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|  |
| Capstone Project Document |

**Vietnamese Medicinal Plants Network**

Report #2 – Class Design

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| **Project code** | VMN | |

**- Hanoi, 03/2016 -**

# SIGNATURE PAGE

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Supervisor

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# Introduction

## Purpose

Vietnamese Medicinal Plants Network class design document contains descriptions of all classes of the Vietnamese Medicinal Plants Network. It includes: Class diagrams that describe the static relation of all classes in the system.

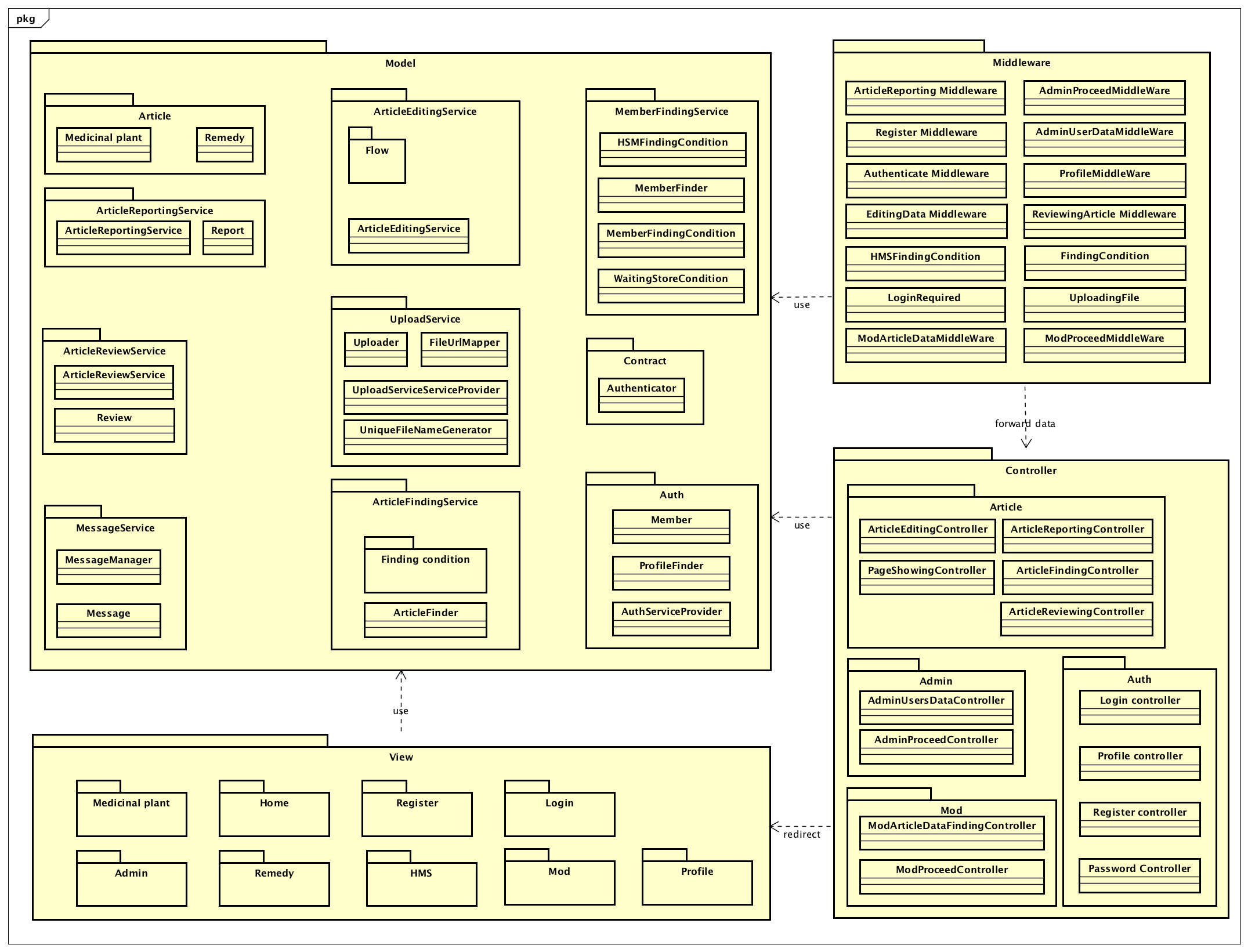
## Definitions, Acronyms and Abbreviations

|  |  |  |
| --- | --- | --- |
| Abbreviations | Description | Comment |
| VMN | Vietnamese Medicinal Plants Network |  |
| FAQ | Frequently Asked Question |  |

1. Definitions, Acronyms and Abbreviations

# Package

## Package Diagram



1. Package Diagram

## Package Description

### Model

#### Article

##### 2.2.1.1.1 Medicinal Plant Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Default** | **Note** | **Description** |
|  | commonName | String | Not Null |  | Common name of medicinal plant |
|  | otherName | String | Null |  | Other name of medicinal plant |
|  | ScienceName | String | Null |  | Science name of medicinal plant |
|  | Location | String | Null |  | Location of medicinal plant |
|  | Description | String | Not Null |  | Description of medicinal plant |
|  | ratingPoint | int | 0 |  | Rating point of medicinal plant |
|  | utility | String | Not Null |  | Utility of medicinal plant |
|  | thumbnailUrl | String | Null |  | Link to thumbnail image |
|  | author | String | Not Null |  | Medicinal plant article contributor |
|  | imgUrl | String | Null |  | Image link of medicinal plant |
|  | id | int |  | Auto increment | Id of medicinal plant |

1. Medicinal Plant model

##### Remedy Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Default** | **Note** | **Description** |
|  | title | String | Not null |  | Title of remedy article |
|  | description | String | Not Null |  | Description in remedy article |
|  | note | String | Null |  | Note in remedy |
|  | usage | String | Not null |  | How to use |
|  | ratingPoint | int | 0 |  | Rating point of remedy article |
|  | utility | String | Not null |  | Utility of remedy article |
|  | thumbnailUrl | String | Null |  | Link to thumbnail image |
|  | author | String | Not null |  | Remedy article contributor |
|  | imgUrl | String |  |  | Image link of remedy article |
|  | id | int |  | Auto increment | Id of remedy article |

1. Remedy model

#### Auth

#### 2.2.1.2.1 Authenticator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Properties** | **Type** | **Default** | **Note** | **Description** |
|  | Credential | Object |  |  | Authentic tasks |
|  | Hasher | Object |  |  | Create password |
|  | Key | String |  |  |  |

1. Authenticator properties

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | setPrivateKey | key |  | Set private key |
|  | byPassword | Email, password | foundCredential | Check password for authentic task |

1. Authenticator

##### Member Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Default** | **Note** | **Description** |
|  | accountName | String | Not null |  | Member account |
|  | firstName | String | Null |  | First name |
|  | lastName | String | Null |  | Last name |
|  | DoB | String | Null |  | Date of birth |
|  | email | String | Not null |  | Email |
|  | avatar | String | Null |  | Avatar |

1. Member Model

#### Article edit service

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Edit | editorFlowManager, type | EditorFlow | Edit an article |
|  | Add | editorFlowManager, type | EditorFlow | Add an article |

1. Article edit service

#### MemberFlow Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | proceed | Article, type |  | Log article |

1. MemberFlow Model

#### ModFlow Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | proceed | Article, type |  | Log and save article to database |

1. ModFlow Model

#### ArticleFindingService

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | getQuery | Article, type |  | Find article |

1. Article finding service

#### ArticleReportingService

#### 2.2.1.7.1 Report Class

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Properties** | **Type** | **Default** | **Note** | **Description** |
|  | Reason | String |  |  | Reason of report |
|  | Reporter | String |  |  | Reporter who reported article |
|  | Reported | String |  |  | Article Reported |

1. Report

#### 2.2.1.7.2 ArticleReportingService

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | reportPlant | Report |  | Insert reported information to database |

#### ArticleReviewService

#### 2.2.1.8.1 Review Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Properties** | **Type** | **Default** | **Note** | **Description** |
|  | Comment | String |  |  | comments in article |
|  | Rating | int |  |  | Reviewer rates in article |
|  | Reviewer | String |  |  | Reviewer who review article |
|  | Reviewed | int |  |  |  |

1. Review Model

#### Upload Service

#### 2.2.1.9.1 Uploader Model

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Field Name** | **Type** | **Default** | **Note** | **Description** |
|  | fileNameGenerator |  |  |  |  |
|  | fileUrlMapper |  |  |  |  |
|  | uploadDir |  |  |  |  |

1. Uploader Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | upload |  | uploader |  |

#### 2.2.1.9.2 UploadServiceServiceProvider

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | register | uploadedFile | fileUrlMapper |  |
|  | provider |  | Uploader, FileUploadValidator |  |

#### 2.2.1.9.2 FileUrlMapper Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | setPathTemplate | pathTemplate |  |  |
|  | map | fileName | String |  |

1. FileUrlMapper Model

#### UniqueFileNameGenerator Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | generate |  | String |  |

1. Slide Model

### View

Contain many blade.files to display user interface.

### Middleware

Validate data from client request, and make necessary information.

#### ArticleReporting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | handle | Request, Closure | Closure |  |
|  | buildReportObject | request | report |  |

1. ArticleReporting Middleware

#### Authenticate

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | handle | Request, Closure, guard | Closure | Check authorized, login request. |

1. Authenticate Middleware

#### EditingData

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | handle | Request, Closure | Closure | Handle editing data request |
|  | makeArticleInstance | Request | plantFactory | Contribute or update plant |

1. EditingData Middleware

#### FindingCondition

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | handle | Request, Closure | Closure | Handle condition finding request |
|  | makeSearchCondition | Closure | ArticleFindingCondition | Search to show result of medicinal plant, remedy |

1. FindingCondition Middleware

#### Register

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Handle | Request, Closure | Closure | Handle register request |
|  | makeMemberInstance | Request | MemberFactory | Create member object |
|  | makeCredentialInstance | Request | credential | Set attribute of member |

1. Register Middleware

#### UploadingFile

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Handle | Request, Closure | Closure | Handle uploading file request |

1. UploadingFile Middleware

#### ReviewingArticle

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Handle | Request, Closure | Closure | Handle review article |
|  | buildReviewObject | Request | Review | Build review object, which has comment, rate information. |

1. ReviewingArticle Middleware

### Controller

#### ArticleEditingController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | addPlants | Plant, editorFlowManager | http response | Add medicinal plant, show message when successful. |
|  | editPlants | Plant, editorFlowManager | http response | Edit medicinal plant, show message when successful. |
|  | addRemedy | Remedy, editorFlowManager | http response | Add remedy, show message when successful. |
|  | editRemedy | Remedy, editorFlowManager | http response | Edit remedy, show message when successful. |

1. Article Editing Controller

#### ArticleFindingController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | findPlants | MedicinalPlantNameCondition | view | Search medicinal plant |
|  | medicinalPlantsDetail | MedicinalPlantsIdCondition | view | Show medicinal plant detail |
|  | showAdvanceSearchPlant | AdvanceSearchPlantsCondition | view | Advance search plant |
|  | findRemedies | RemediesKeywordCondition | view | Search remedy |
|  | detailRemedy | RemedyDetailCondition | view | Show remedy detail |
|  | showAdvanceSearchRemedy | AdvanceSearchRemediesCondition | view | Show advance search remedy |

1. ArticleFinding Controller

#### ArticleReportingController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | reportPlant | Report | http response | Report medicinal plant and show message after send report |

1. ArticleReporting Controller

#### ArticleReviewingController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | reviewPlants | Report | http response | Review medicinal plant |

1. ArticleReviewing Controller

#### PageShowingController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | home |  | View | Display homepage |
|  | showAddPlant |  | View | Display add plant page |
|  | showEditPlant |  | View | Display edit plant page |

1. Page showing Controller

#### LoginController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | showLogin |  | View | Show login page |
|  | doLogin |  | http response | Check login and redirect to homepage |
|  | doLogout |  | http response | Check logout and redirect to homepage |

1. Login Controller

#### RegisterController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | memberRegister | Credential, Member | http response | Register as member of system |
|  | storeRegister | Credential, HerbalMedicineStore | http response | Register as herbal medicine store |

1. Register Controller

#### ProfileController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | showMemberProfile |  | view | Show member profile |

1. Profile Controller

#### AdminUsersDataController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | adminHome |  | view | Show admin dashboard |
|  | adminGetApprove | WaitingStoreCondition | view | Get all register as Herbal medicine store |
|  | adminAllUsers | AllUserCondition | view | Get list of all user |
|  | adminStoreInfo | MemberInformationCondition | view | Get store information |
|  | adminUserDetail | MemberInformationCondition | view | Get user detail |

1. Admin user data Controller

#### AdminProceedController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | approveRegister | credential | http response | Approve register as Herbal medicine store |
|  | denyRegister | credential | http response | Deny register as Herbal medicine store |
|  | changeStatus | credential | http response | Active or inactive a credential |
|  | changeRole | credential | http response | Change role |

1. Admin proceed Controller

#### ModArticleDataFindingController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | modHome |  | view | Show the mod dashboard |
|  | getWaitingPlants | PlantManagementCondition | view | Get waiting plants |
|  | getWaitingRemedies | RemedyManagementCondition | view | Get waiting remedy |

1. Mod Article Data Finding Controller

#### ModProceedController

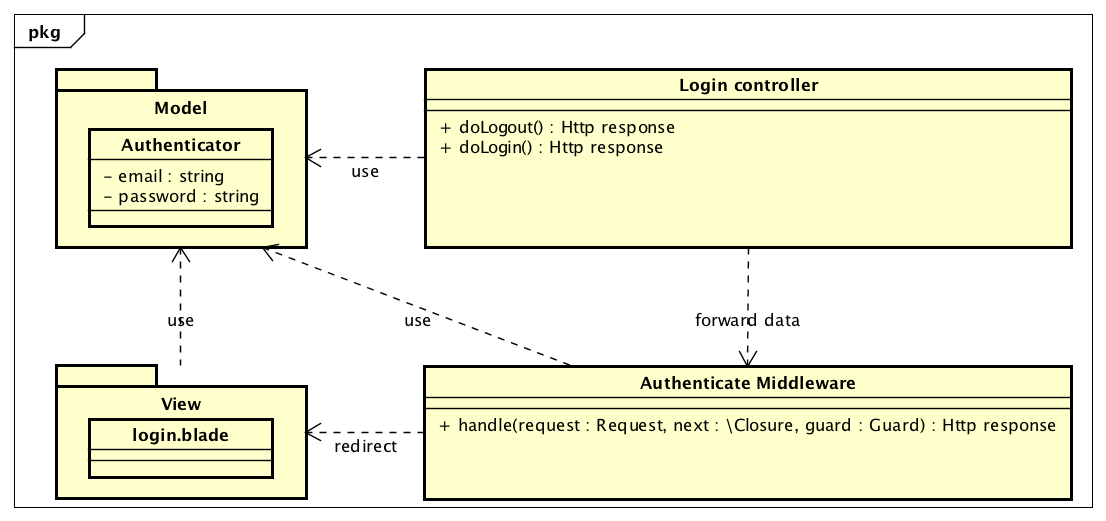
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | approveNewPlant | MedicinalPlant | http response | Approve new plant |
|  | approveEditedPlant | MedicinalPlant | http response | Approve edited plant |
|  | denyPlant |  | http response | Reject medicinal plant |
|  | approveNewRemedy | Remedy | http response | Approve new remedy |
|  | approveEditRemedy | Remedy | http response | Approve edit remedy |
|  | rejectRemedy |  | http response | Reject remedy |
|  | remindPlantAuthor | Message | http response | Send message to remind author’s medicinal plant |
|  | remindRemedyAuthor | Message | http response | Send message to remind author’s remedy |

1. Mod proceed Controller

# Function

## Auth

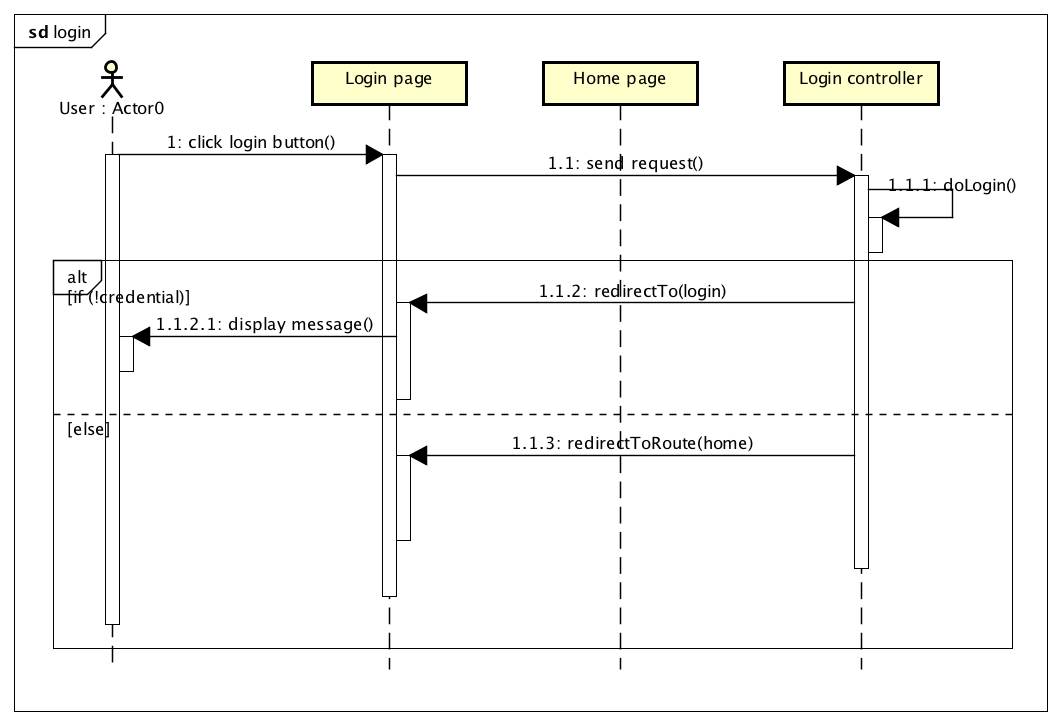
### Class diagram



1. Auth class diagram

### Login

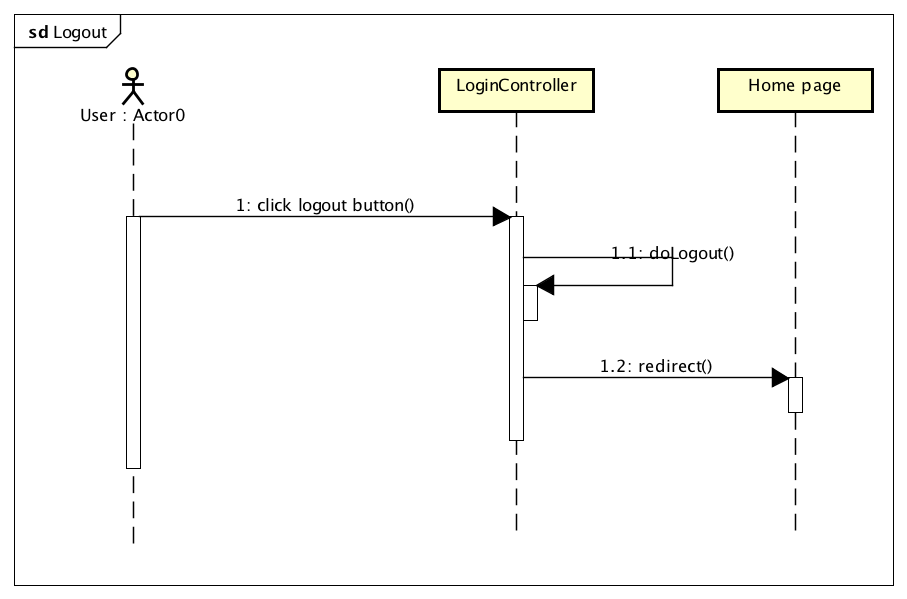
#### Sequence diagram



1. Login sequence diagram

### Logout

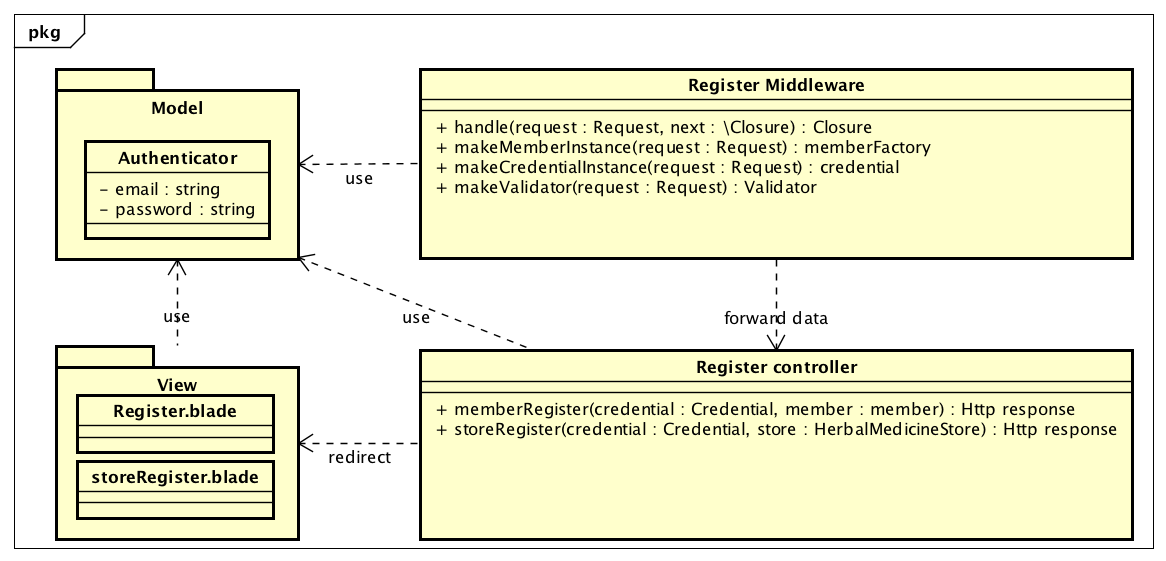
#### Sequence Diagram



1. Logout sequence diagram

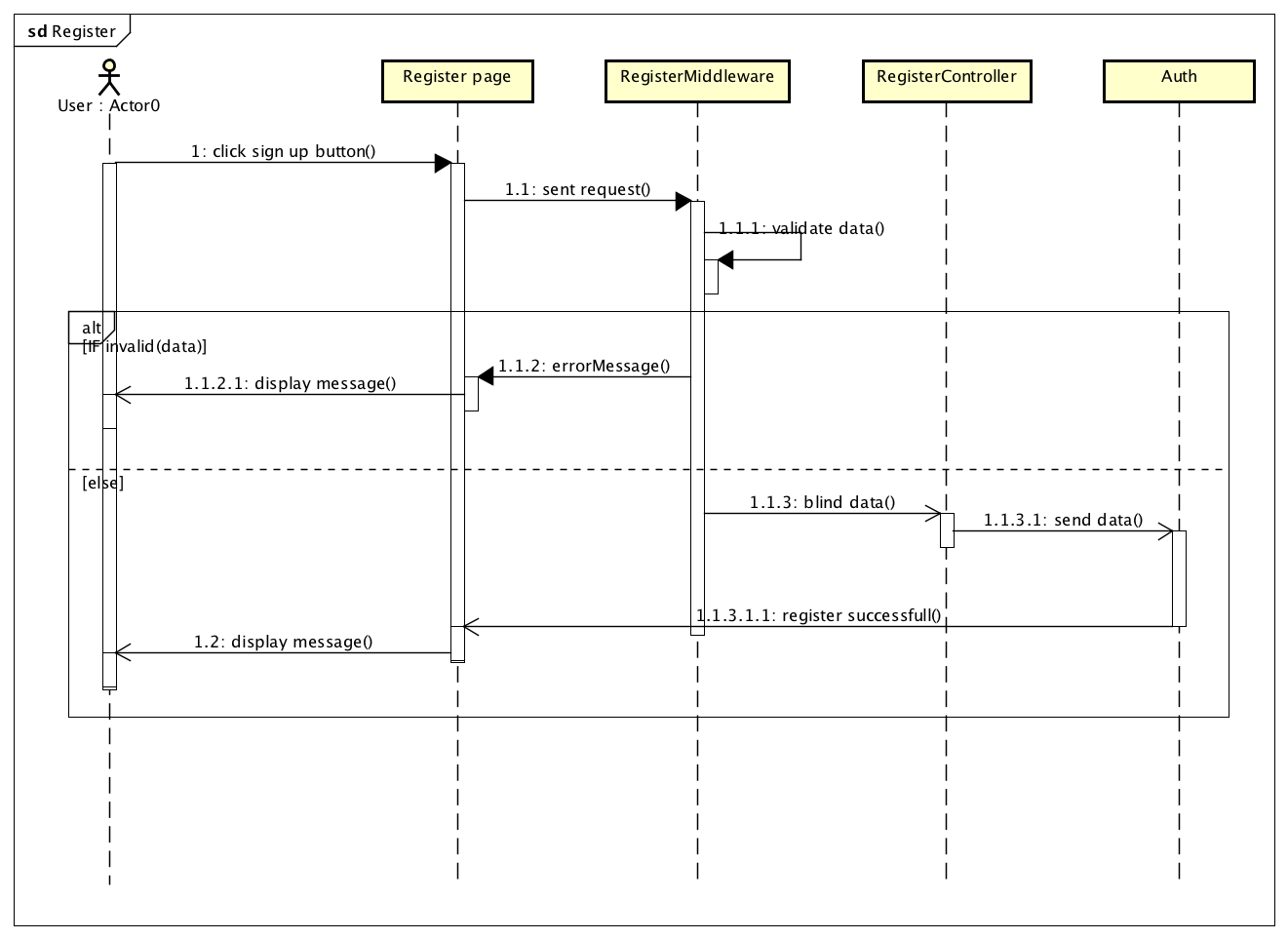
## Register

### Class Diagram



1. Register class diagram

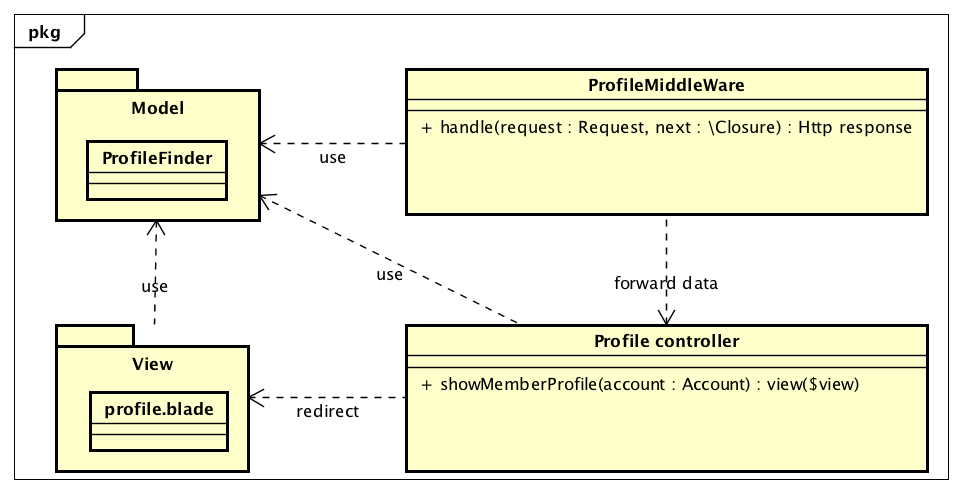
### Sequence Diagram



1. Register sequence diagram

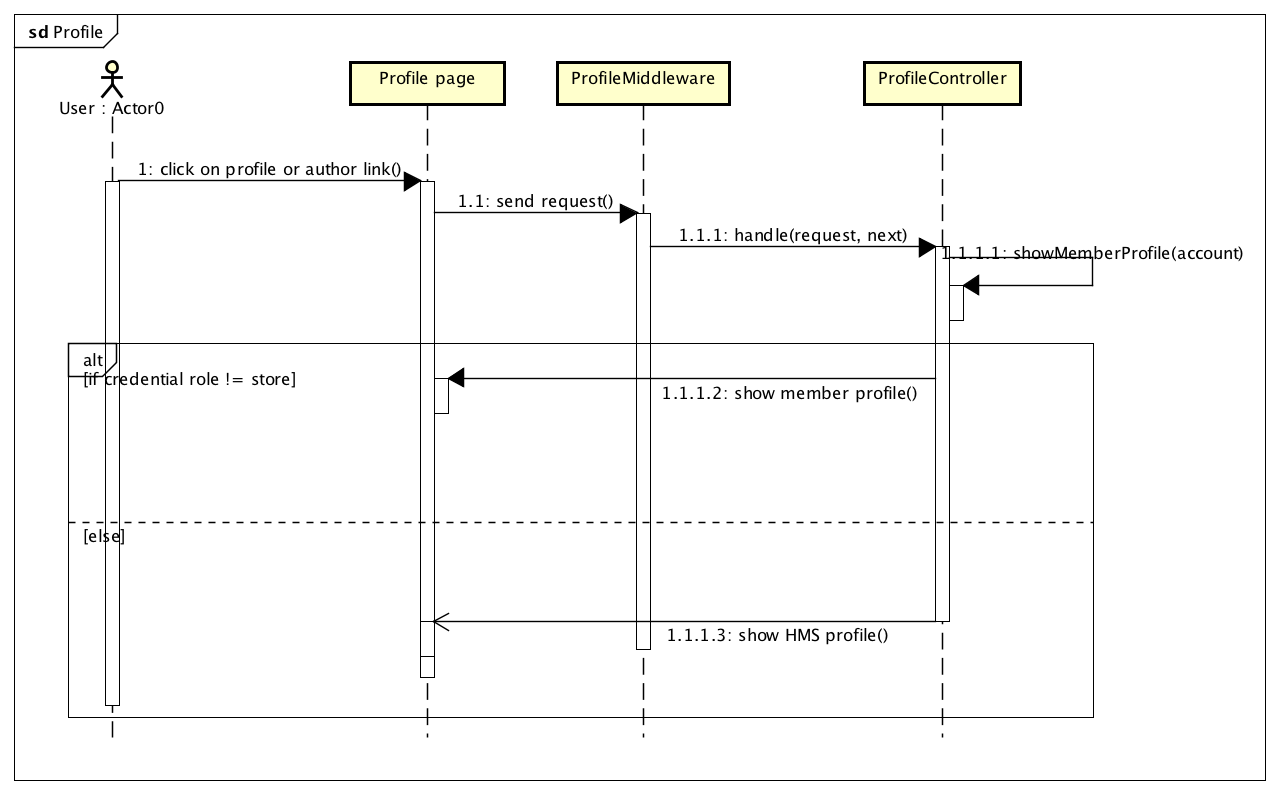
## Profile

### Class Diagram



1. Profile class diagram

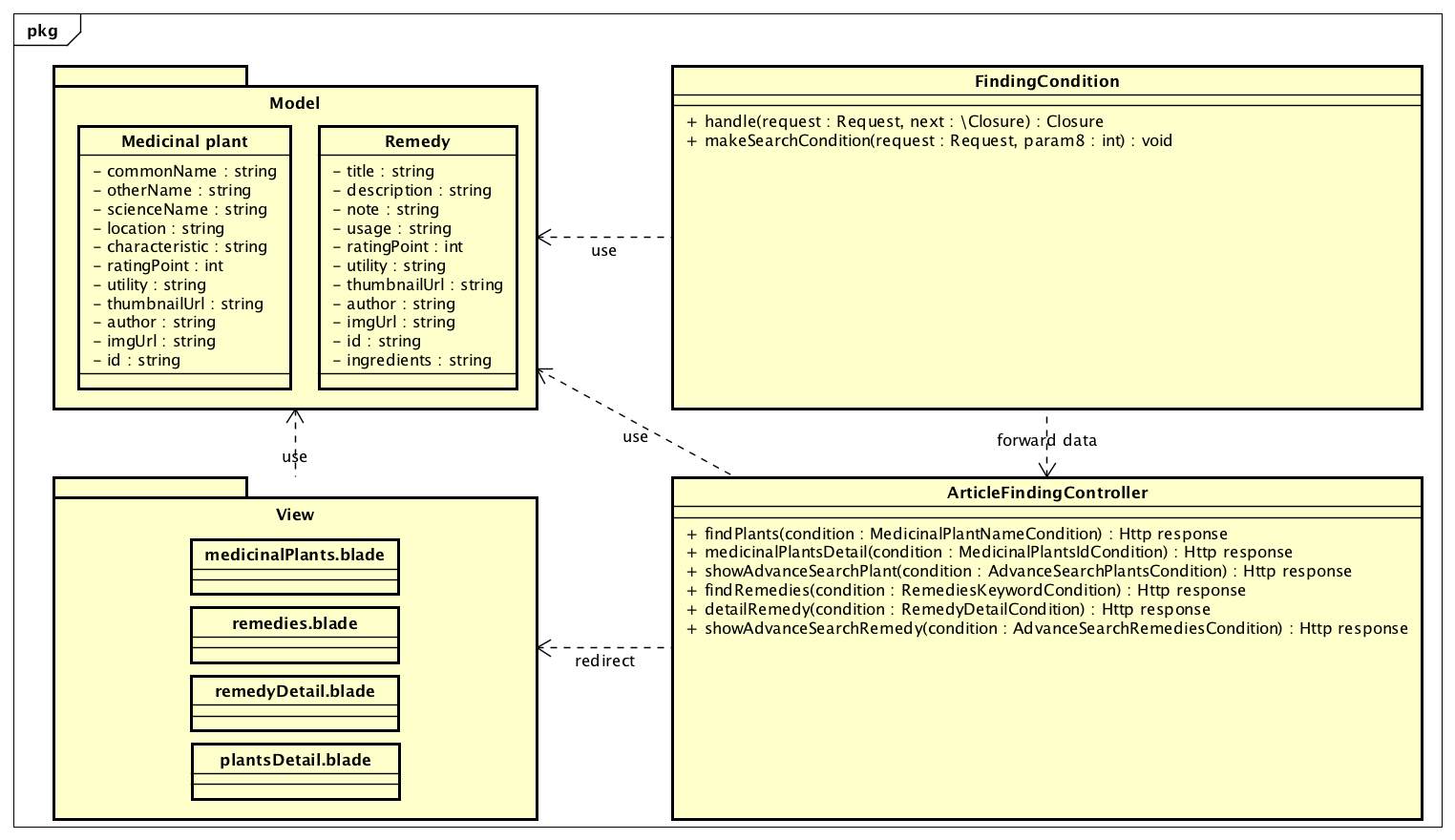
### Sequence Diagram



1. Profile sequence diagram

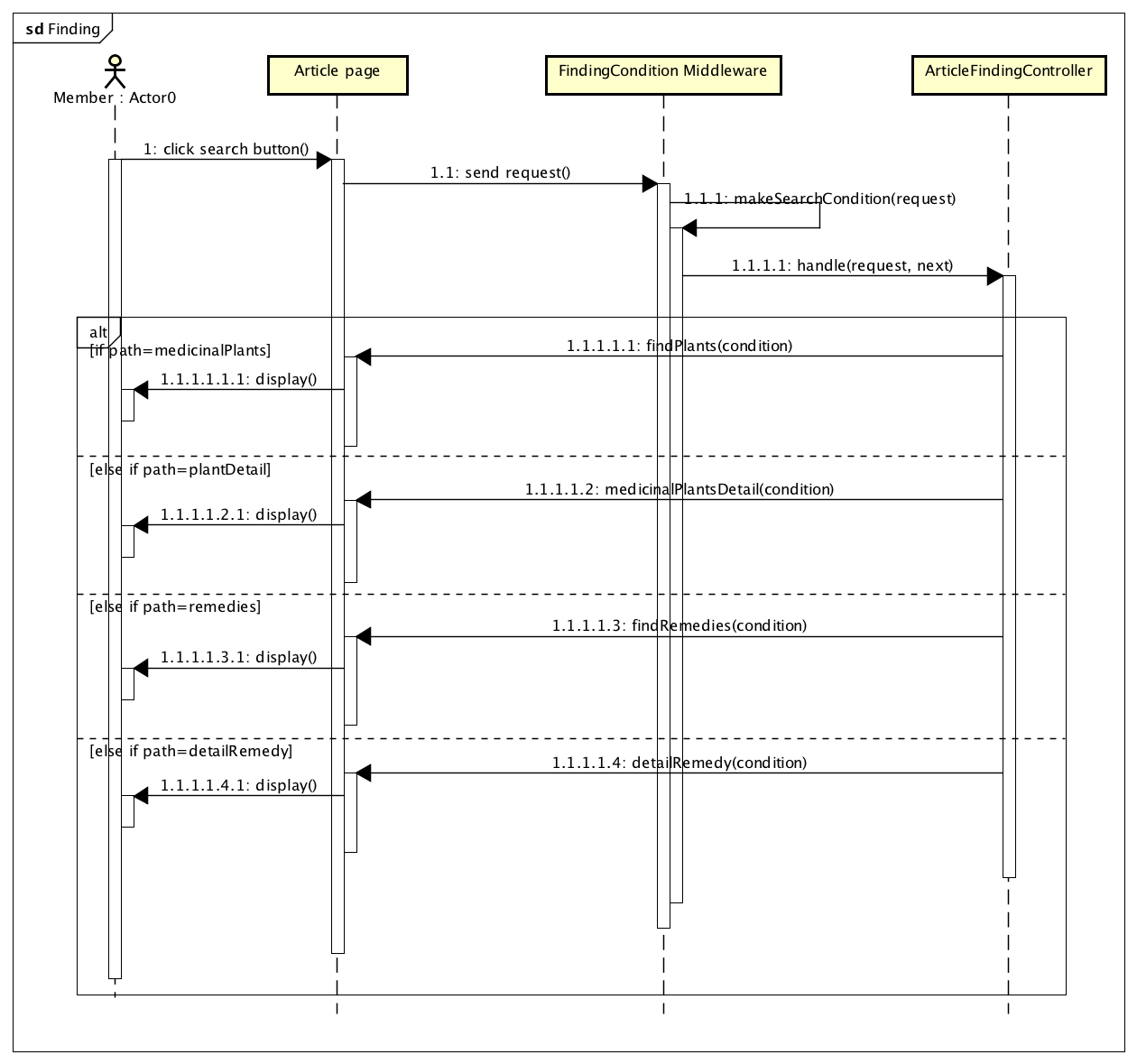
## Finding article

### Class Diagram



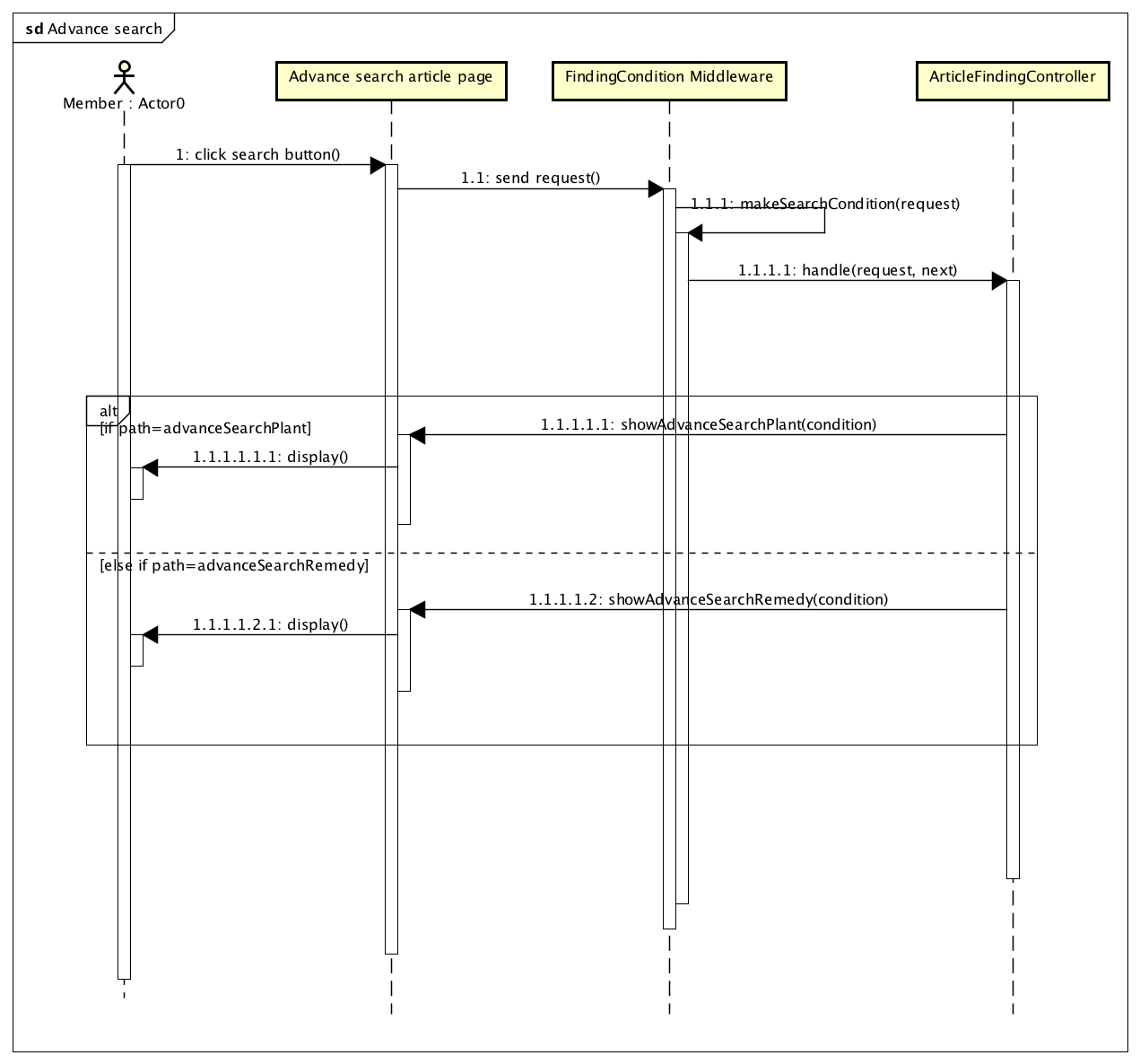
1. Finding article class diagram

### Sequence Diagram of basic finding article



1. Basic finding article sequence diagram

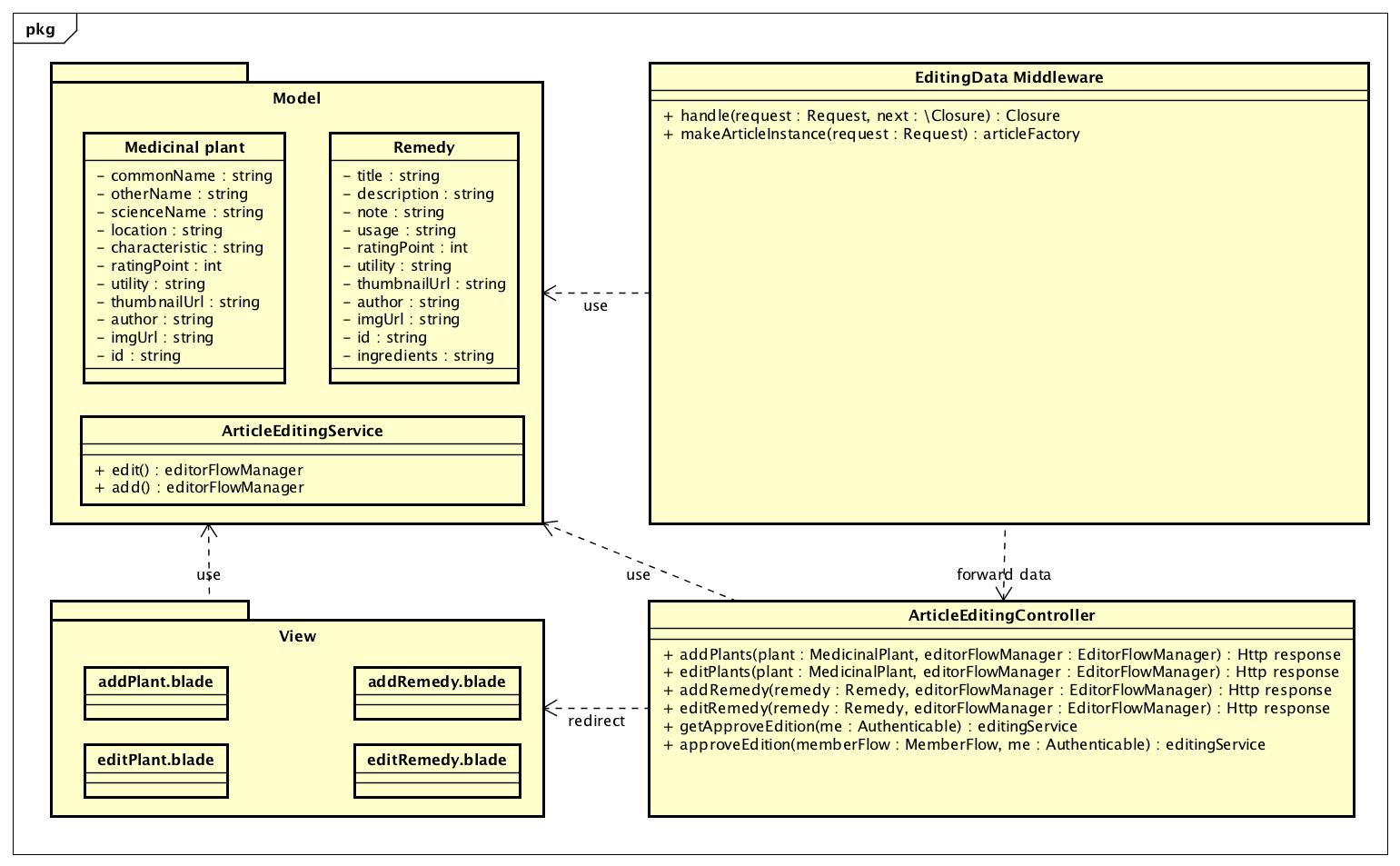
### Sequence Diagram of advance finding article



1. Advance finding article sequence diagram

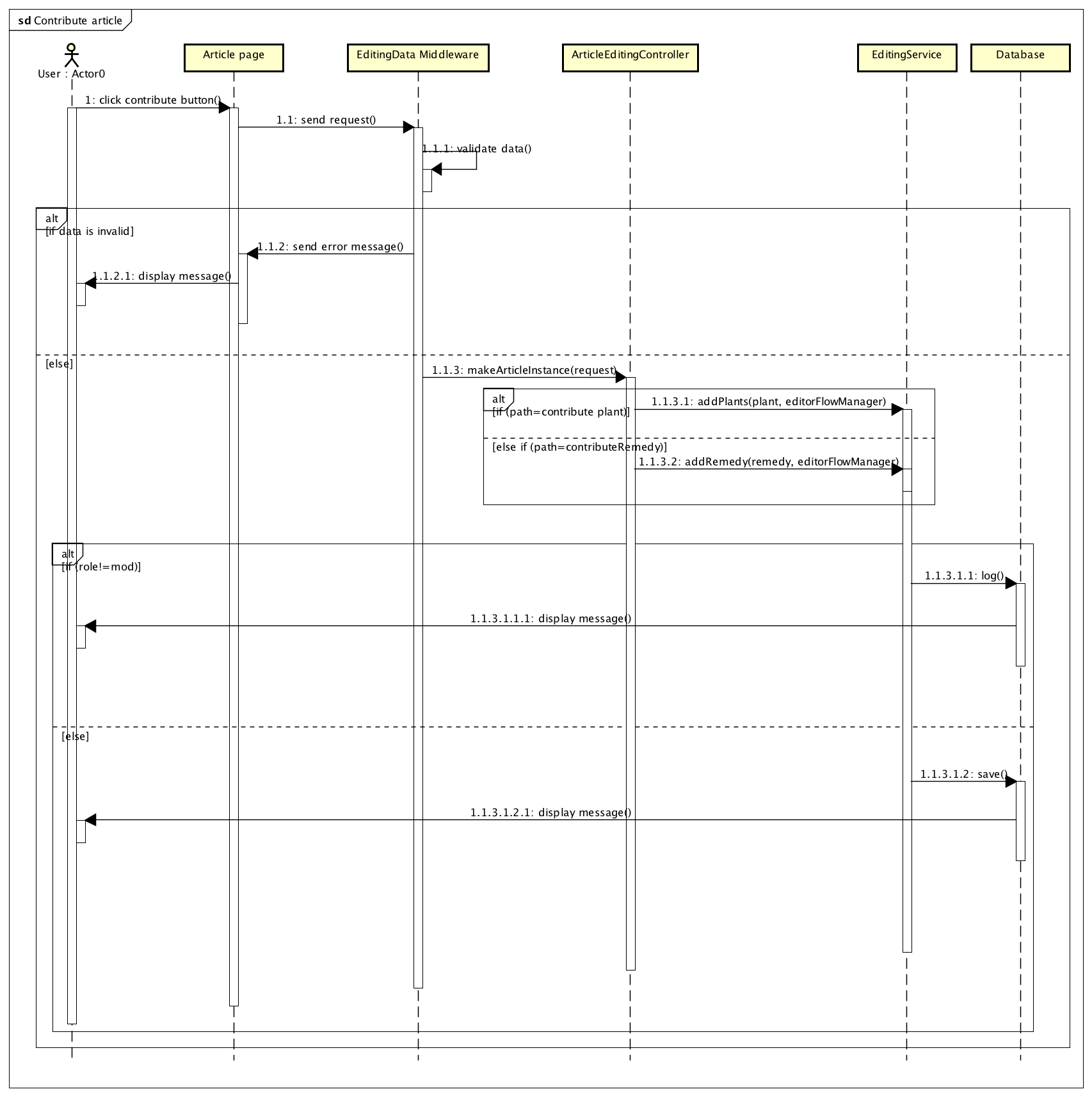
## Editing article

### Class Diagram



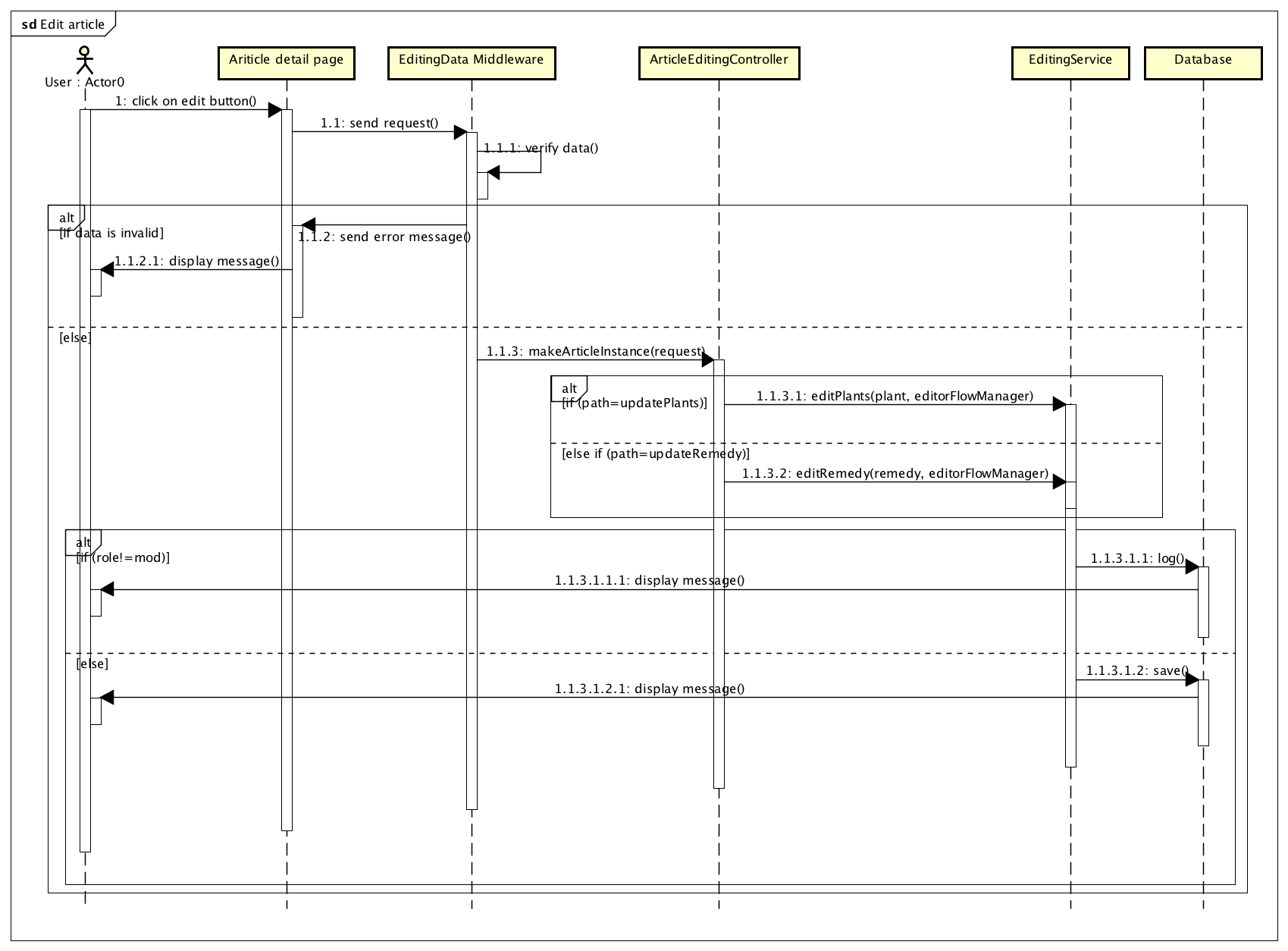
1. Contribute article class diagram

### Sequence Diagram of contribute article



1. Contribute article sequence diagram

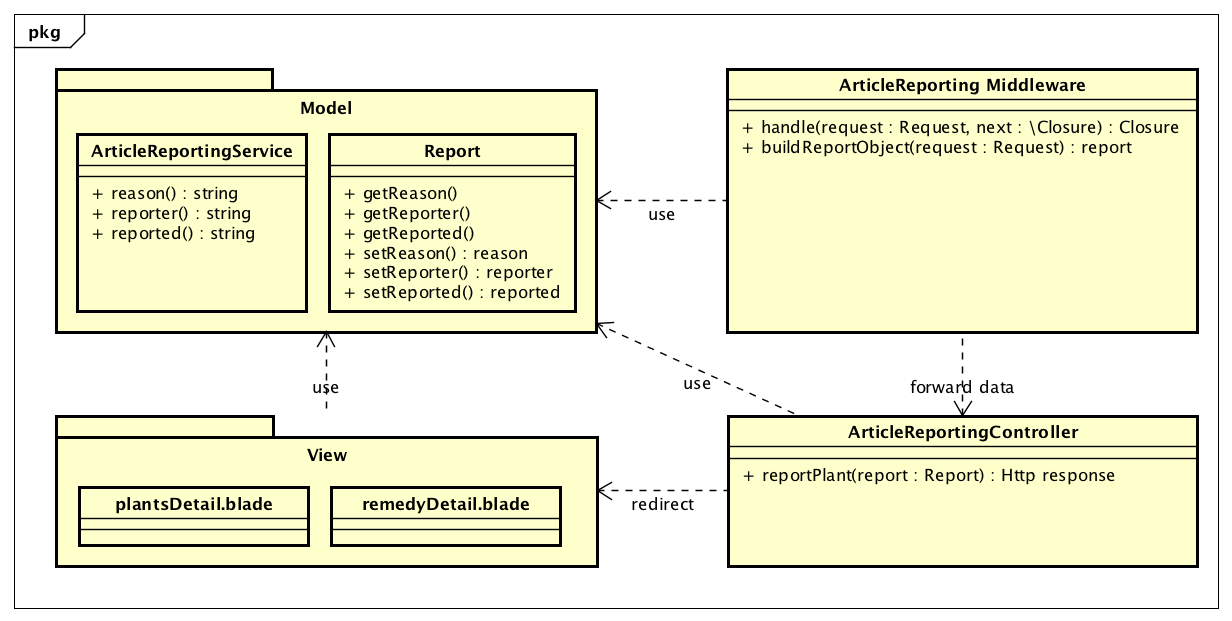
### Sequence Diagram of edit article



1. Edit article sequence diagram

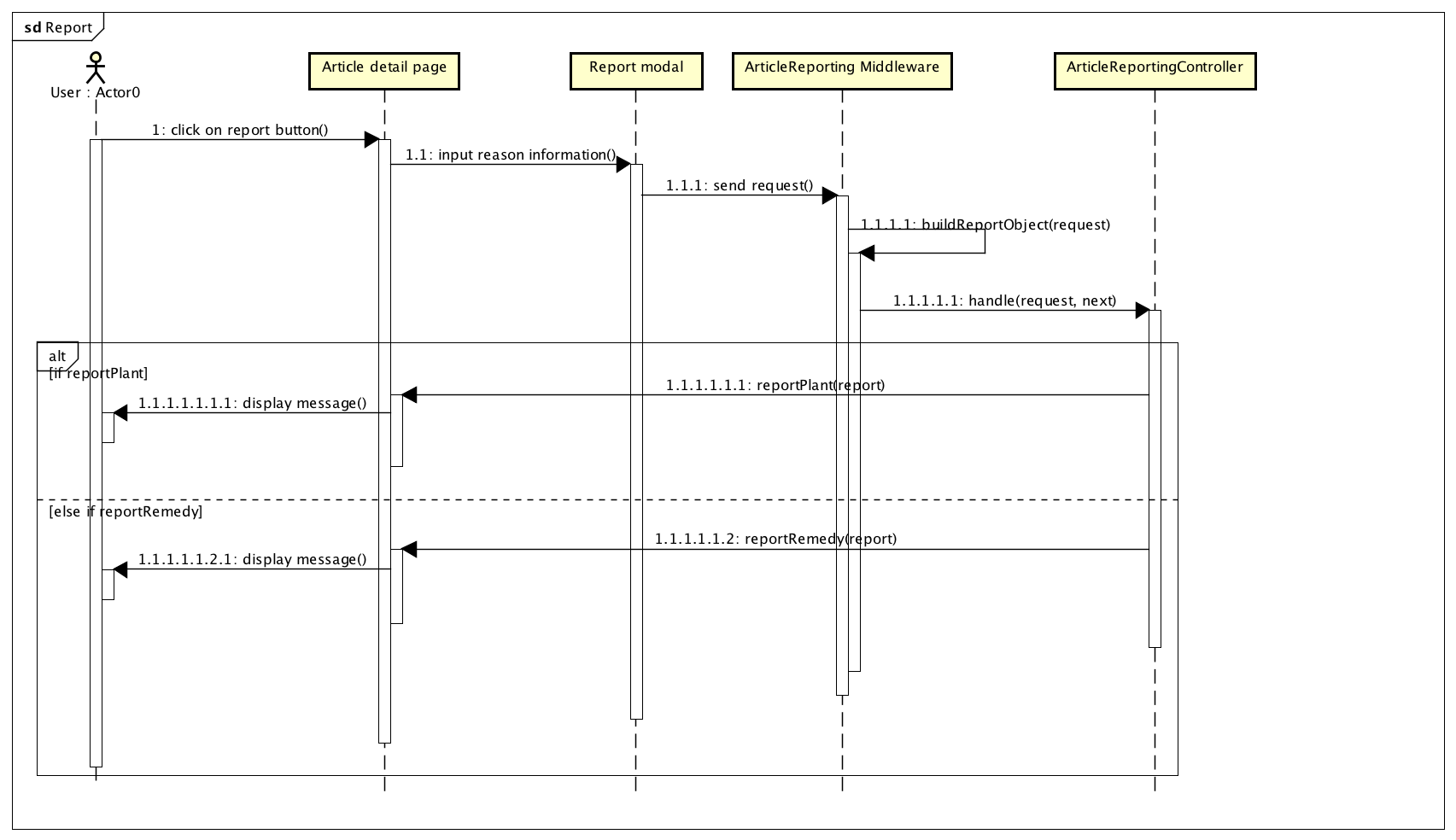
## Report

### Class Diagram



1. Report class diagram

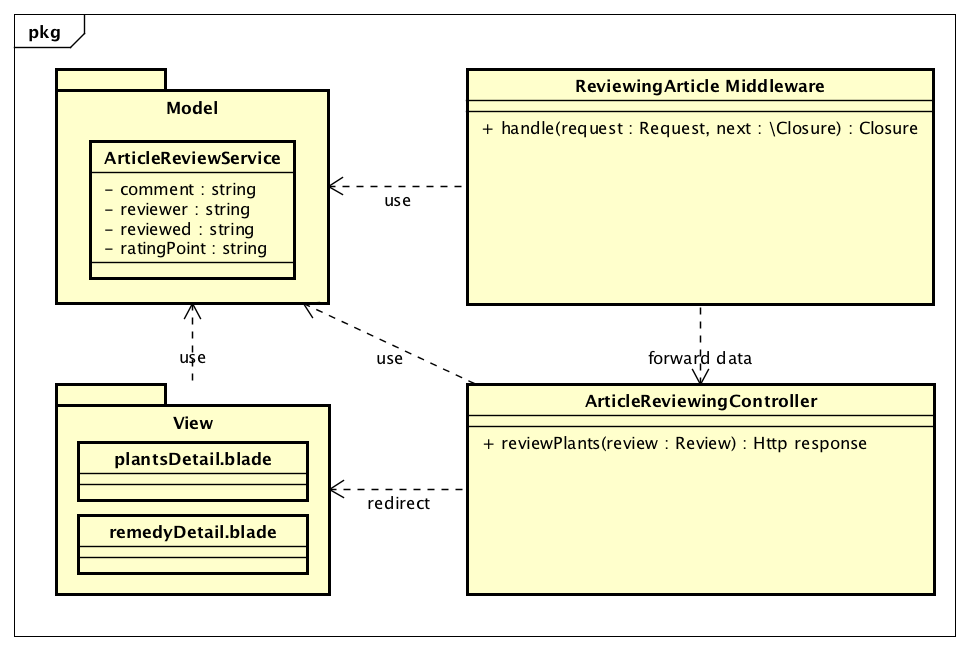
### Sequence Diagram



1. Report sequence diagram

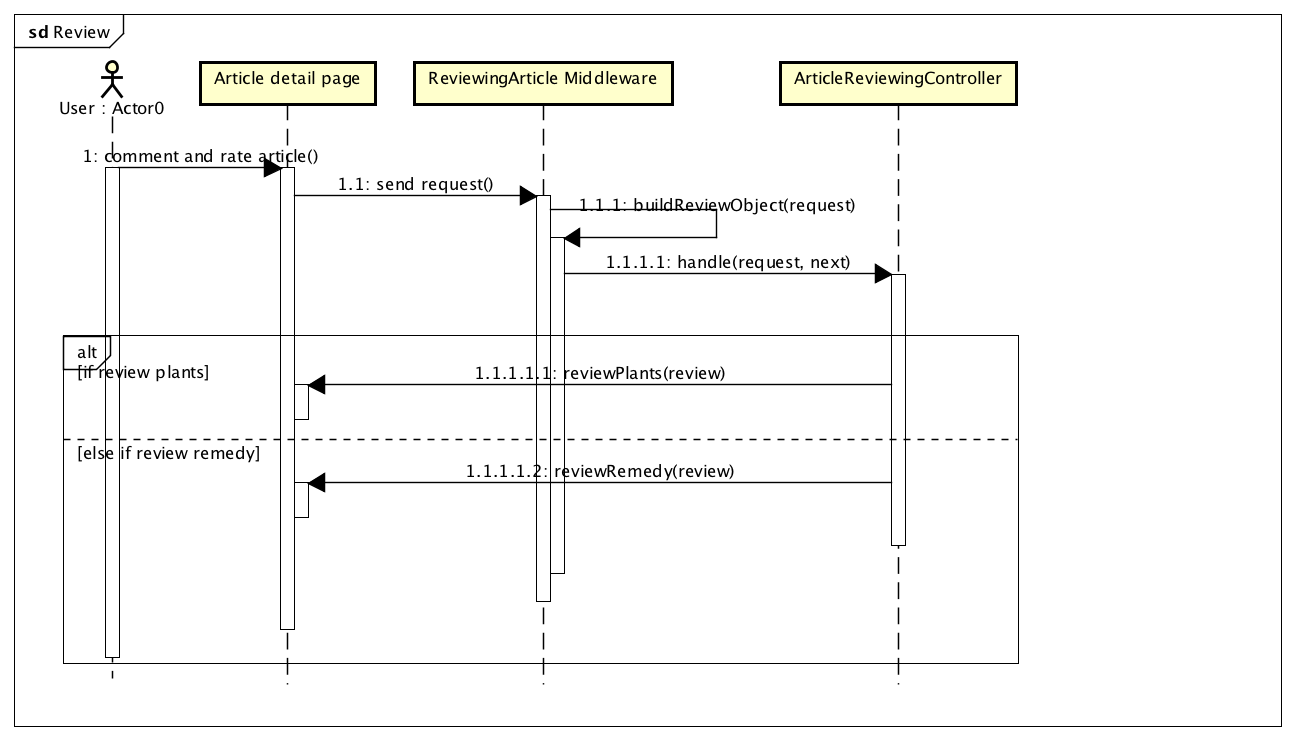
## Review

### Class Diagram



1. Review class diagram

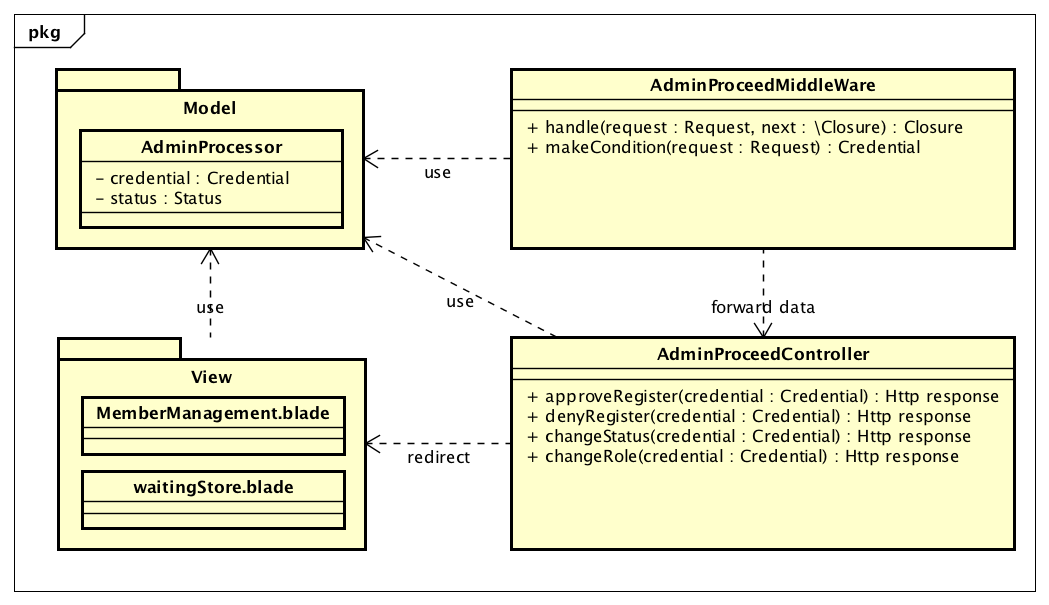
### Sequence Diagram



1. Review sequence diagram

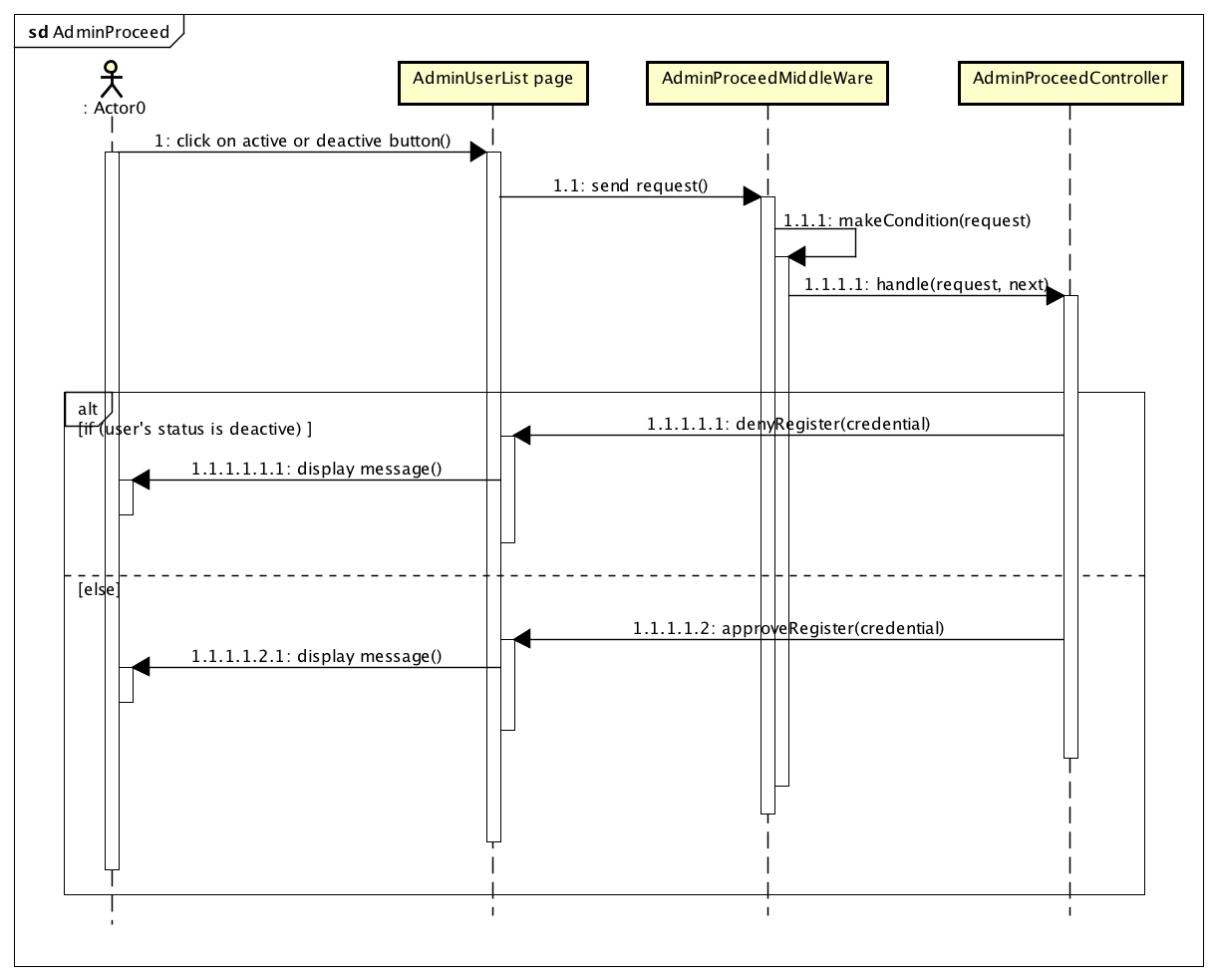
## Admin Proceed

### Class Design



1. Admin class diagram

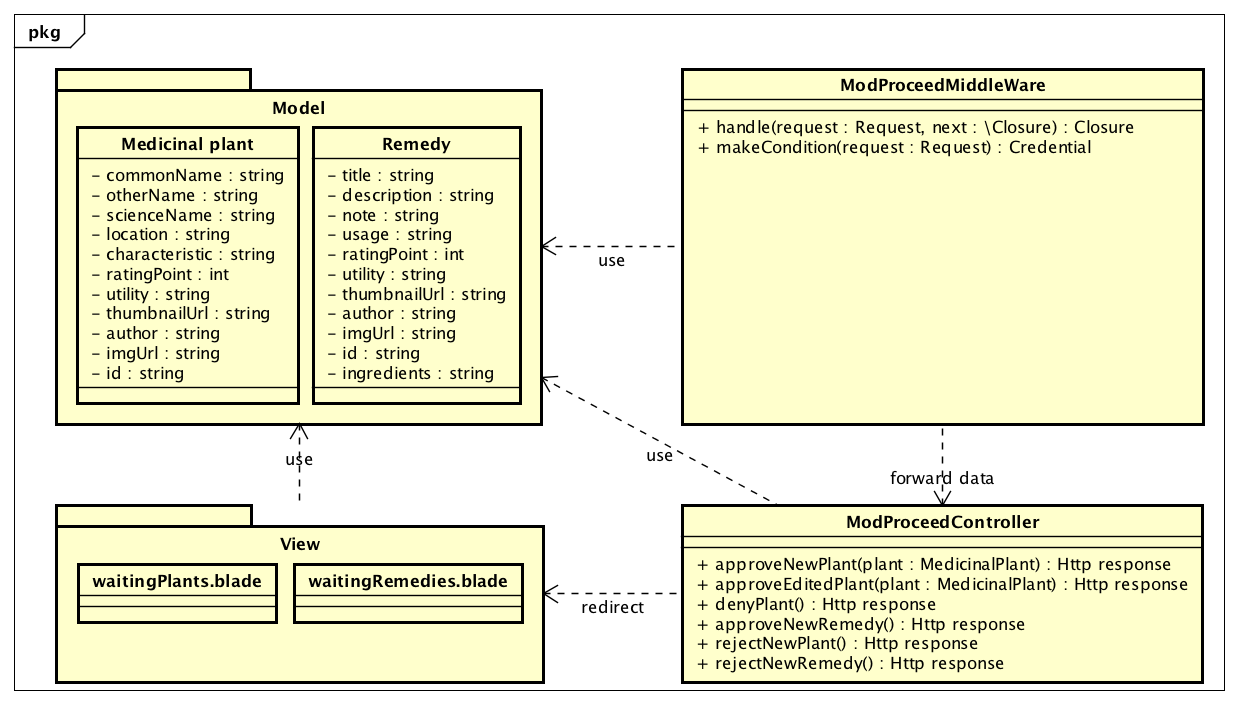
### Sequence Diagram



1. Admin Proceed sequence diagram

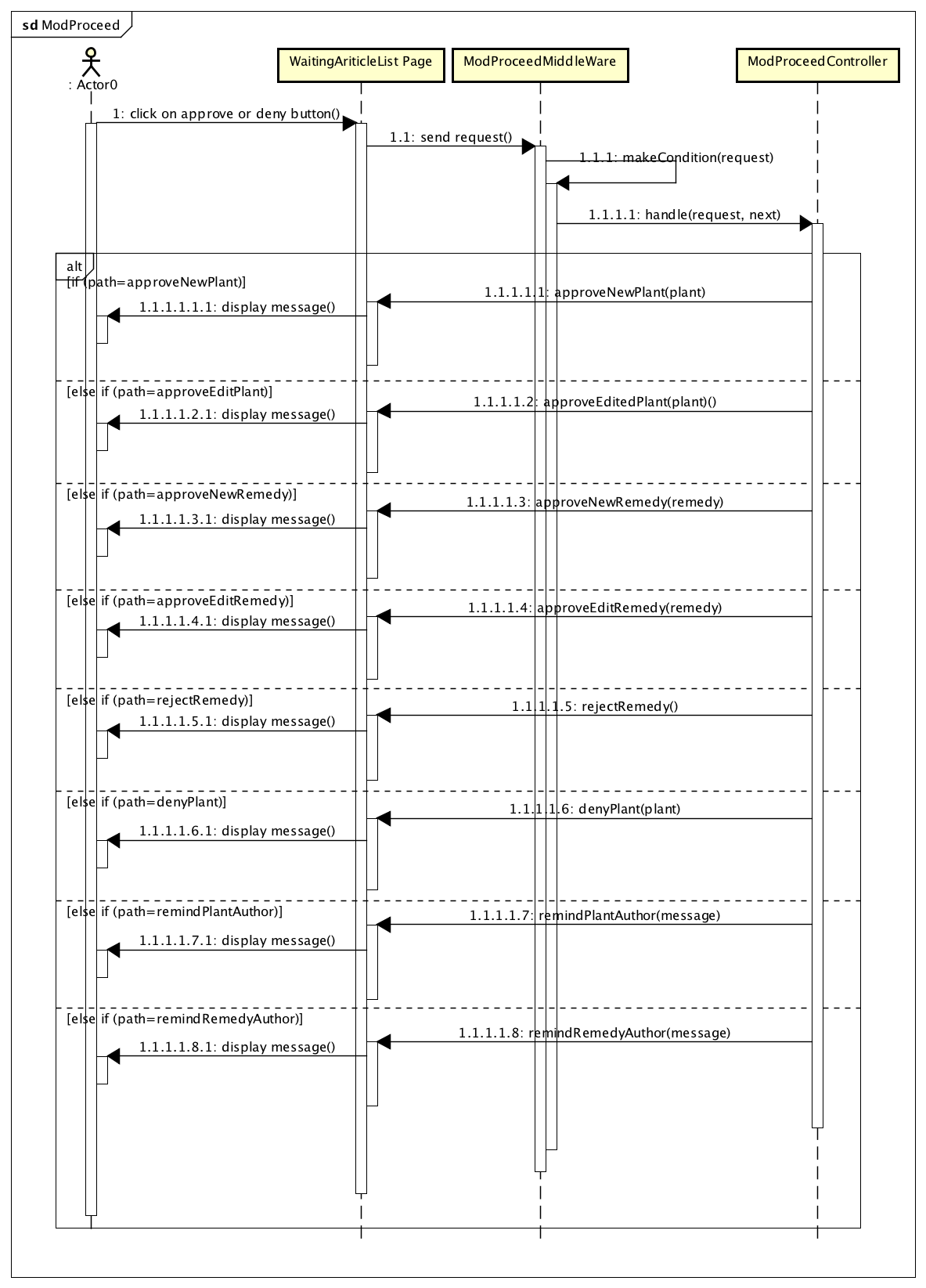
## Mod Proceed

### Class Design



1. Mod proceed class diagram

### Sequence Diagram



1. Mod Proceed sequence diagram