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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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# 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.

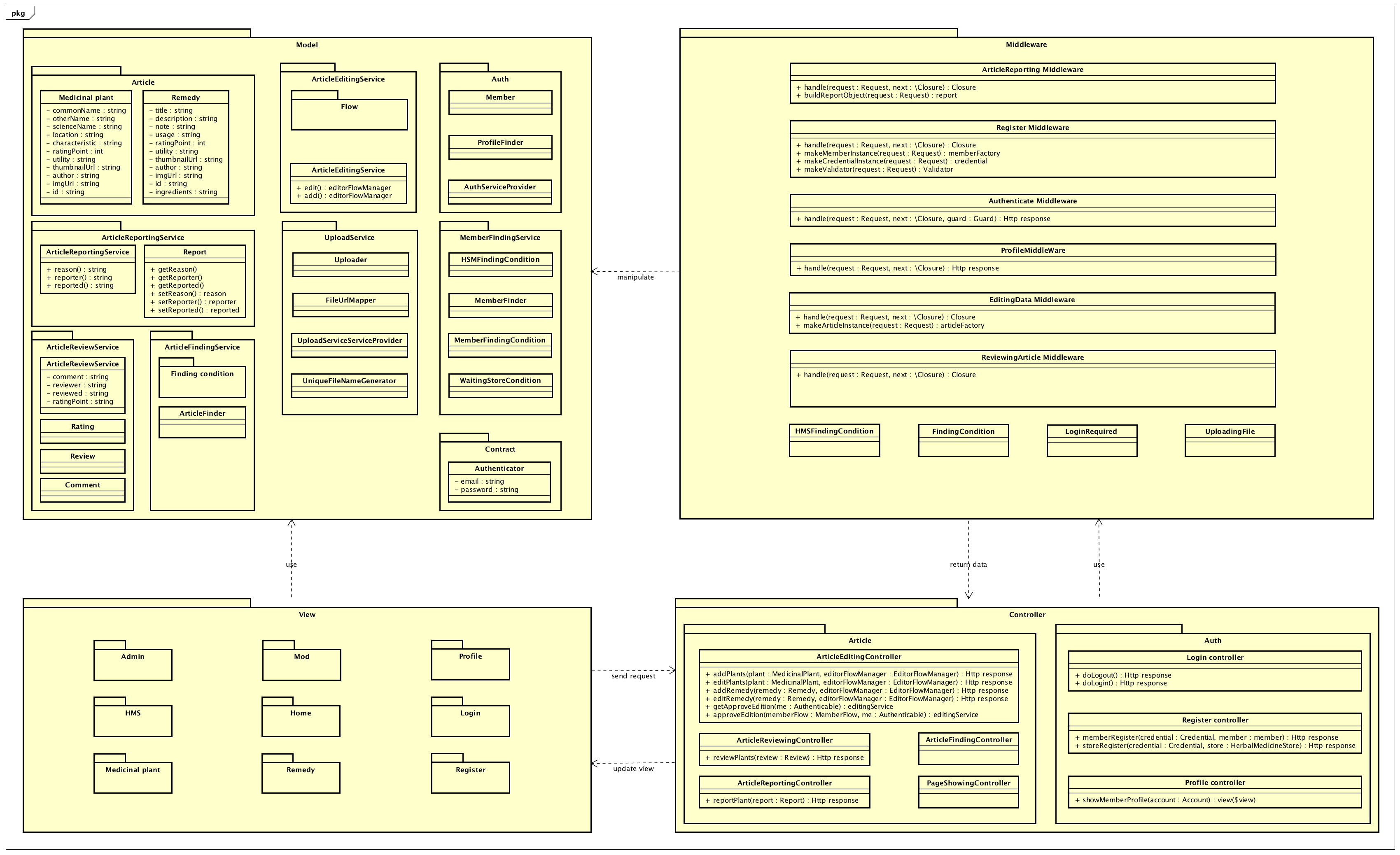
## Definitions, Acronyms and Abbreviations

|  |  |  |
| --- | --- | --- |
| 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 2-21: 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 2-22: Login Controller

#### RegisterController

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

Table 2-23: Register Controller

#### ProfileController

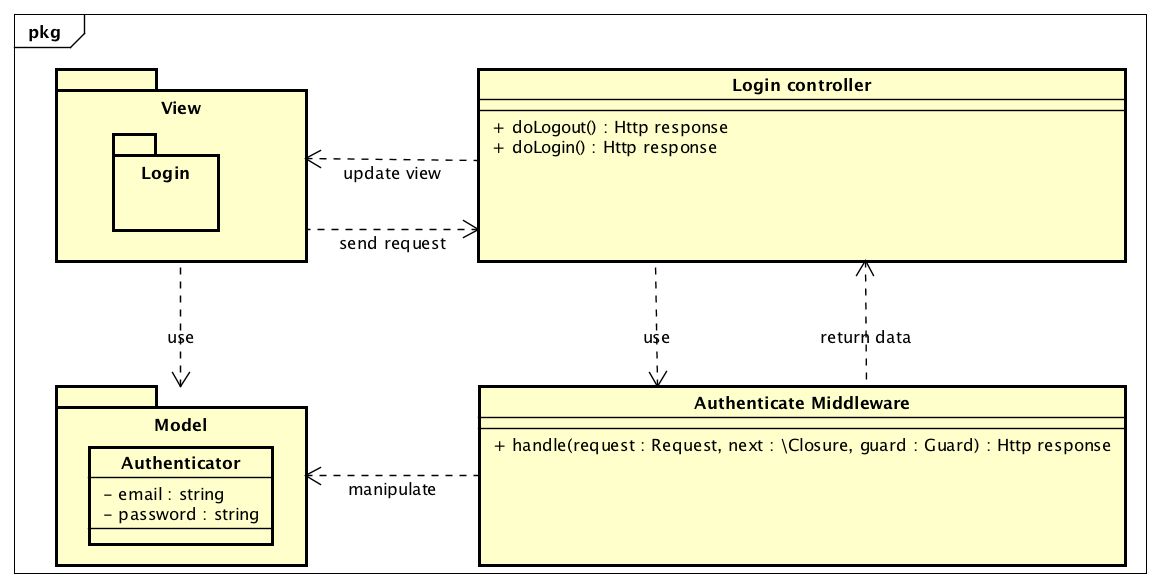
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Method | Parameter | Return | Description |
|  | showMemberProfile |  | view | Show member profile |

Table 2-23: Profile Controller

# Function

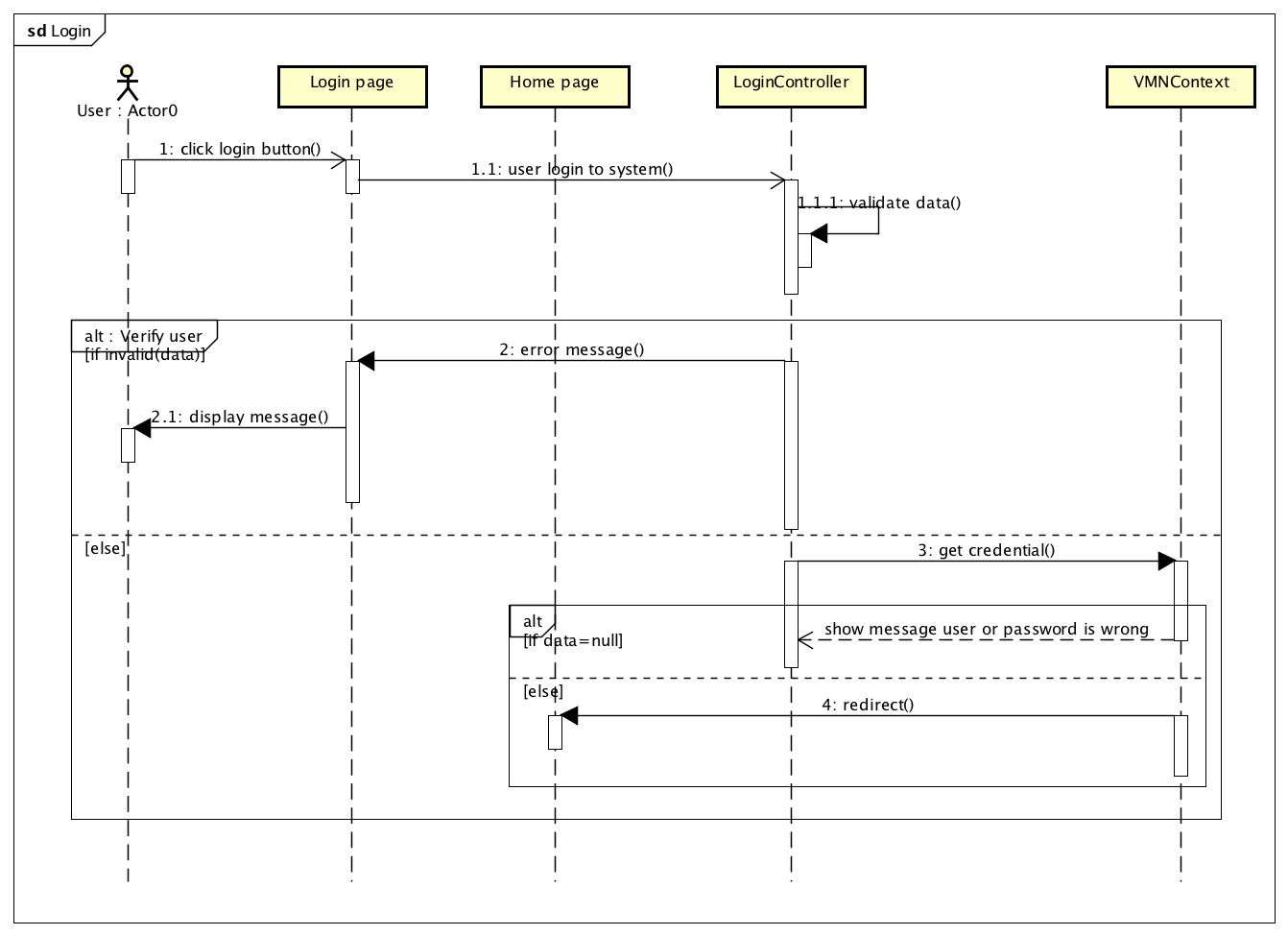
## Auth

### Class diagram



### Login

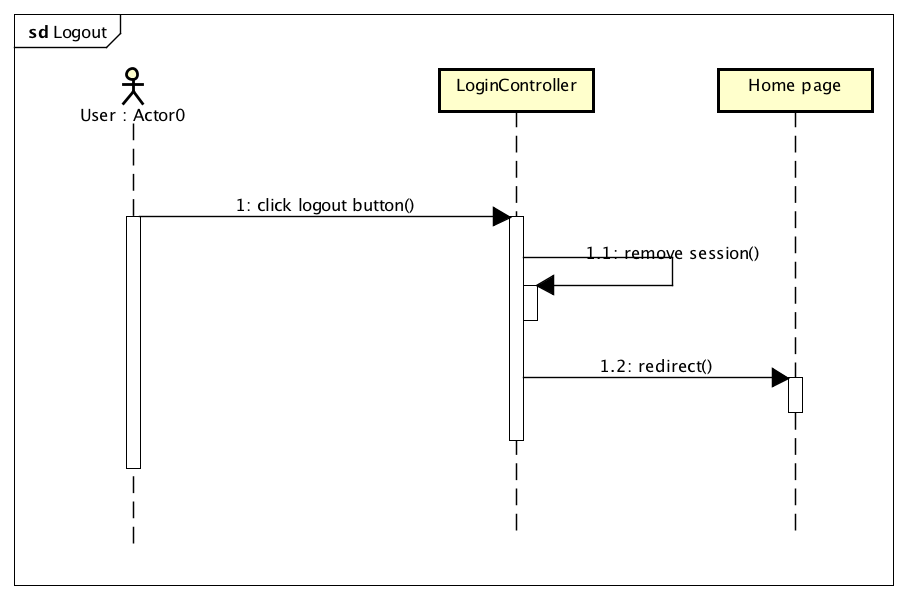
#### Sequence diagram



1. Login sequence diagram

### Logout

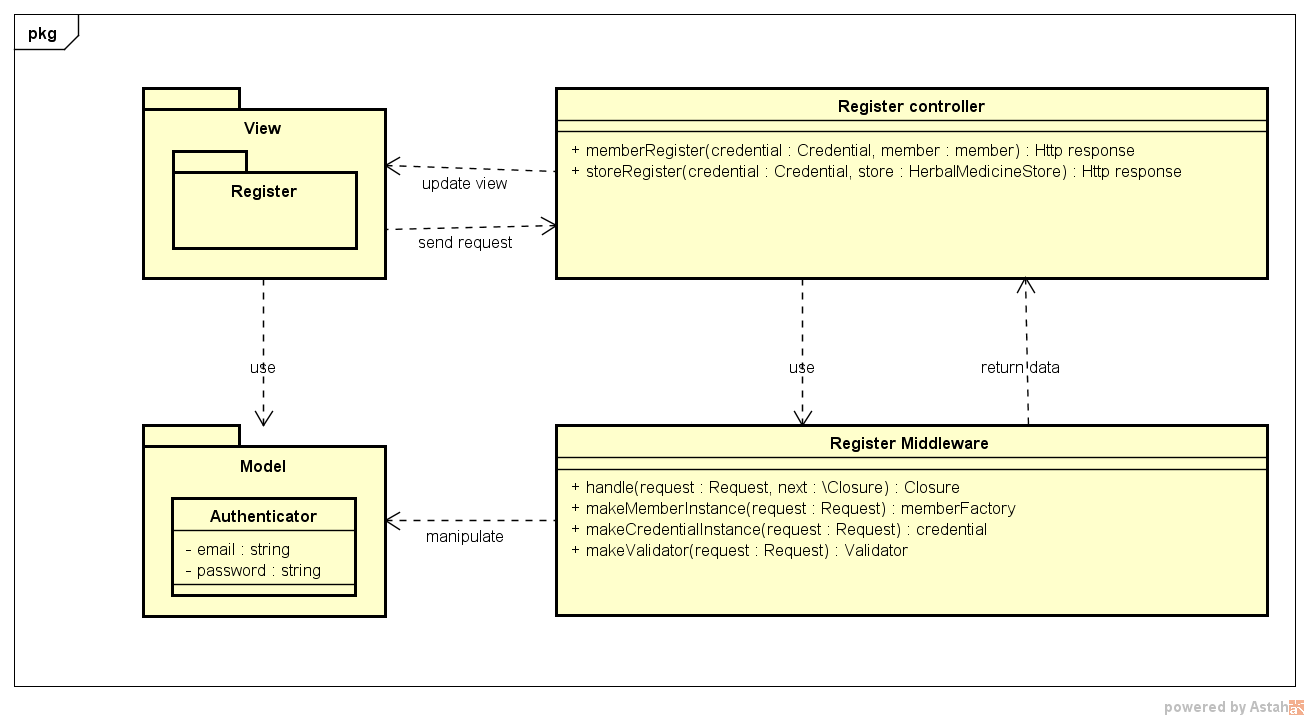
#### Sequence Diagram



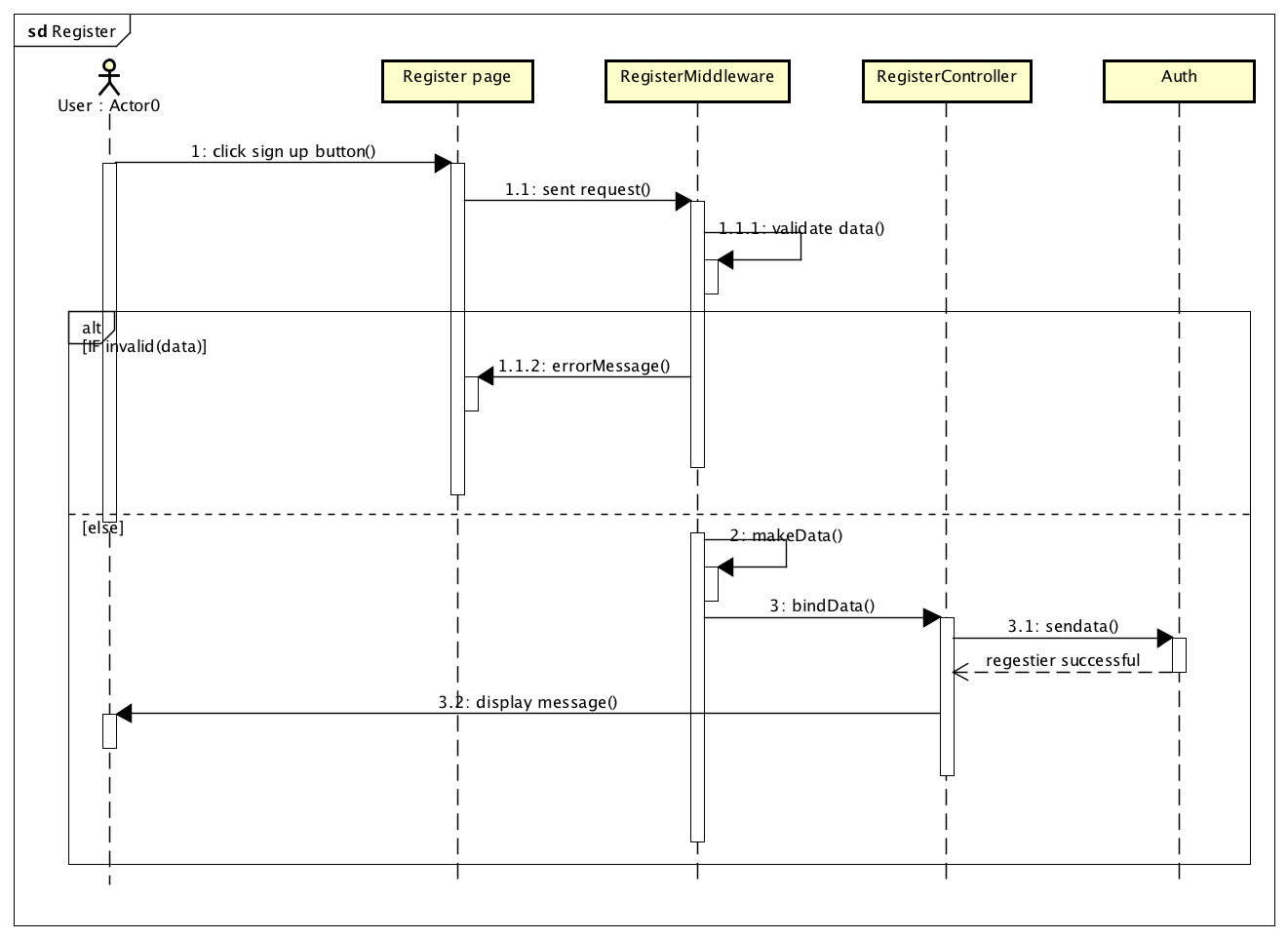
1. Logout sequence diagram

## Register

### Class Diagram



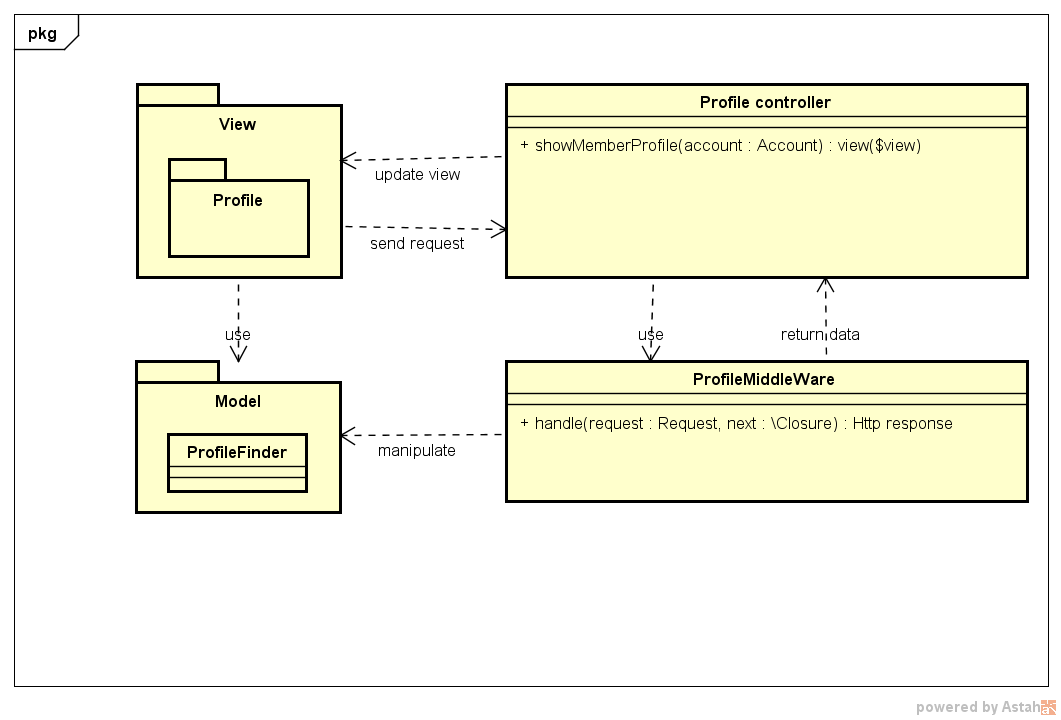
### Sequence Diagram



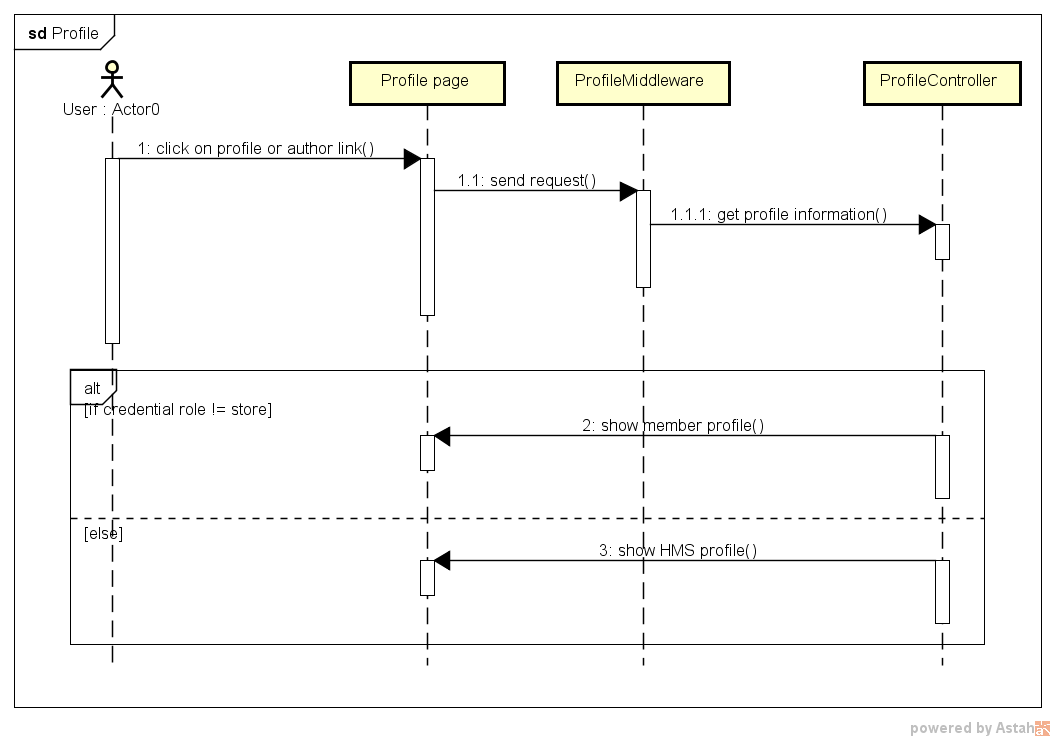
1. Register sequence diagram

## Profile

### Class Diagram



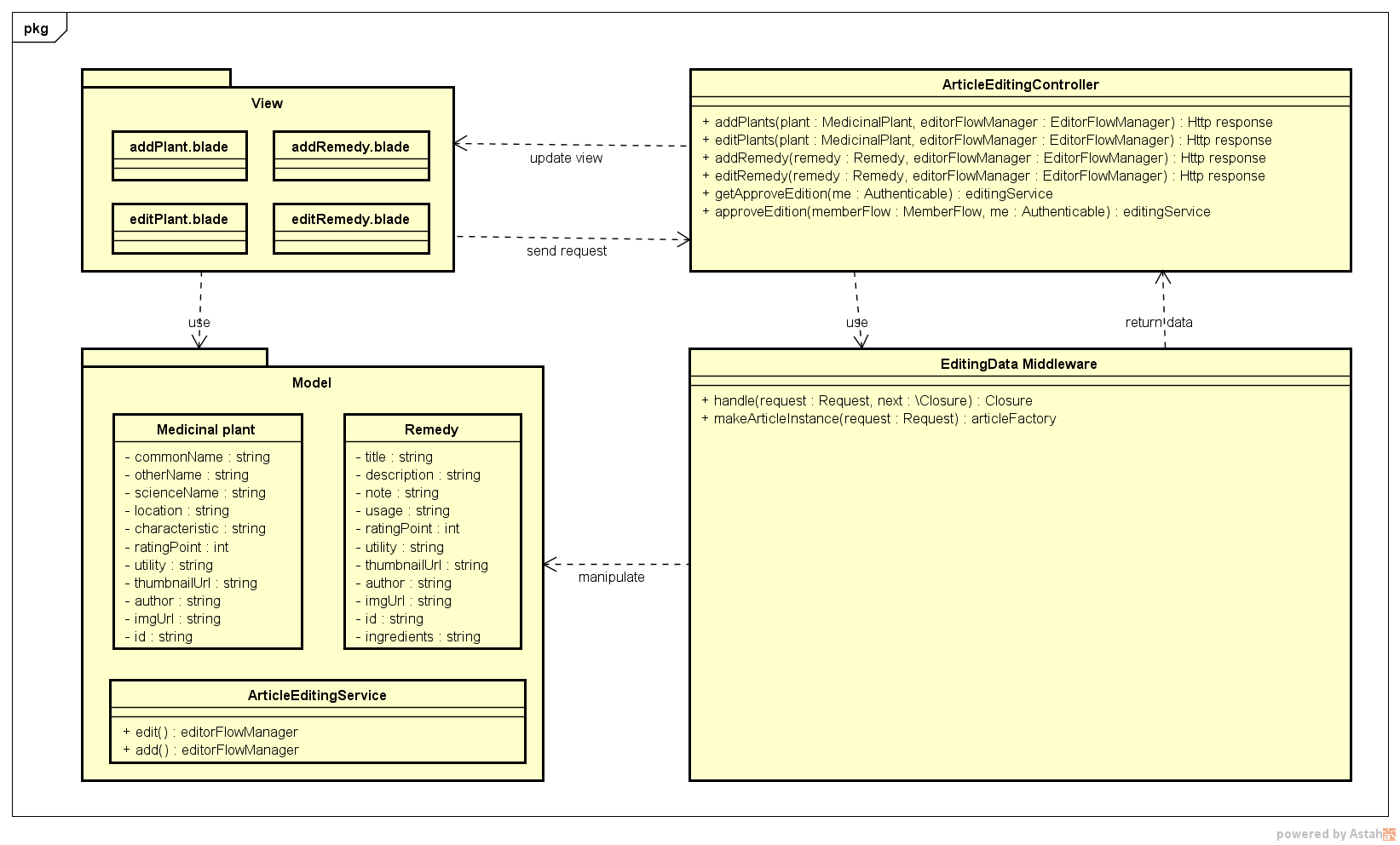
### Sequence Diagram



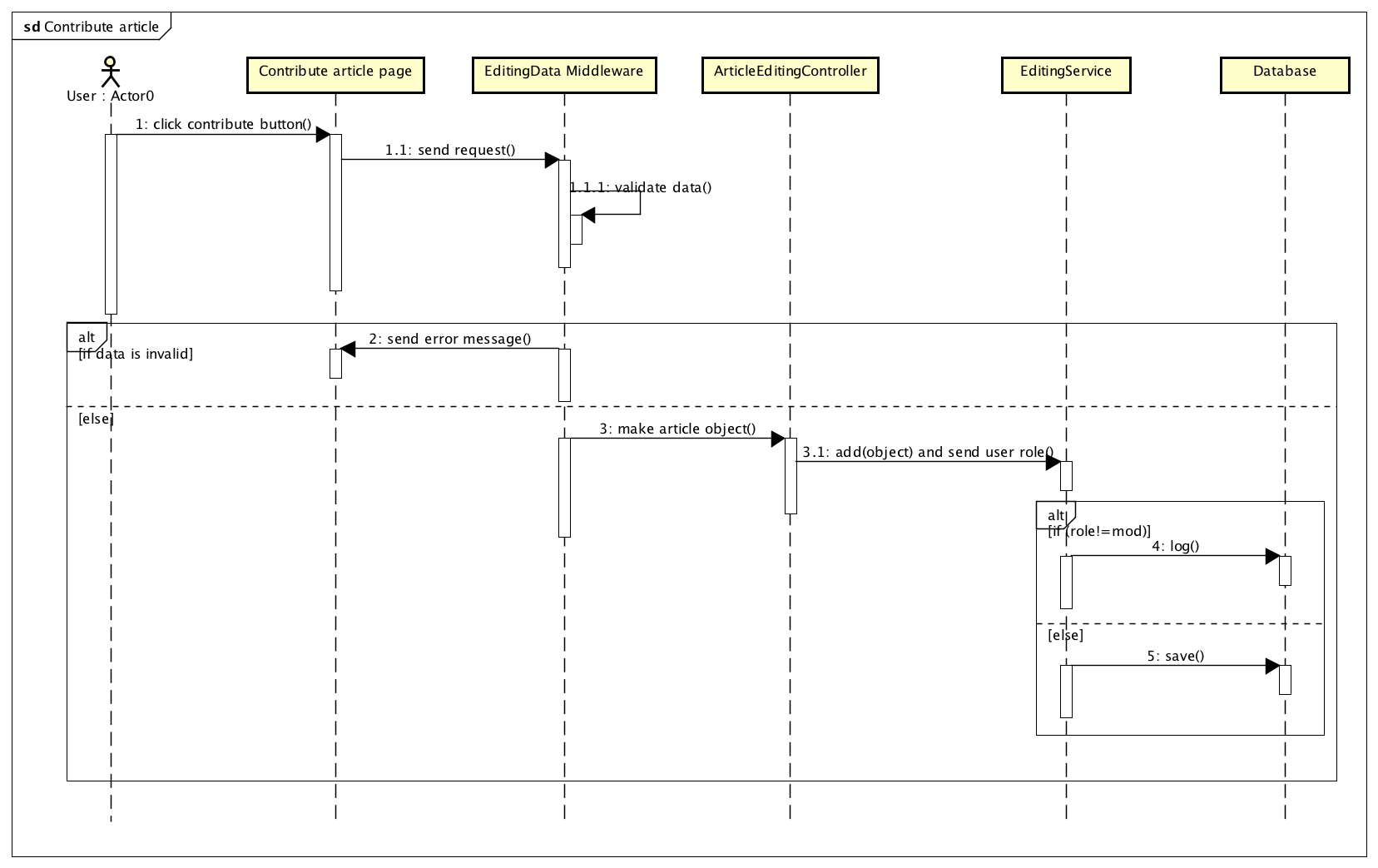
1. Profile sequence diagram

## Contribute article

### Class Diagram



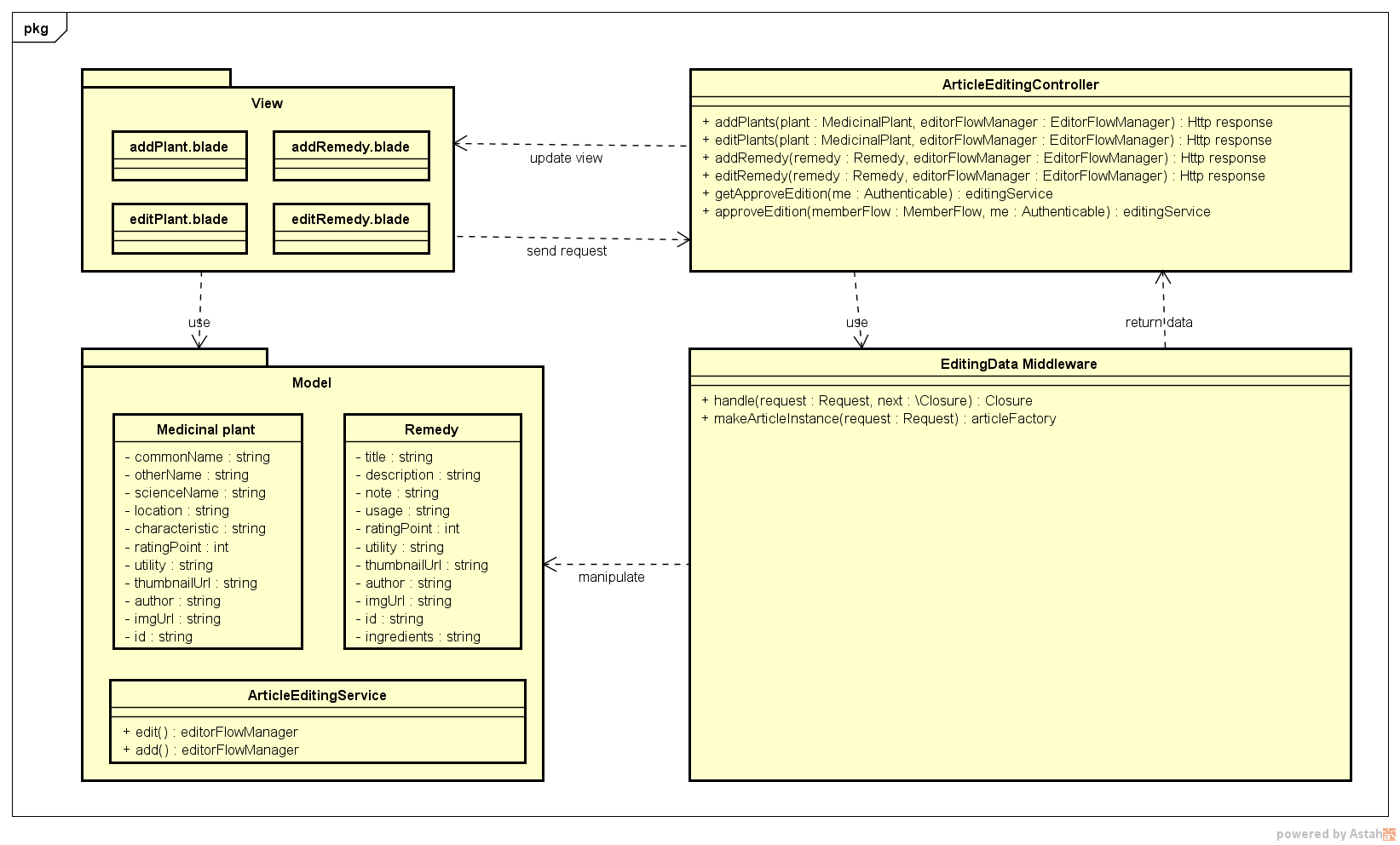
### Sequence Diagram



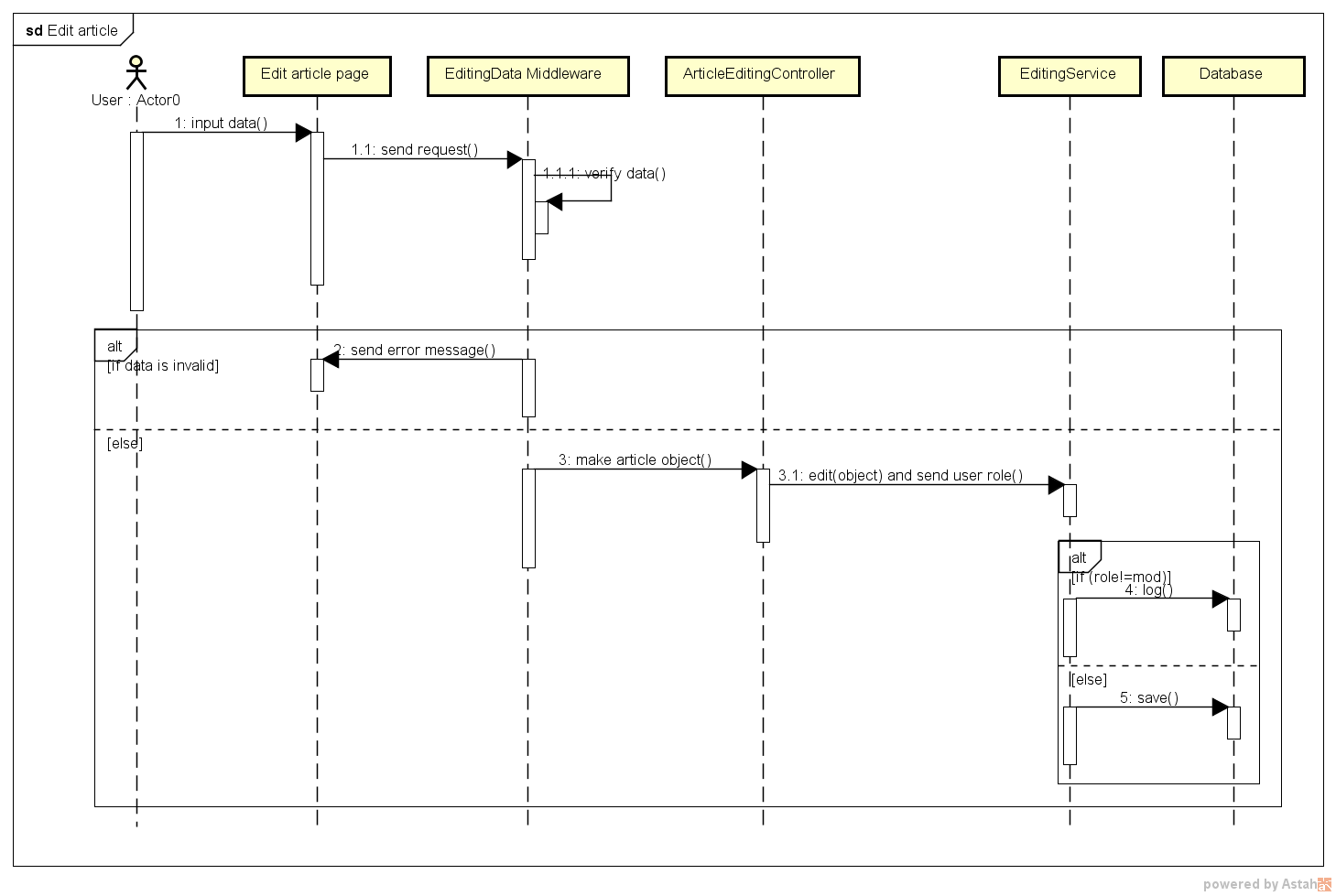
1. Contribute article sequence diagram

## Edit article

### Class Diagram



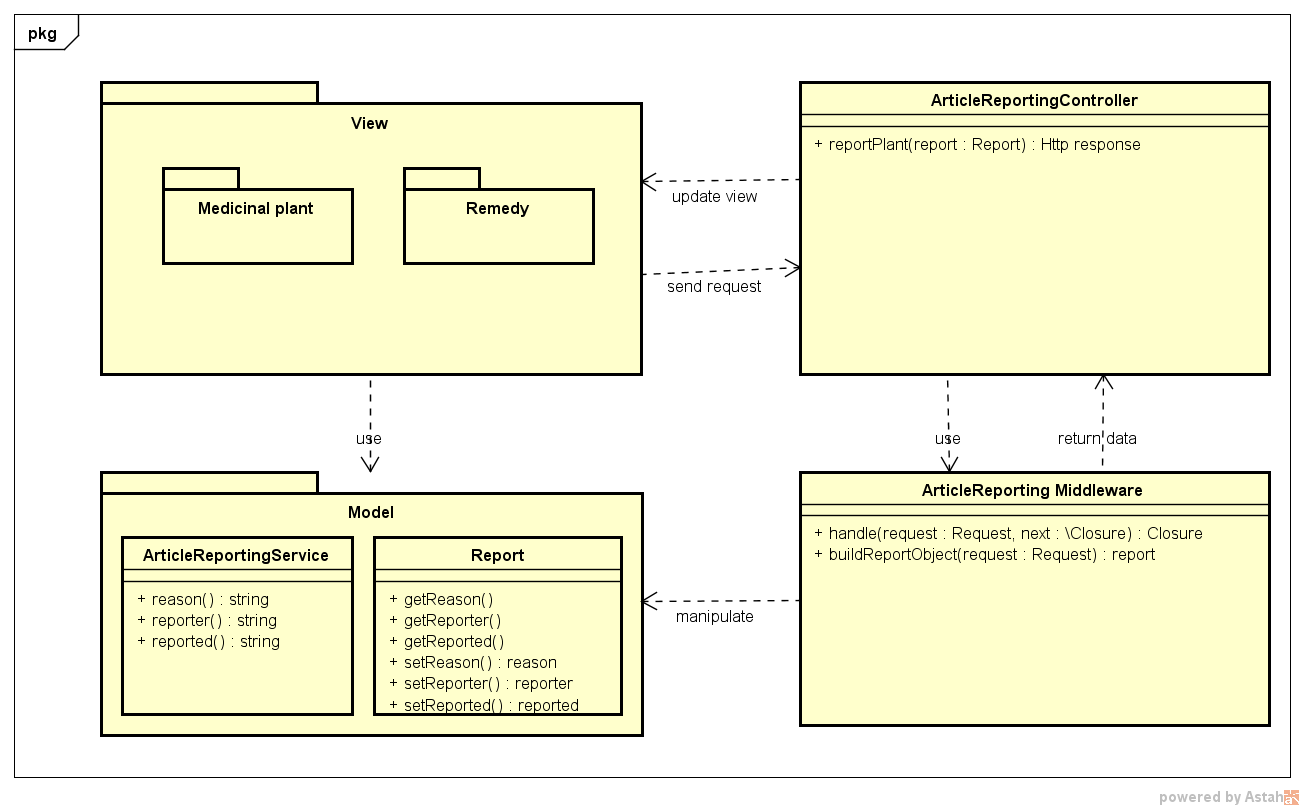
### Sequence Diagram



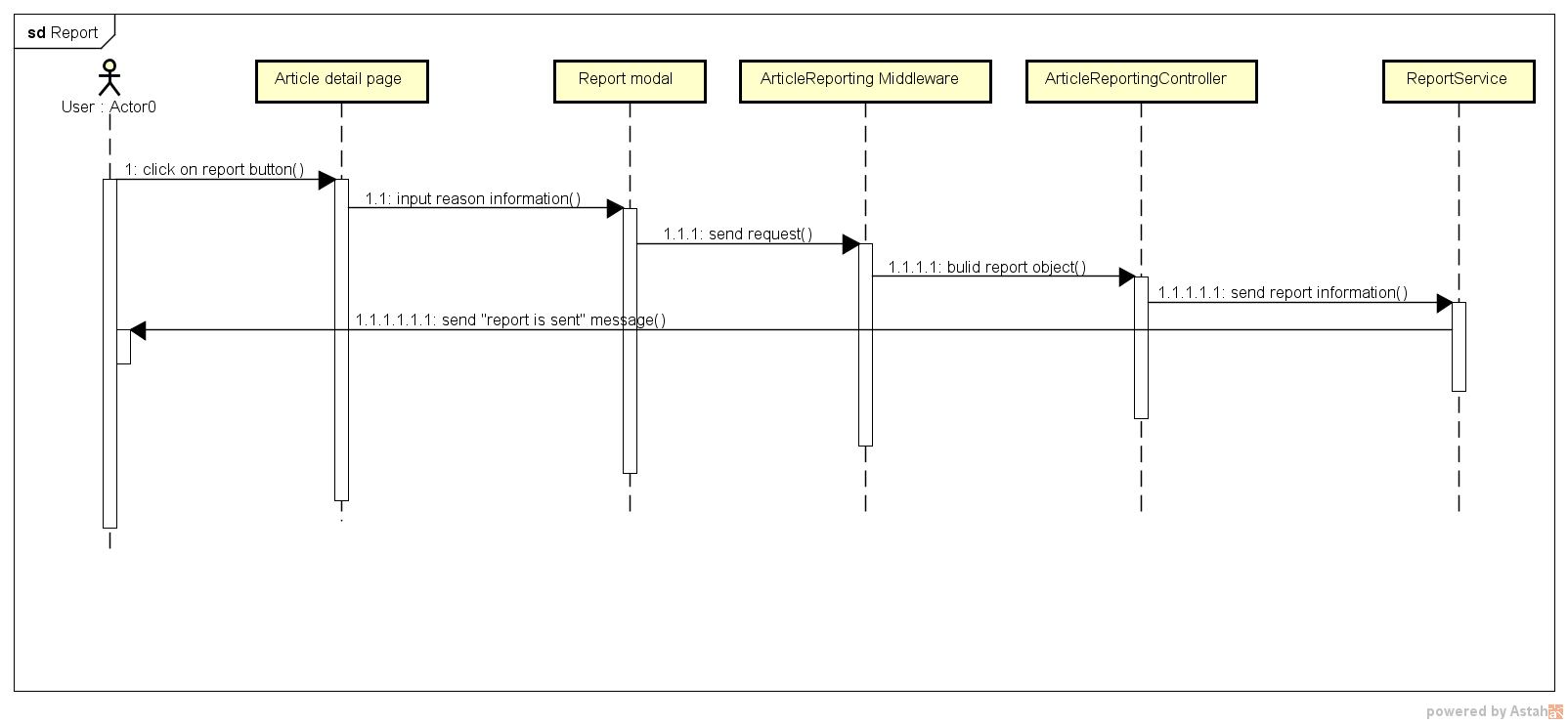
1. Edit article sequence diagram

## Report

### Class Diagram



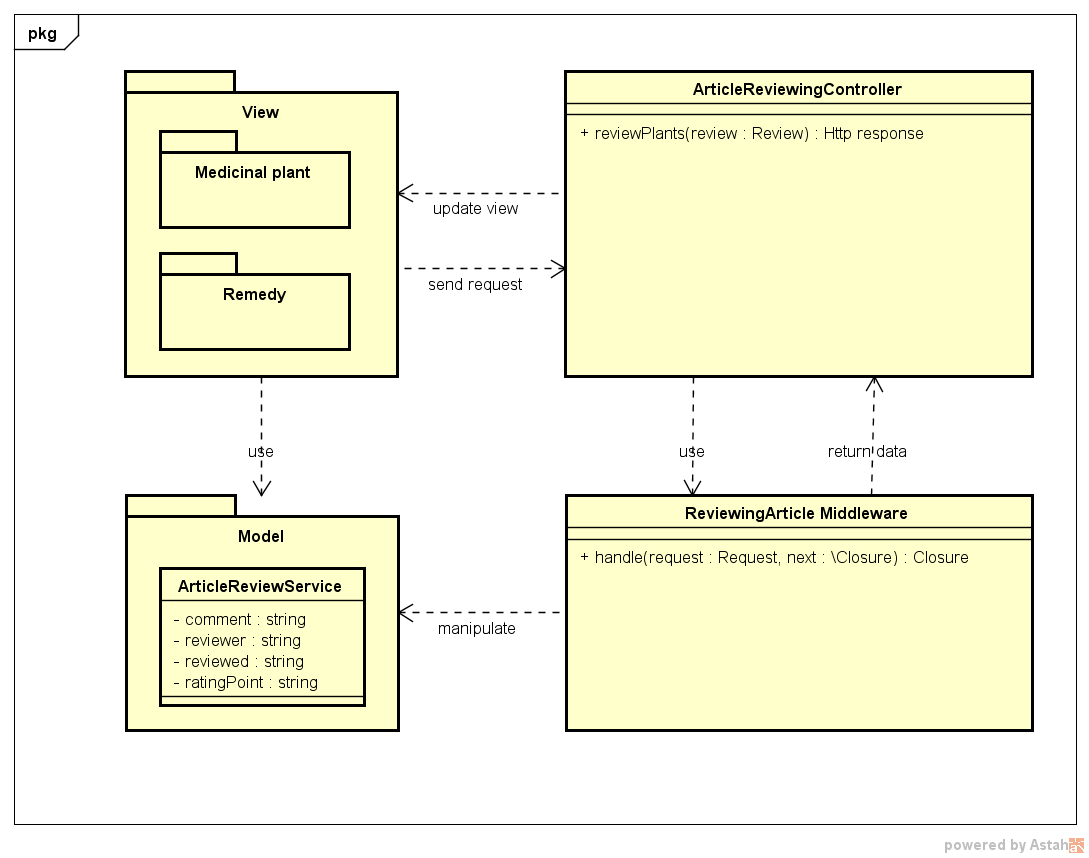
### Sequence Diagram



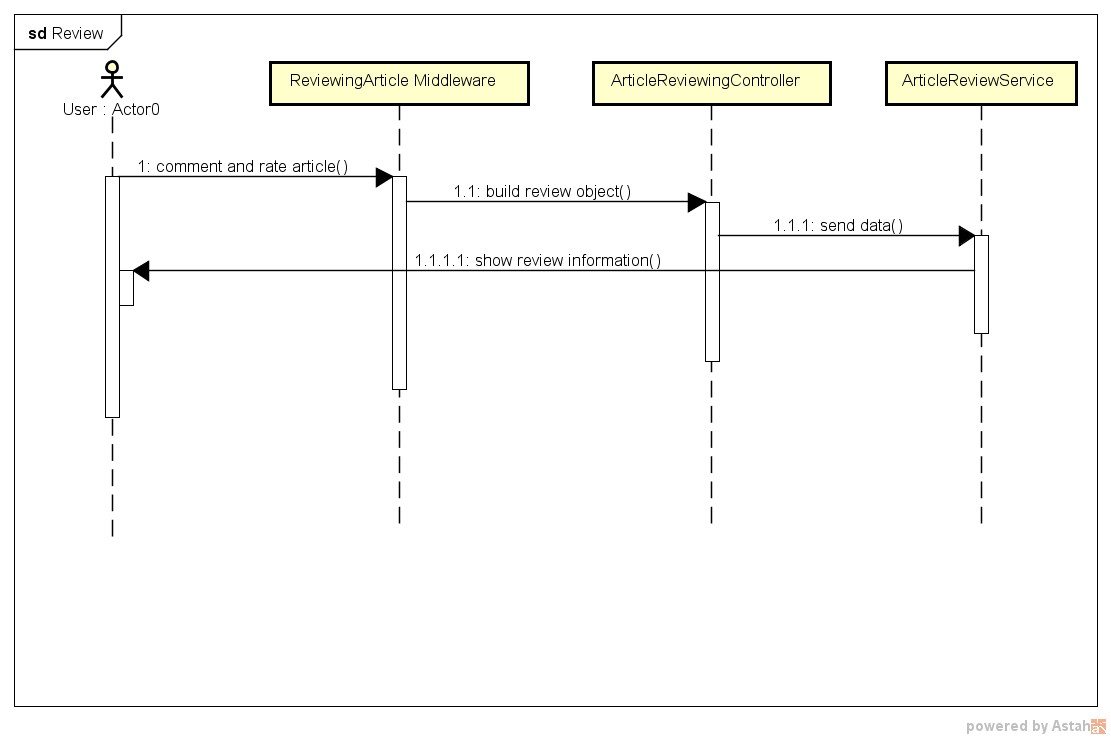
1. Report sequence diagram

## Review

### Class Diagram



### Sequence Diagram



1. Review sequence diagram