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| Capstone Project Document |

**Vietnamese Medicinal Plants Network**

Report #2 – Class Design

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**- Hanoi, 03/2016 -**

# SIGNATURE PAGE

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Record of change

\*A - Added M - Modified D – Deleted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Effective Date | Changed Item | A,M,D | Change Description | Reason for Change | Rev. Number |
| 28/March/2016 | Create Class Design | A | First version | Create Class Design | 1.0 |
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TABLE CONTENTS

SIGNATURE PAGE 1

Introduction 3

1.1 Purpose 3

1.2 Definitions, Acronyms and Abbreviations 3

2 Package 3

2.1 Package Diagram 3

2.2 Package Description 3

2.2.1 Model 3

2.2.2 View 8

2.2.3 Middleware 8

2.2.4 Controller 10

3 Function 11

3.1 Auth 11

3.1.1 Class diagram 12

3.1.2 Login 12

3.1.3 Logout 13

3.2 Register 13

3.2.1 Class Diagram 13

3.2.2 Sequence Diagram 14

3.3 Profile 15

3.3.1 Class Diagram 15

3.3.2 Sequence Diagram 15

3.4 Contribute article 16

3.4.1 Class Diagram 16

3.4.2 Sequence Diagram 16

3.5 Edit article 17

3.5.1 Class Diagram 17

3.5.2 Sequence Diagram 17

3.6 Report 18

3.6.1 Class Diagram 18

3.6.2 Sequence Diagram 18

3.7 Review 19

3.7.1 Class Diagram 19

3.7.2 Sequence Diagram 19

# 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.

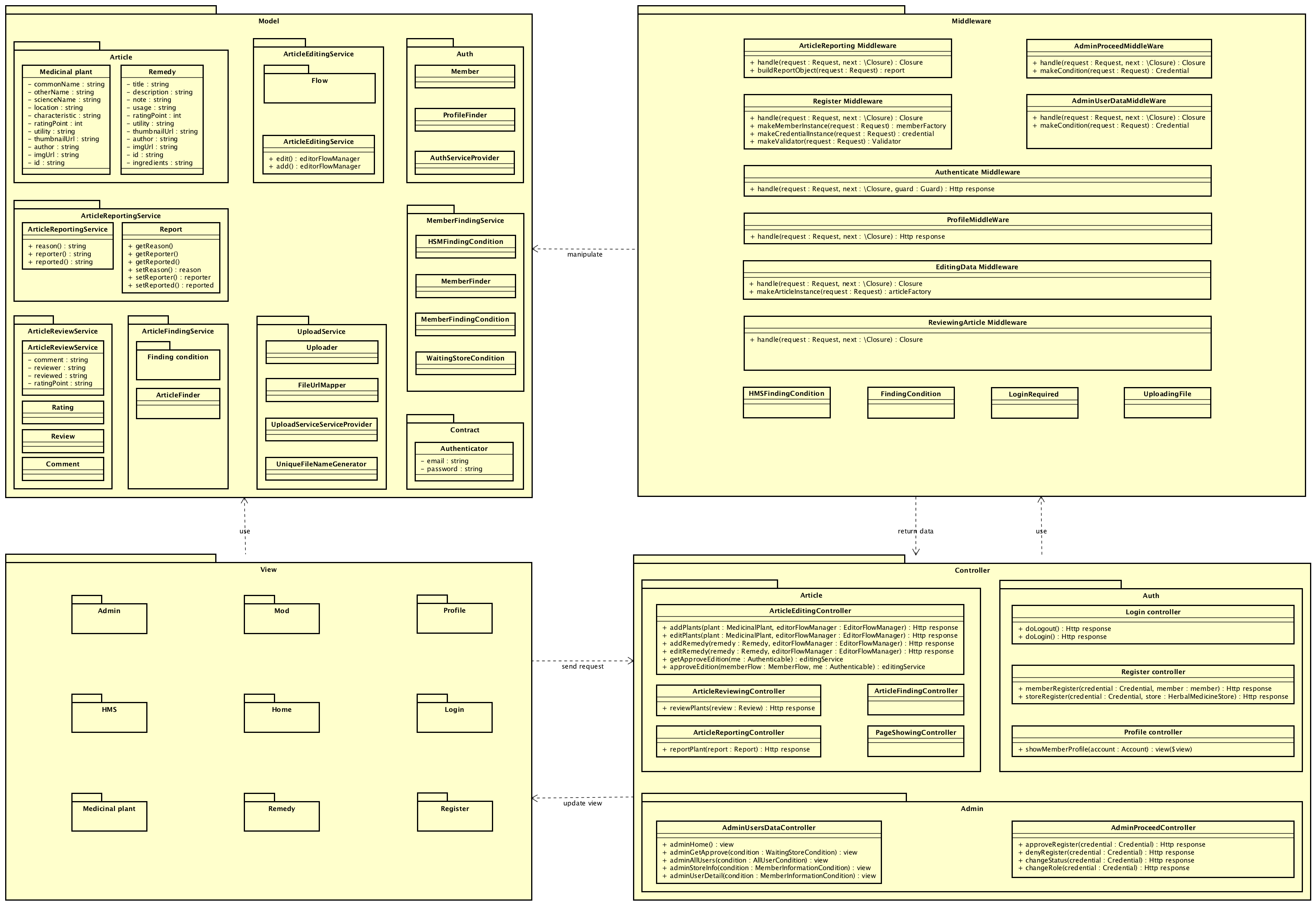
## Definitions, Acronyms and Abbreviations

|  |  |  |
| --- | --- | --- |
| 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 |
|  | byToken | token | Credential | An unique string that is generated by login action |

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 |
|  | editRequest | forEditor | MemberFlow[] | Edit a request |
|  | Report | forEditor | MemberFlow | Report article |
|  | Approve | memberFlow, authenticable | authenticable | Approve 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

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

1. 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 | str\_replace |  |

1. FileUrlMapper Model

#### UniqueFileNameGenerator Model

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

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, next | Closure |  |
|  | buildReportObject | request | report |  |

1. ArticleReporting Middleware

#### Authenticate

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

1. Authenticate Middleware

#### EditingData

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

1. EditingData Middleware

#### FindingCondition

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

1. FindingCondition Middleware

#### Register

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

1. UploadingFile Middleware

#### ReviewingArticle

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | Handle | Request, next | 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. |

1. Article Editing Controller

#### ArticleFindingController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | findPlants | condition | view | Search medicinal plant |
|  | medicinalPlantsDetail | condition | view | Show medicinal plant detail |
|  | showAdvanceSearchPlant | condition | view | Advance search plant |
|  | findRemedies | condition | view | Search remedy |
|  | detailRemedy | condition | view | Show remedy detail |

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 |

Table -21: PageShowing 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 |

Table -22: Login Controller

#### RegisterController

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | memberRegister | Credential, member | http response | Register as member of system |

Table -23: Register Controller

#### ProfileController

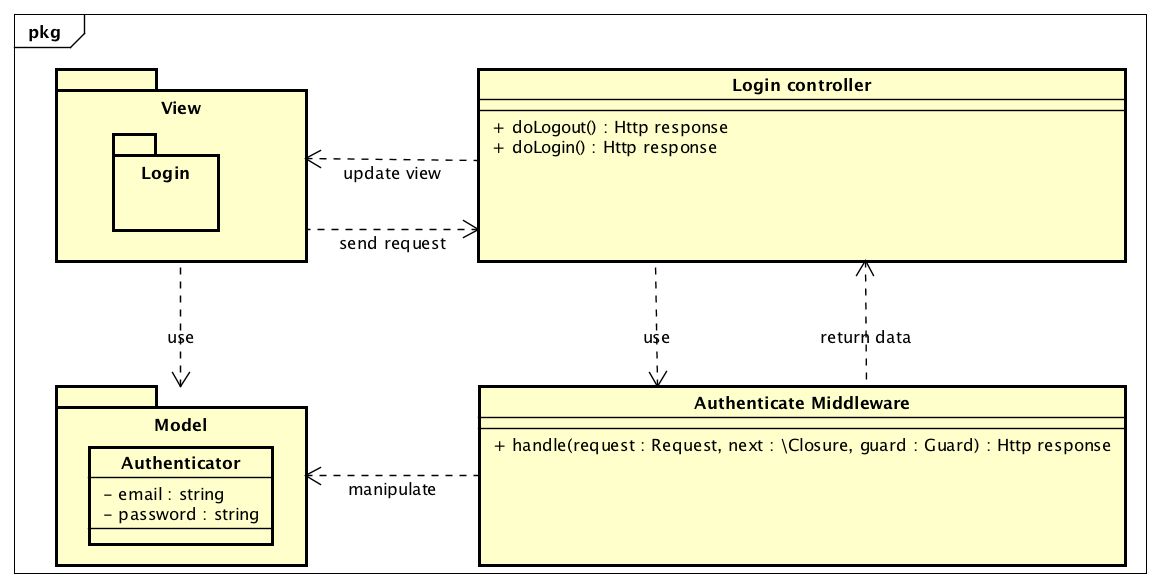
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | showMemberProfile |  | view | Show member profile |

Table -23: Profile Controller

# Function

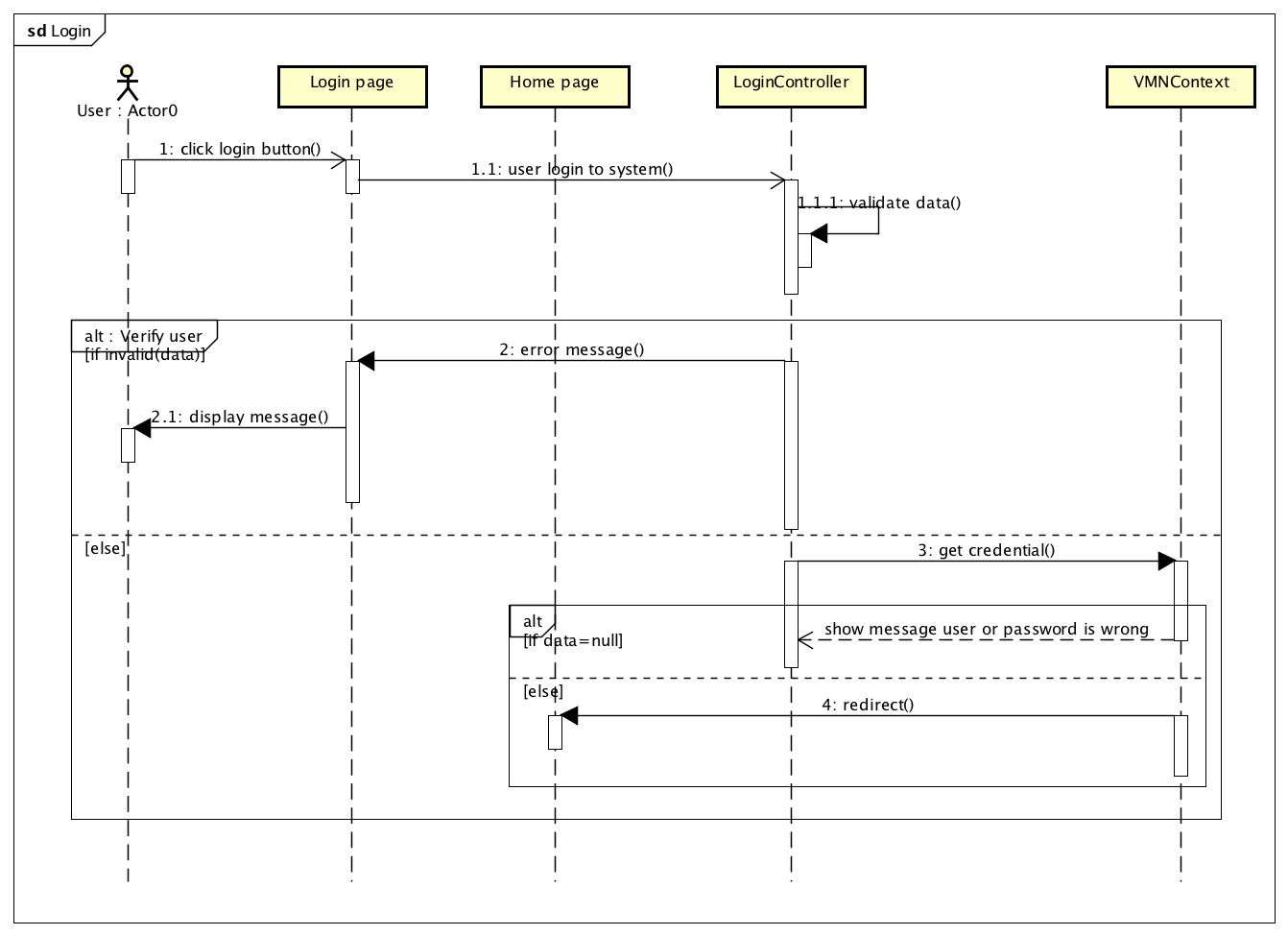
## Auth

### Class diagram



### Login

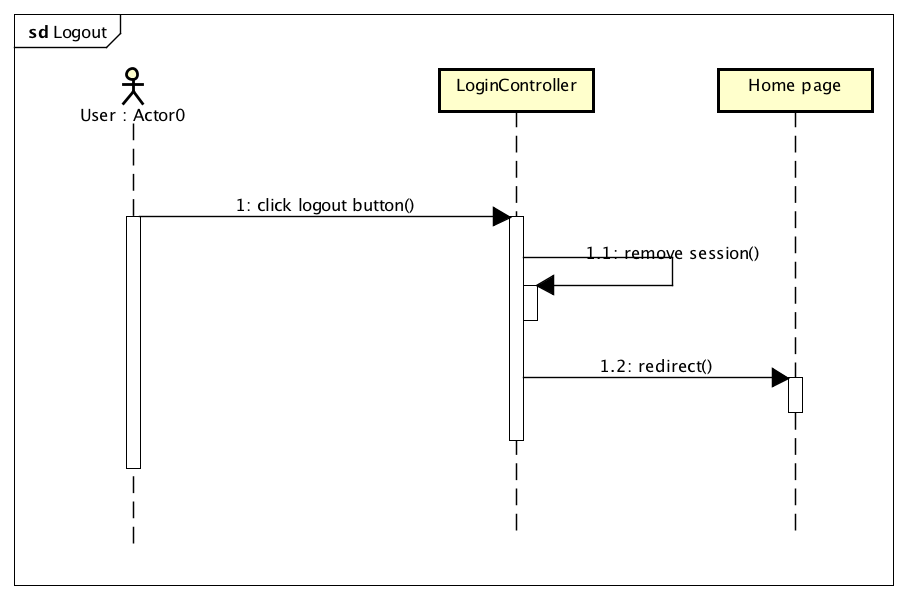
#### Sequence diagram



1. Login sequence diagram

### Logout

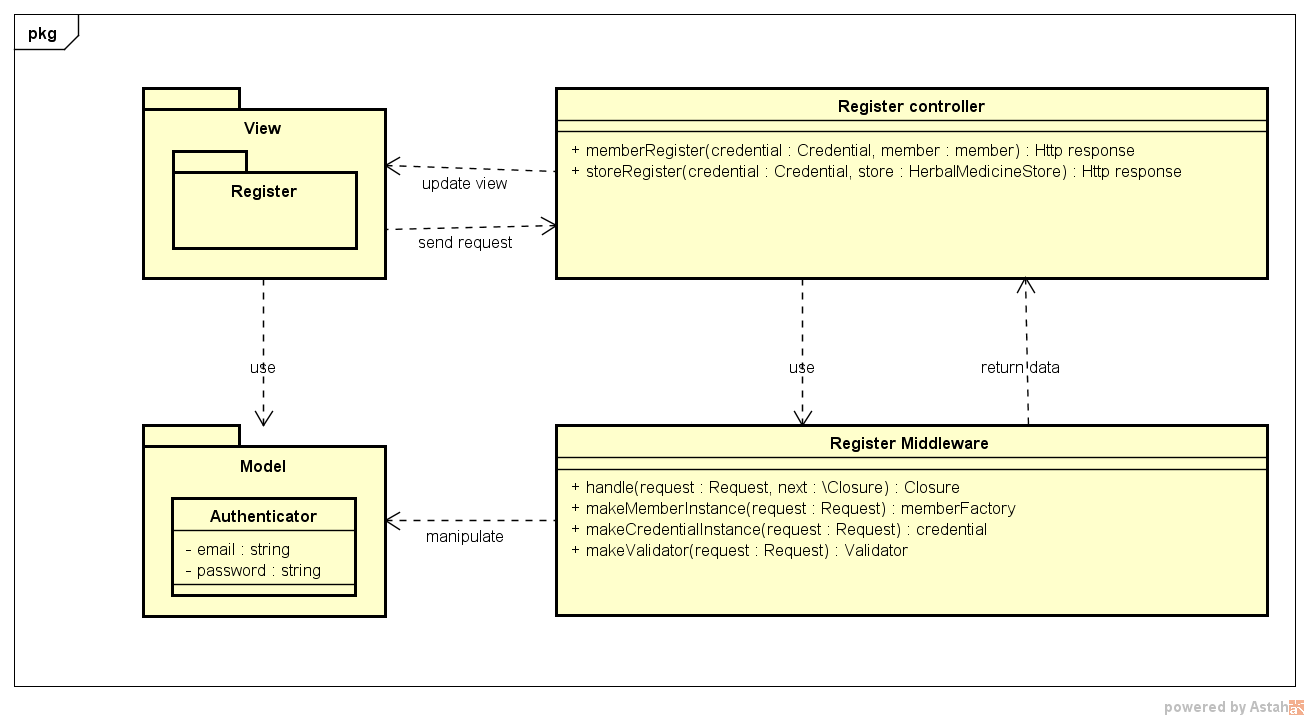
#### Sequence Diagram



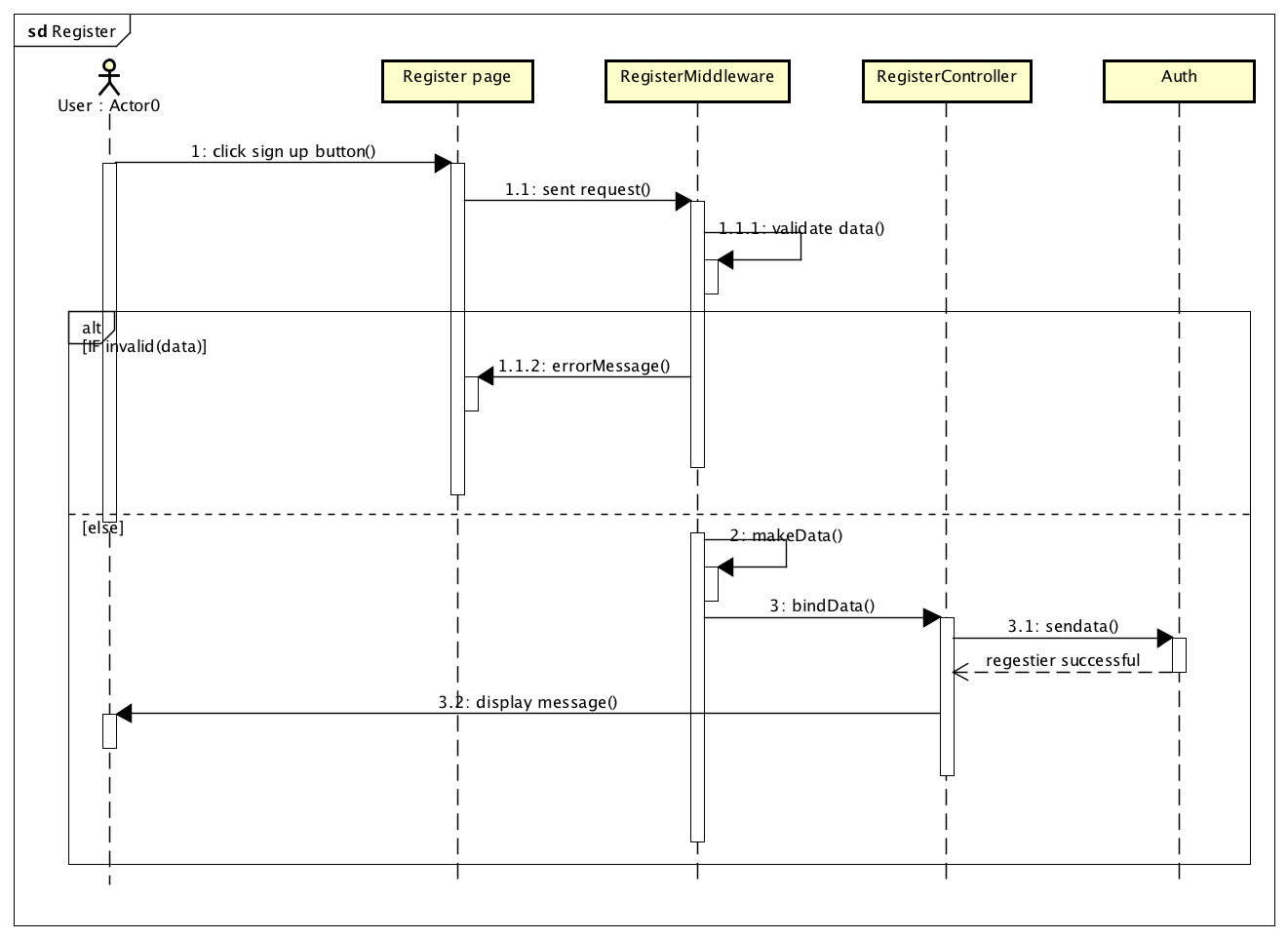
1. Logout sequence diagram

## Register

### Class Diagram



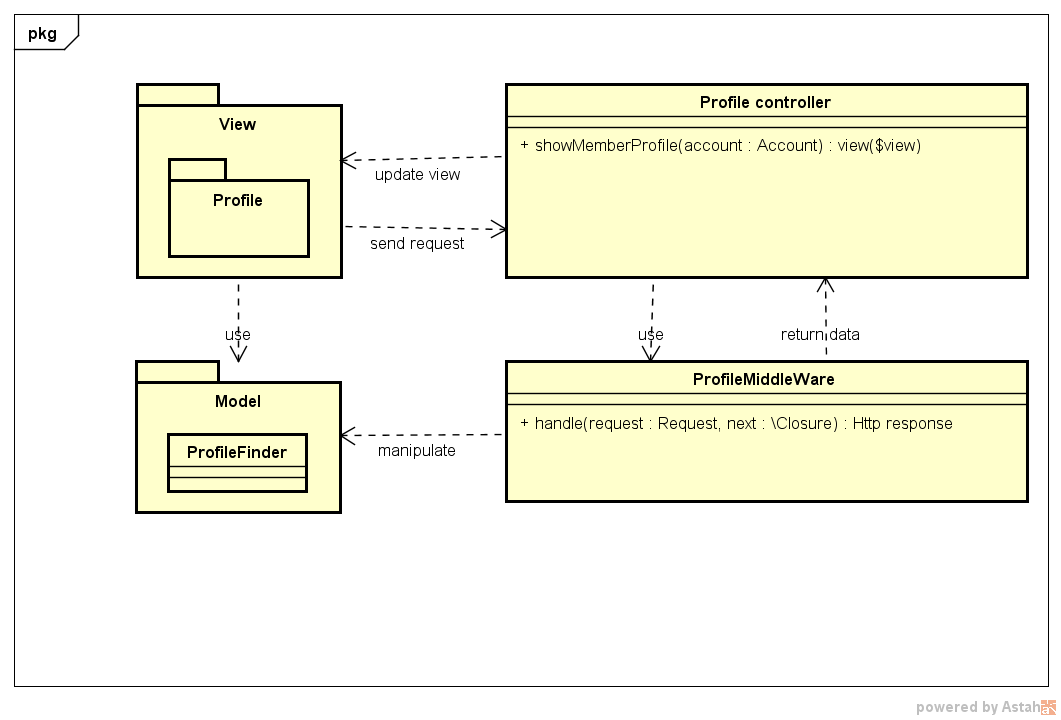
### Sequence Diagram



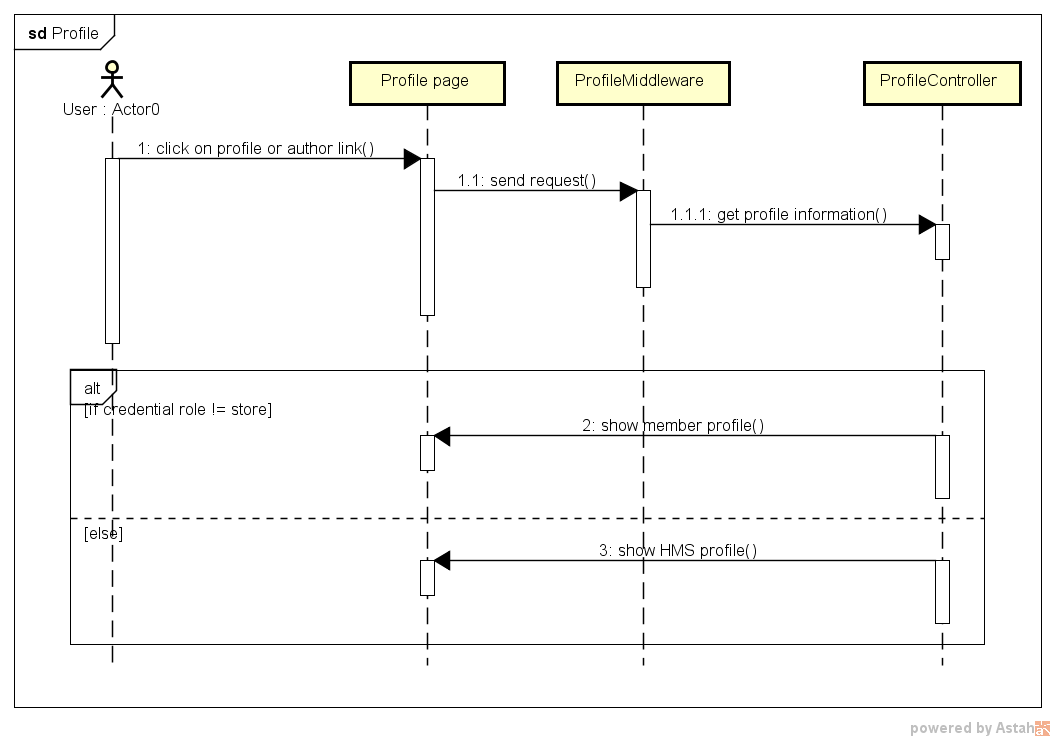
1. Register sequence diagram

## Profile

### Class Diagram



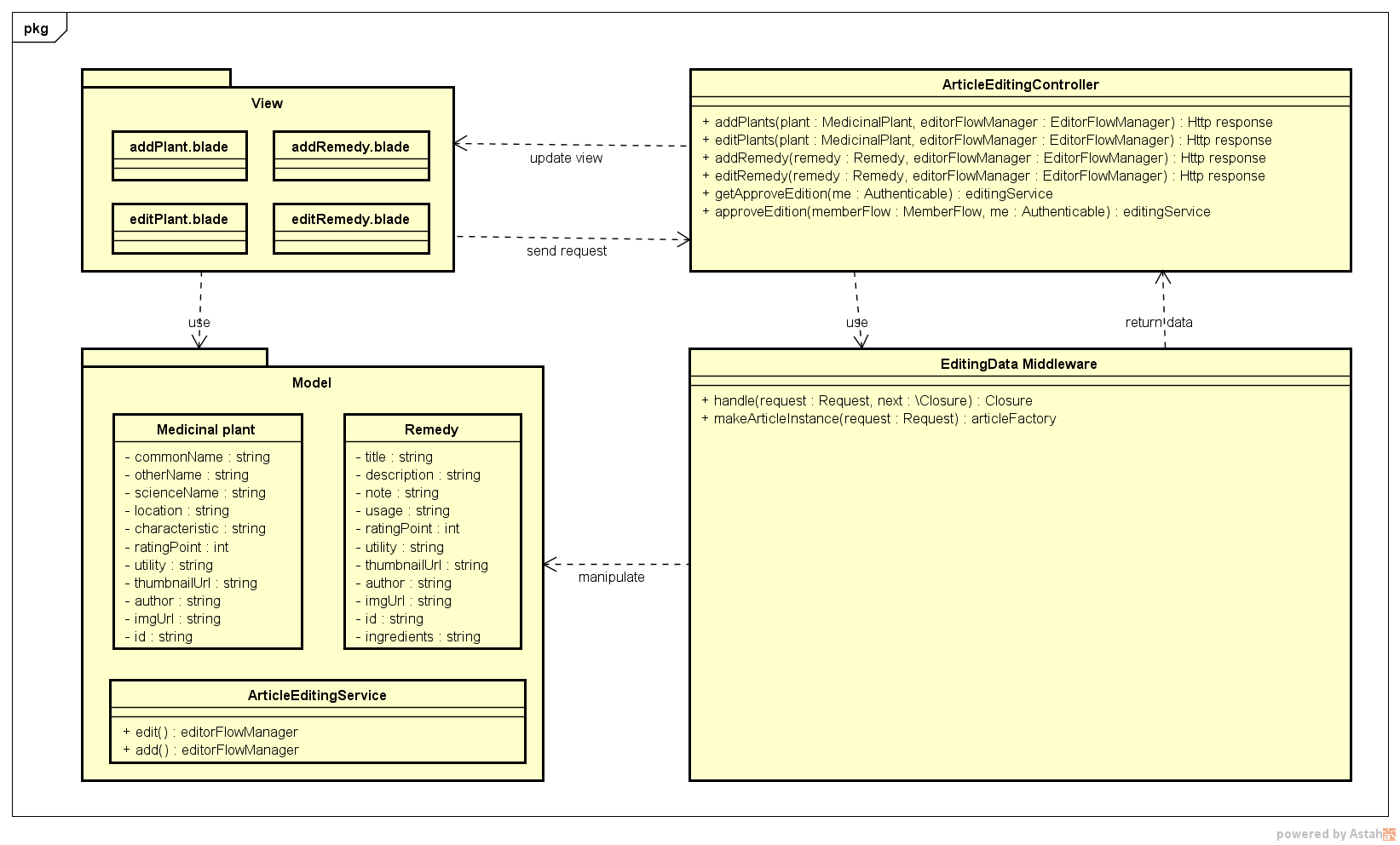
### Sequence Diagram



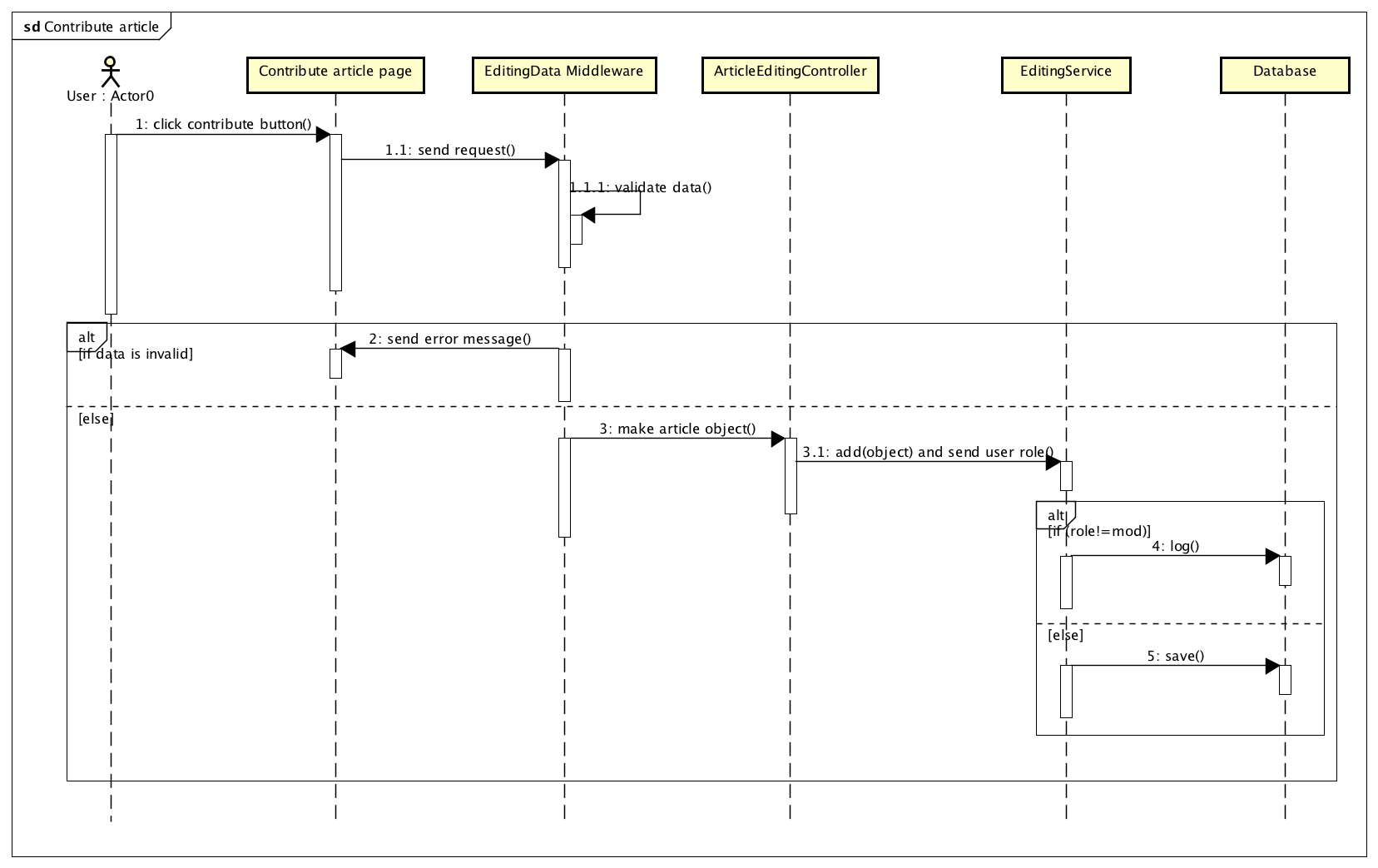
1. Profile sequence diagram

## Contribute article

### Class Diagram



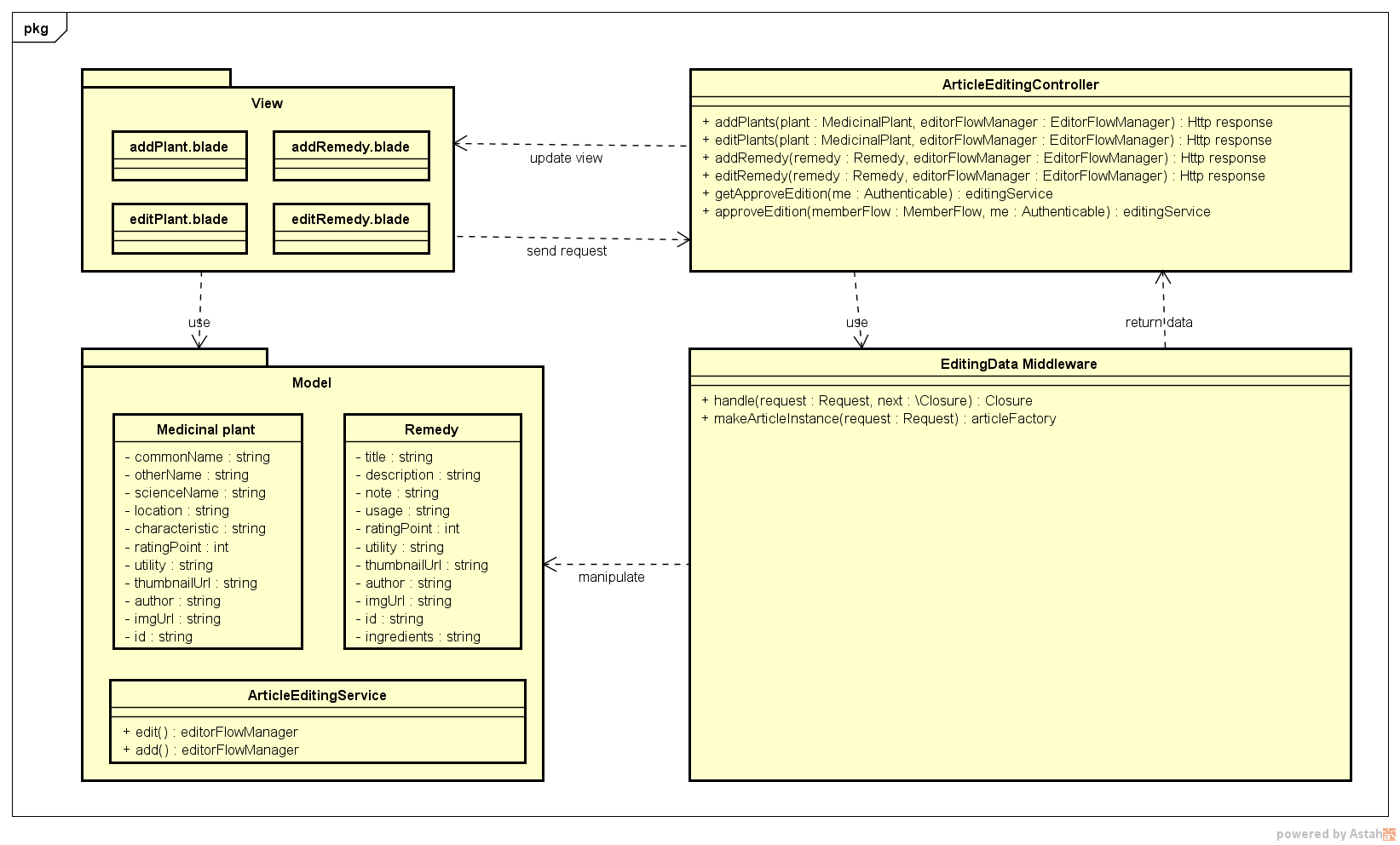
### Sequence Diagram



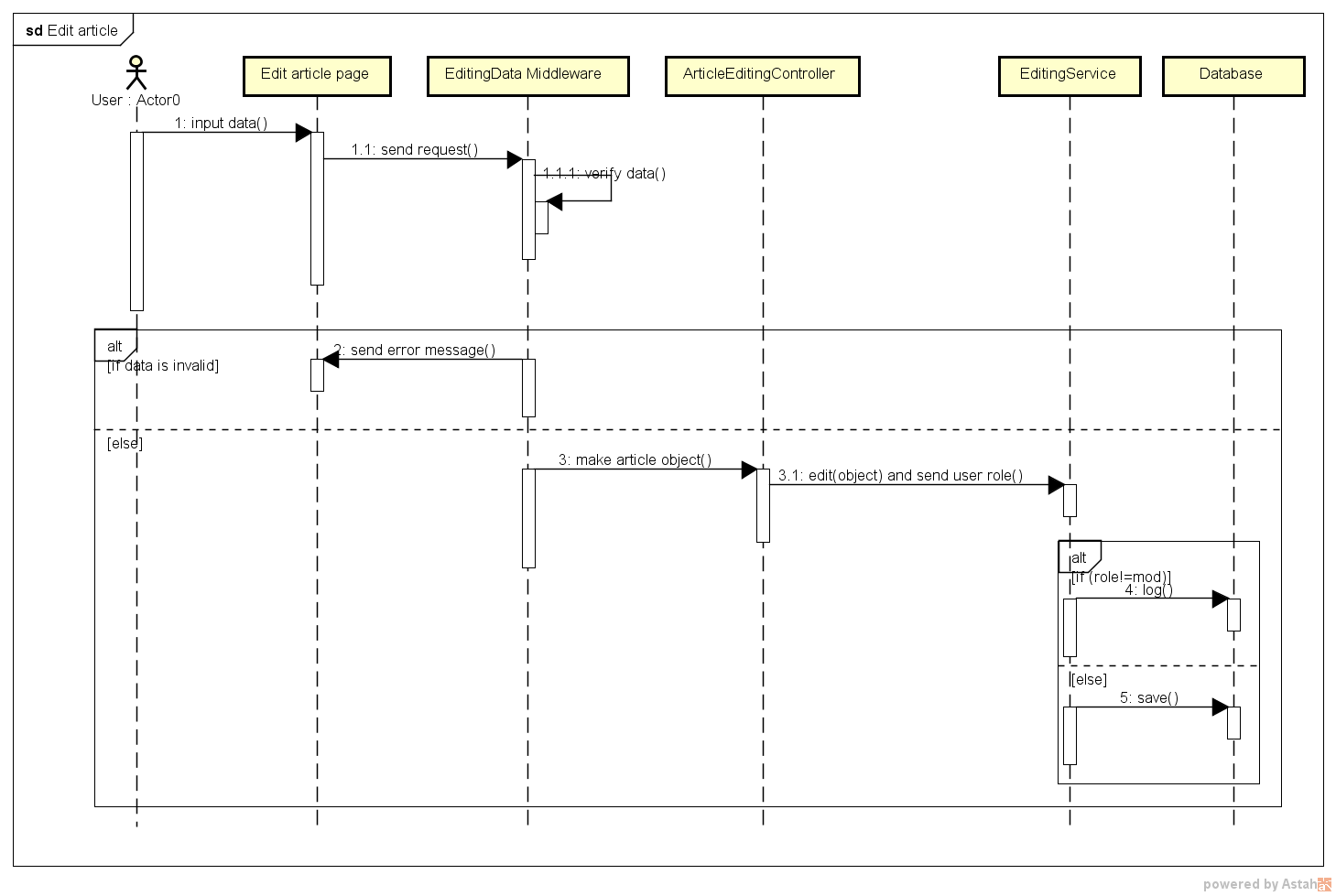
1. Contribute article sequence diagram

## Edit article

### Class Diagram



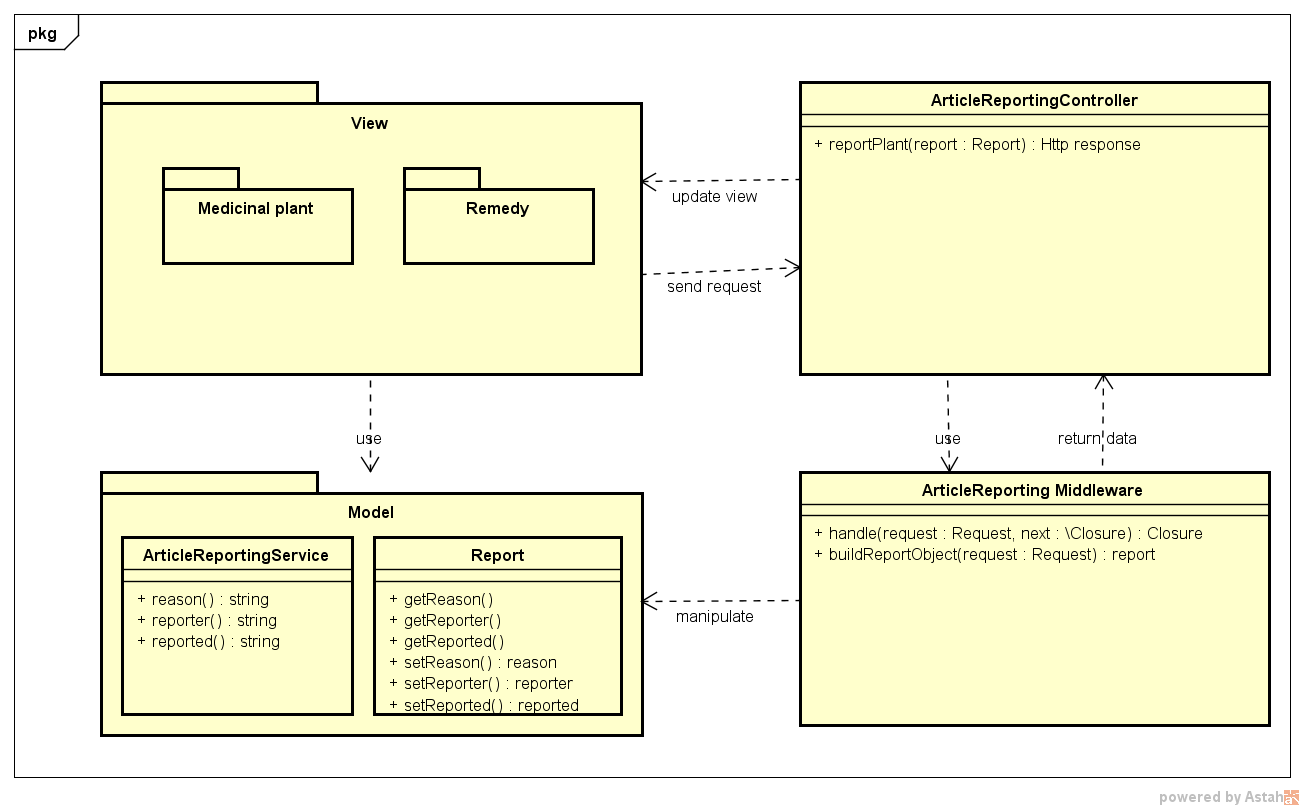
### Sequence Diagram



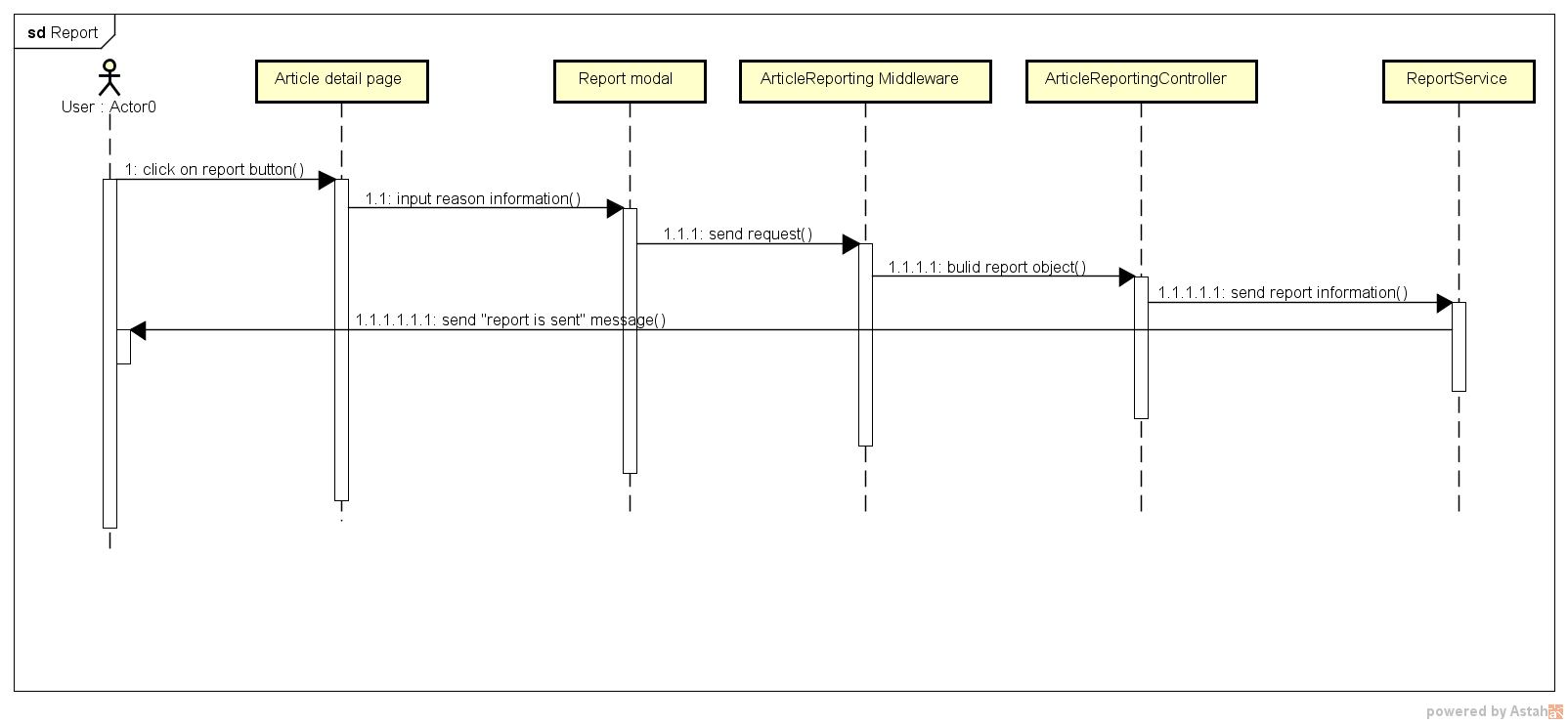
1. Edit article sequence diagram

## Report

### Class Diagram



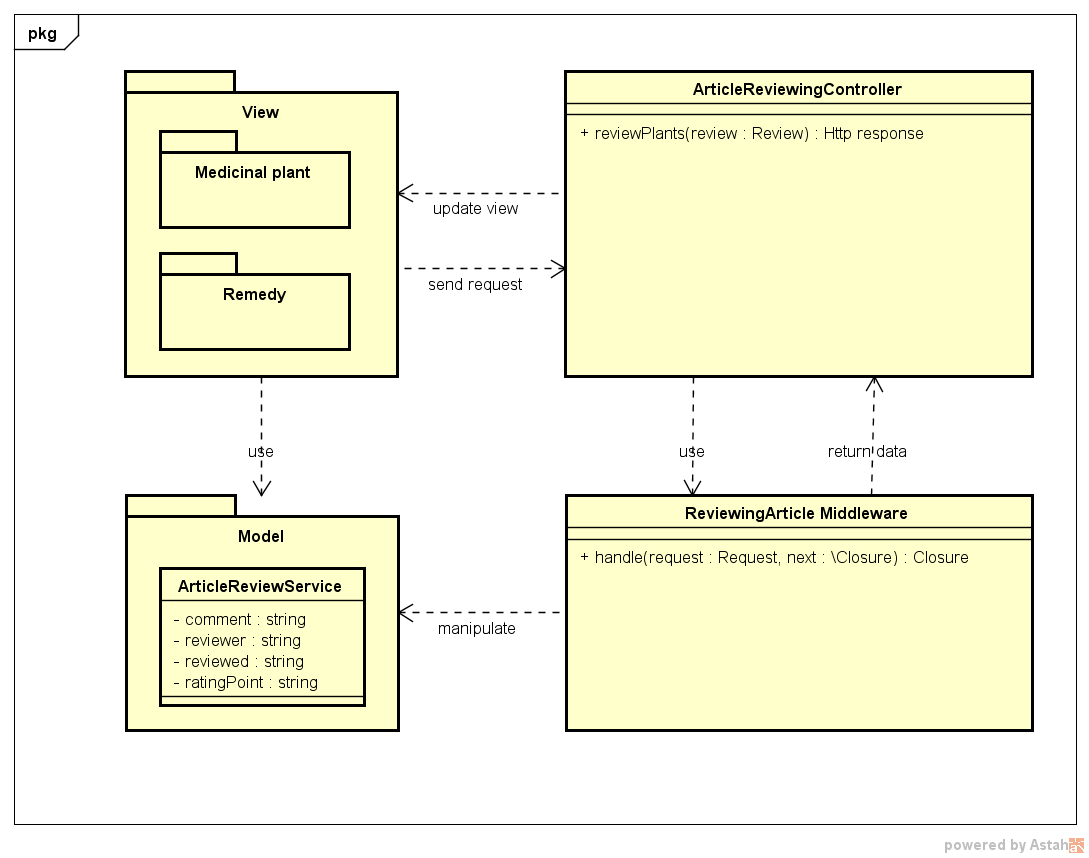
### Sequence Diagram



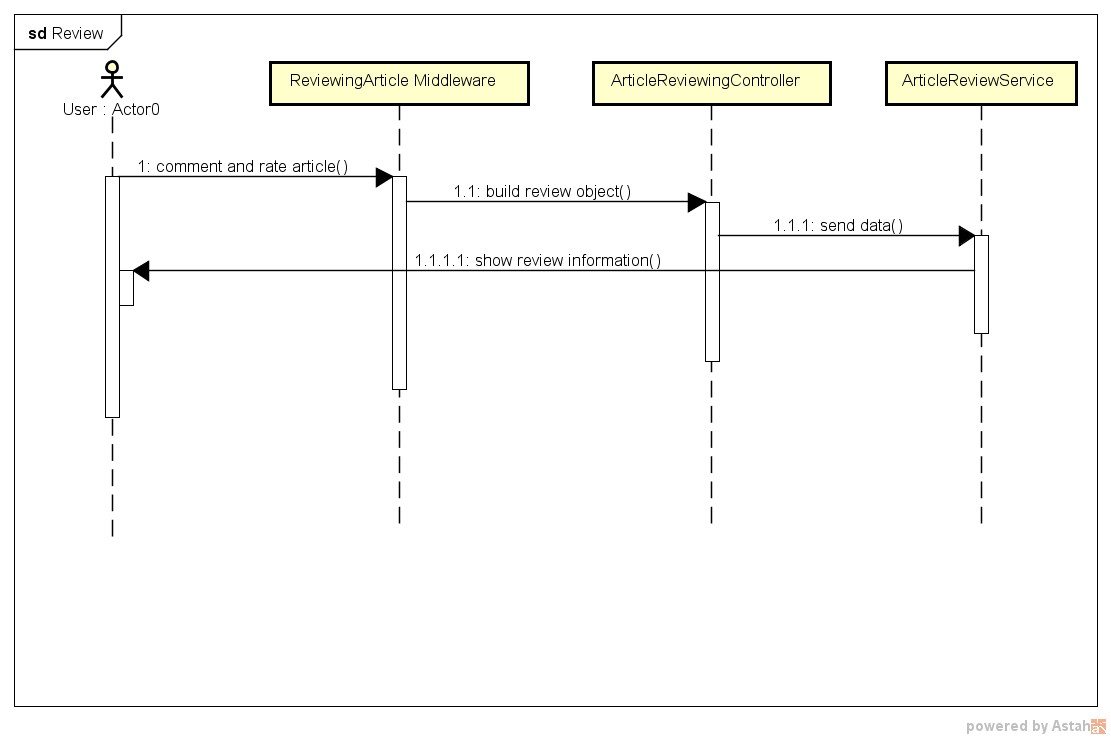
1. Report sequence diagram

## Review

### Class Diagram



### Sequence Diagram



1. Review sequence diagram