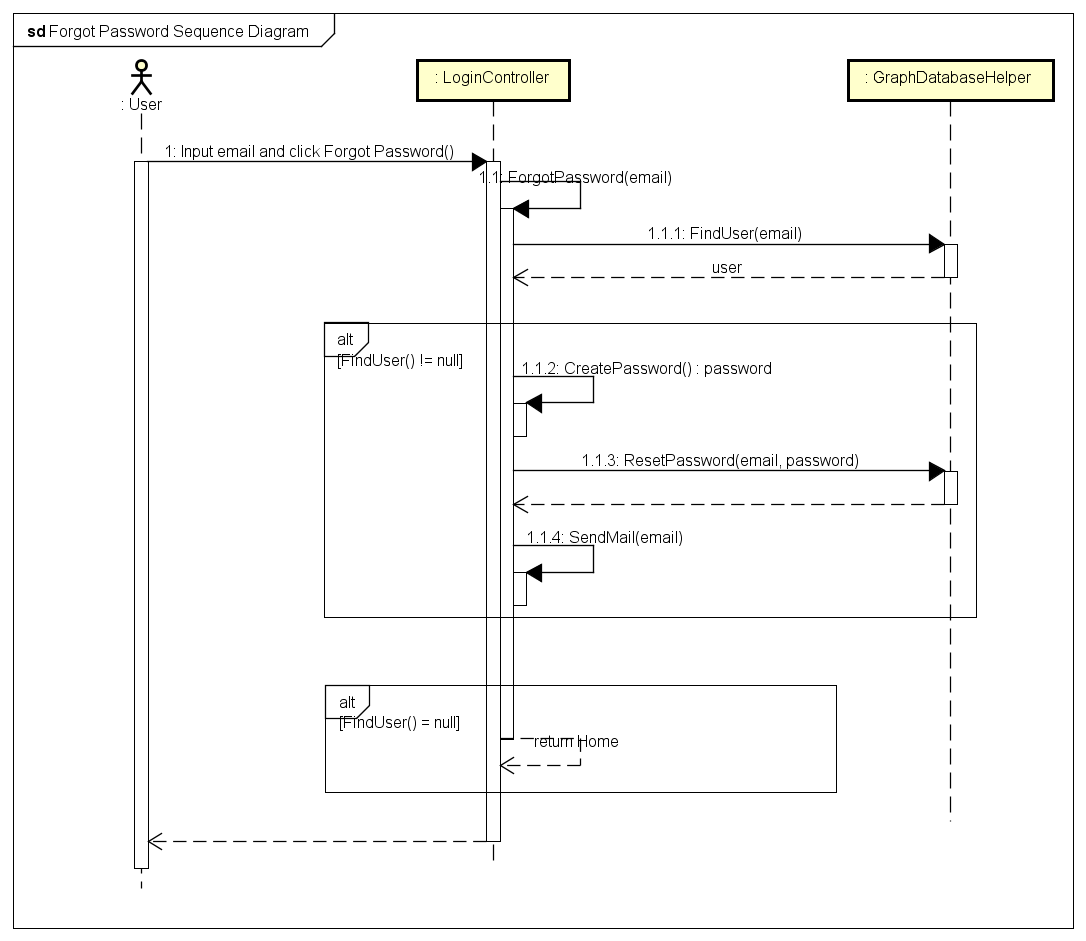
#### Register (Undone)

#### Edit Profile



*Edit Profile Sequence Diagram*

#### Forgot Password



*Forgot Password Sequence Diagram*