



##### COVID CARE

**Software Design Document**

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# I. Overview

## 1. CovidCare\_Final



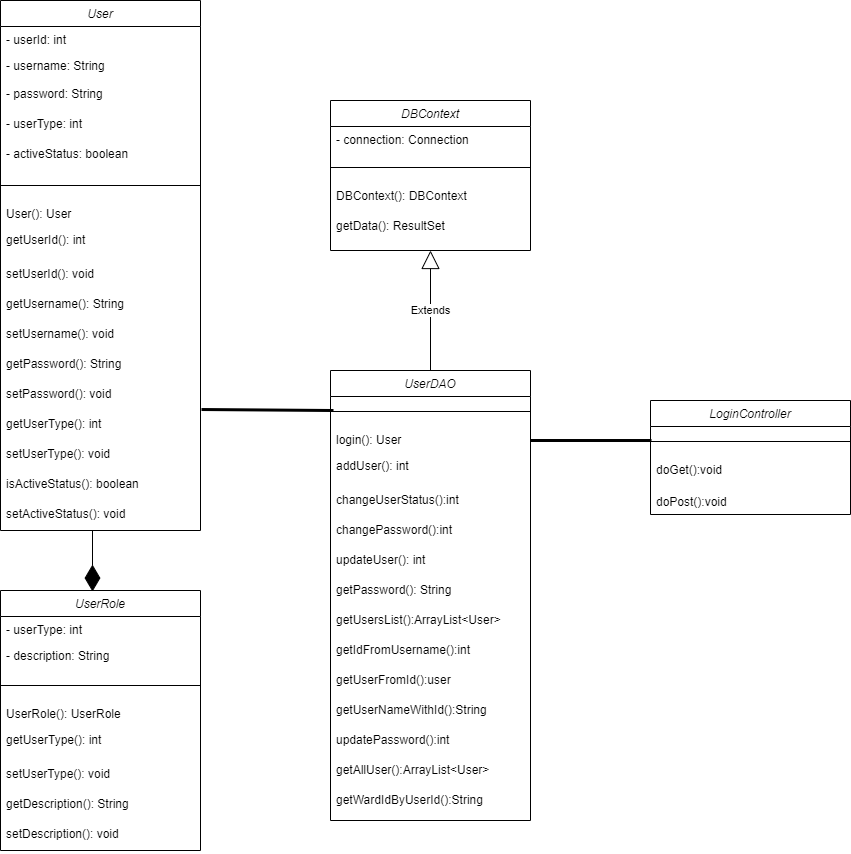
***Package descriptions & package class naming conventions***

|  |  |  |
| --- | --- | --- |
| **No** | **Package** | **Description** |
| 01 | Controller | Acting as an intermediary between the Model and the View, it is responsible for receiving requests from the client, then processing the request, loading the model and sending data through the corresponding view and then returning the results to the client. |
| 02 | Dal | A pattern in which objects are reserved for communication with the Data Layer. |
| 03 | Model | Are classes that contain object information (data), interact with database access. |
| 04 | utils | The package contains the definition of some useful classes that provide a lot of functionality. The package mainly contains collection classes useful for working with groups of objects. This package also contains definitions of classes that provide date and time utilities and many more |
| 05 | view | Is the place to receive data from the model, database and arrange them correctly thanks to the request from the controller and transmit it to the client. |

# II. Code Designs

## 1. Login

**a. Class Diagram:**

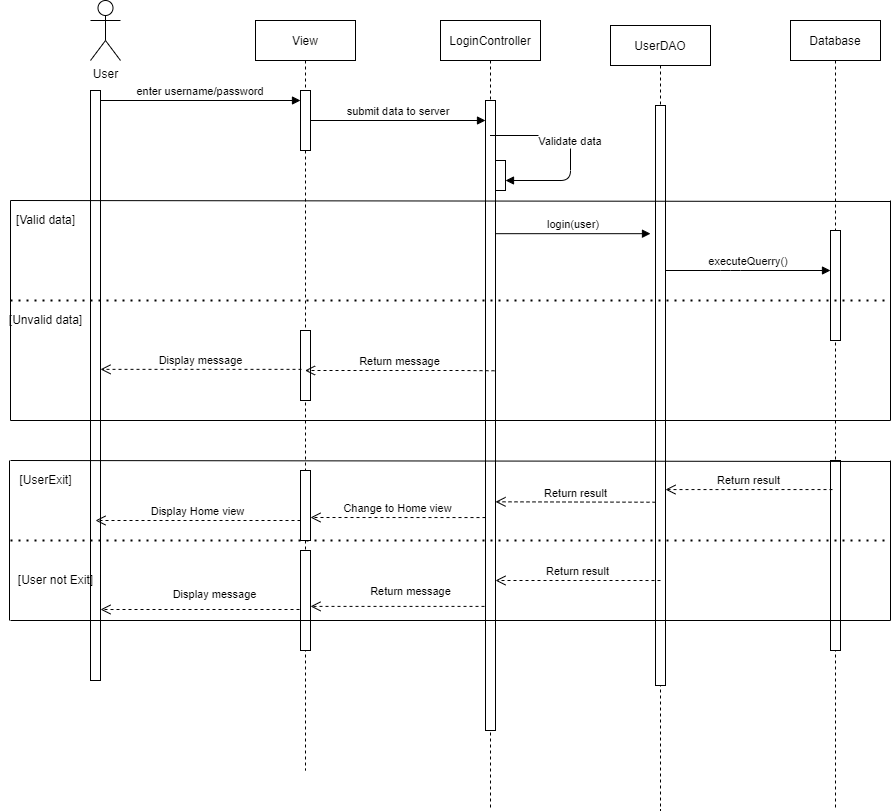


*Login\_Class Diagram*

1. **Class Specification**

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 01 | User() | Contructor of object User. |
| 02 | getUserId() | Return value of attribute userId |
| 03 | setUserId() | Set value to attribute userId |
| 04 | getUsername() | Return value of attribute userId |
| 05 | setUsername() | Set value to attribute userId |
| 06 | getPassword() | Return attribute password |
| 07 | setPassword() | Set value to attribute password |
| 08 | getUserType() | Return value of attribute userType |
| 09 | setUserType () | Set value to attribute userType |
| 10 | isActiveStatus() | Return value of attribute activeStatus |
| 11 | setActiveStatus() | Set value to attribute activeStatus |
| 12 | Login(User user) | Get data from database then create and return User object |
| 13 | addUser(User user) | Add data object User to database |
| 14 | ChangeUserStatus(userId, activeFlag) | Update data column *activeStatus* of table Users |
| 15 | changePassword(user) | Update data column *password* of table Users |
| 16 | updateUser(user) | Update data all column of table Users |
| 17 | getUsersList() | Get all data from table User, create object User then return list User. |
| 18 | getIdFromUsername(username) | Return Id of username input. |
| 19 | getUserFromId(Id) | Return User have Id same with input Id. |
| 20 | getUserNameWithId(Id) | Return username at object User have id same with input Id |
| 21 | getWardIdByUserId(userId) | Return ward id belong to user. |

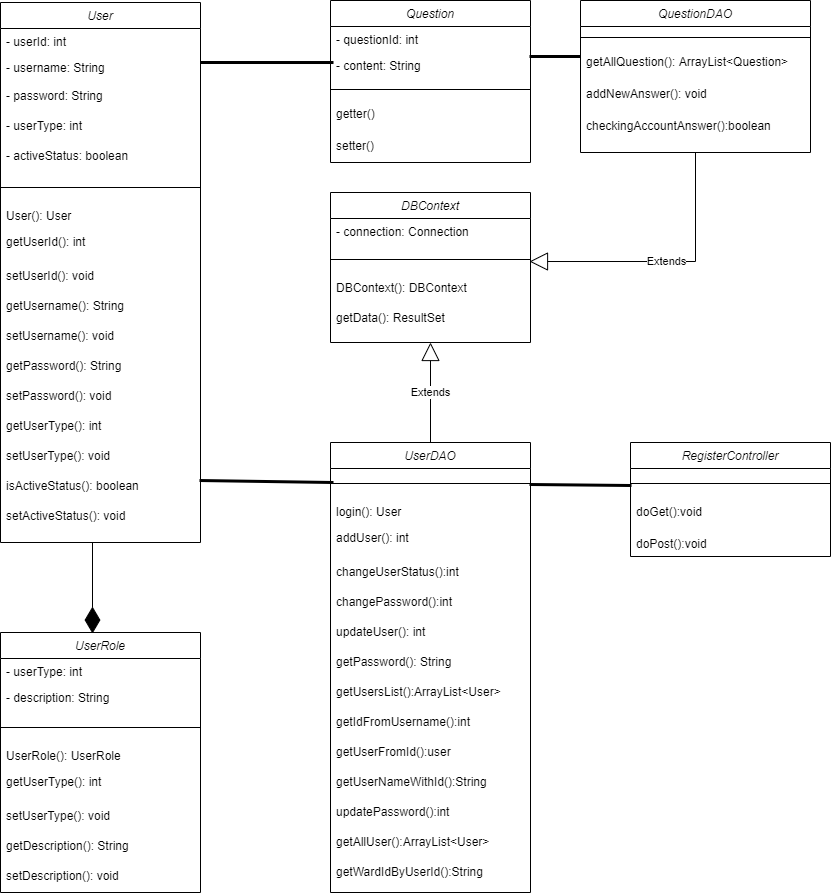
1. **Sequense Diagram**



*Login\_Sequense Diagram*

## 2. Register

**a. Class Diagram:**

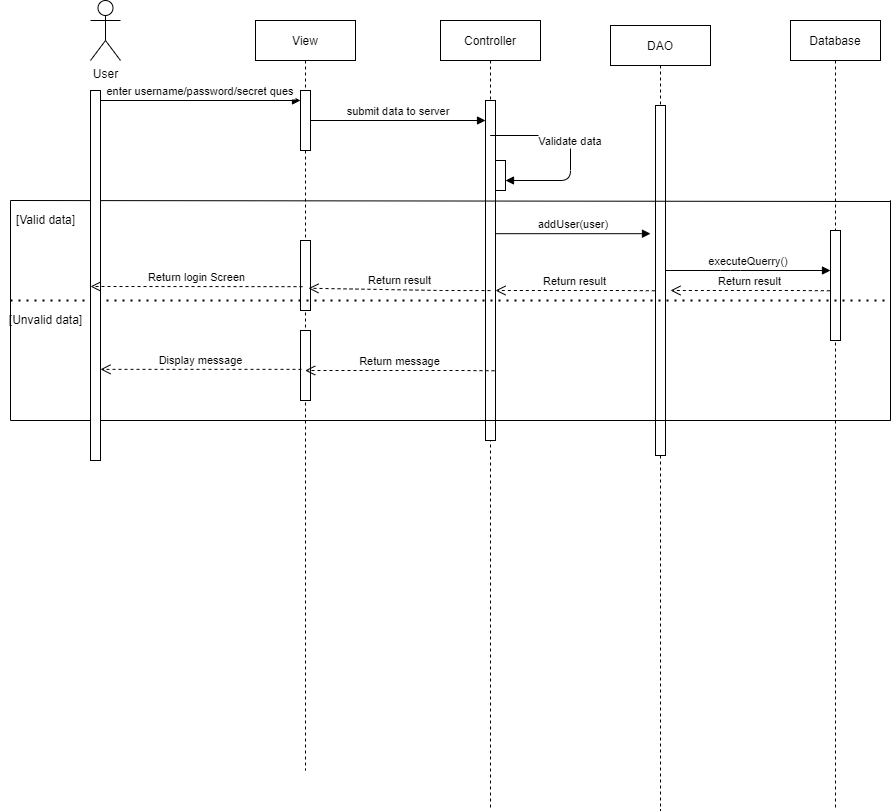


*Register\_Class Diagram*

1. **Class Specification**

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 01 | addUser(user) | Add new User information to Database |
| 02 | getAllQuestion() | Get all question |

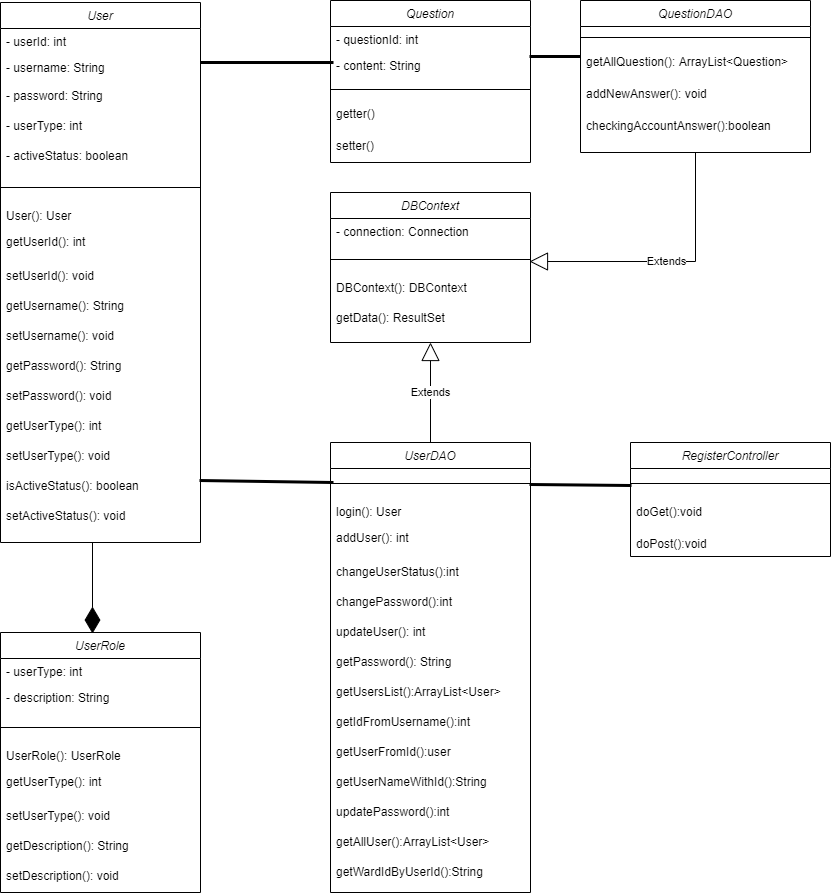
1. **Sequense Diagram**



*Register\_Sequense Diagram*

## 3. Manage Account

**a. Class Diagram:**

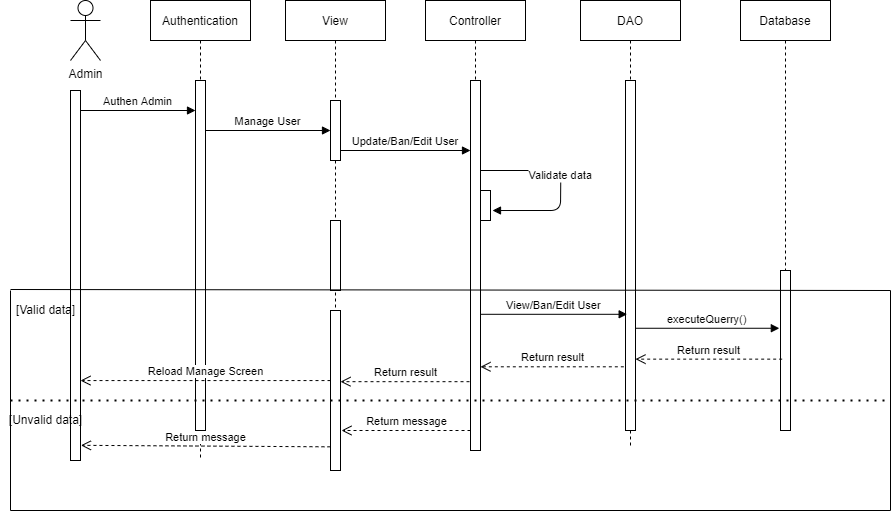


*Manage Account\_Class Diagram*

1. **Class Specification**

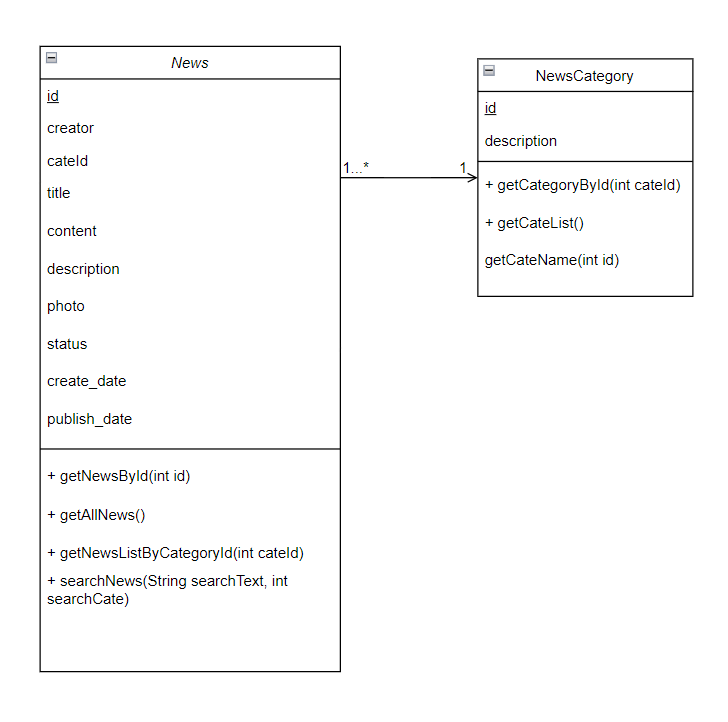
|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 1 | isActiveStatus() | Return value of attribute activeStatus |
| 2 | setActiveStatus() | Set value to attribute activeStatus |
| 3 | Login(User user) | Get data from database then create and return User object |
| 4 | addUser(User user) | Add data object User to database |
| 5 | ChangeUserStatus(userId, activeFlag) | Update data column *activeStatus* of table Users |
| 6 | changePassword(user) | Update data column *password* of table Users |
| 7 | updateUser(user) | Update data all column of table Users |
| 8 | getUsersList() | Get all data from table User, create object User then return list User. |
| 9 | getIdFromUsername(username) | Return Id of username input. |
| 10 | getUserFromId(Id) | Return User have Id same with input Id. |
| 11 | getUserNameWithId(Id) | Return username at object User have id same with input Id |
| 12 | getWardIdByUserId(userId) | Return ward id belong to user. |

1. **Sequense Diagram**



*Manage Account \_Sequense Diagram*

## 4. List News/ News Detail:

**a. Class Diagram:** 

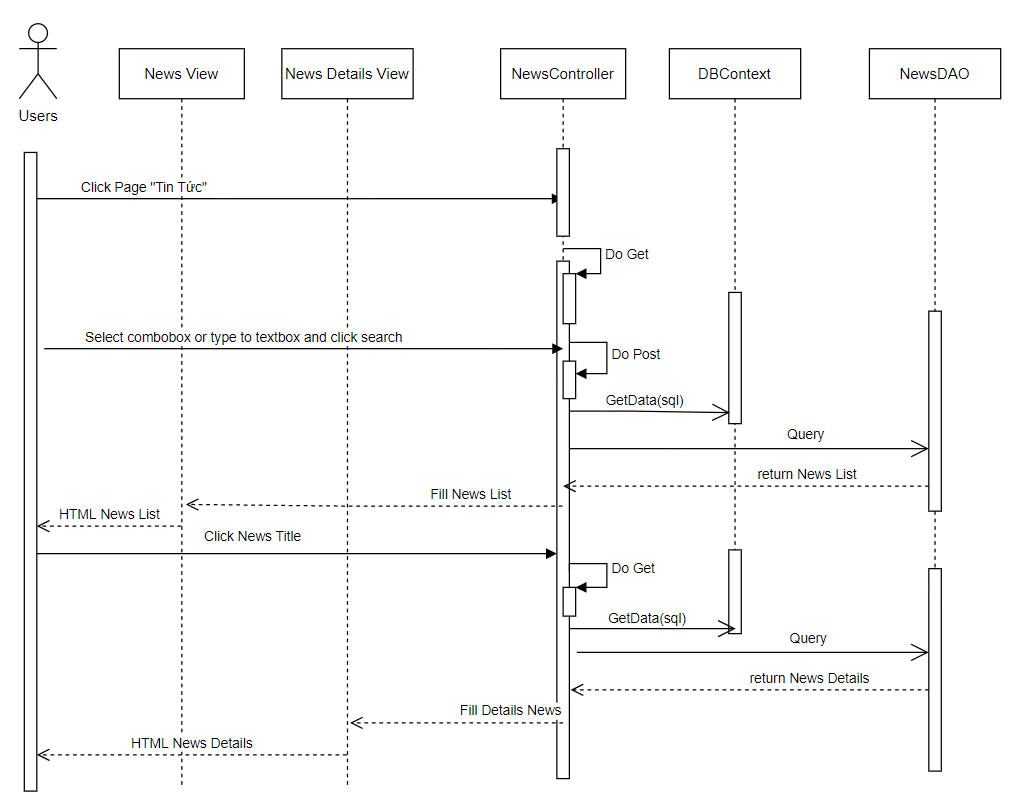
*ListNews/NewsDetail\_Class Diagram*

1. **Class Specification**

|  |  |  |
| --- | --- | --- |
| 1. **No** | **Method** | **Description** |
| 01 | getCateList() | Get List Category to add news by category |
| 02 | getCateName(int id) | Get List Category to display to Search Combobox |
| 03 | getCateName(int id) | search by category which is choosen in Combobox |

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 04 | getAllNews() | Get all news to display to screen |
| 05 | getNewsById(int id) | Get news by id in order to update or delete news or see news details by newsId |
| 06 | getNewsListByCategoryId(int cateId) | Choose one Category which is shown in combobox, this method is to displaying news which is belong to category that is choosen by user |
| 07 | searchNews(String searchText, int searchCate) | This method is to displaying news which is typed in the test box |

1. **Sequense Diagram**



*ListNews/NewsDetail\_Sequense Diagram*

## 5. Manage News

**a. Class Diagram:**

*Manage News\_Class Diagram*

1. **Class Specification**

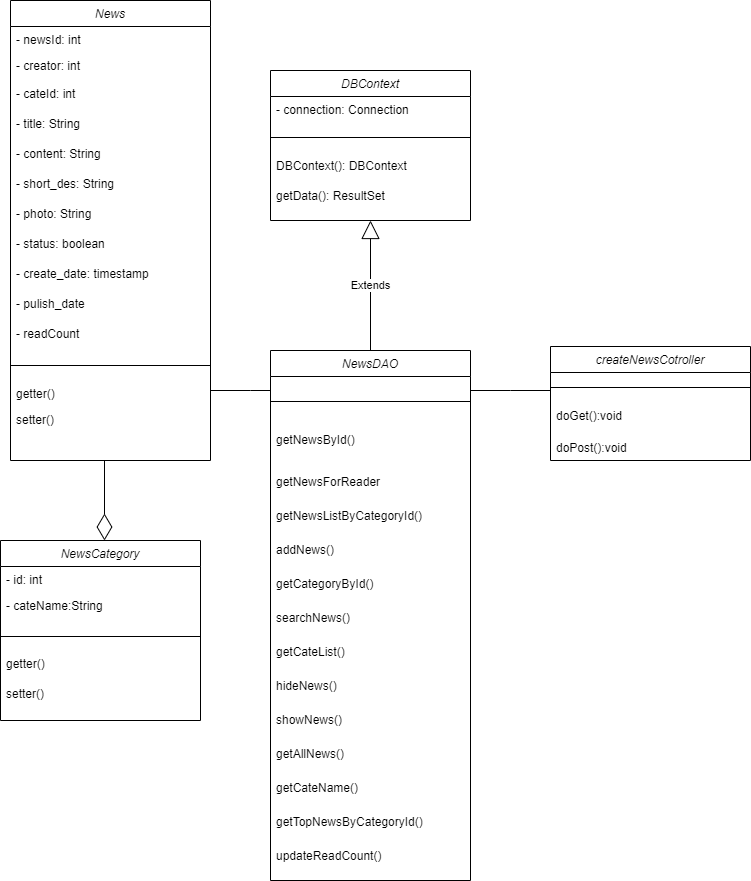
|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 01 | User() | Contructor of object User. |
| 02 | getUserId() | Return value of attribute userId |
| 03 | setUserId() | Set value to attribute userId |
| 04 | getUsername() | Return value of attribute userId |
| 05 | setUsername() | Set value to attribute userId |
| 06 | getPassword() | Return attribute password |
| 07 | setPassword() | Set value to attribute password |
| 08 | getUserType() | Return value of attribute userType |
| 09 | setUserType () | Set value to attribute userType |
| 10 | isActiveStatus() | Return value of attribute activeStatus |
| 11 | setActiveStatus() | Set value to attribute activeStatus |
| 12 | Login(User user) | Get data from database then create and return User object |
| 13 | addUser(User user) | Add data object User to database |
| 14 | ChangeUserStatus(userId, activeFlag) | Update data column *activeStatus* of table Users |
| 15 | changePassword(user) | Update data column *password* of table Users |
| 16 | updateUser(user) | Update data all column of table Users |
| 17 | getUsersList() | Get all data from table User, create object User then return list User. |
| 18 | getIdFromUsername(username) | Return Id of username input. |
| 19 | getUserFromId(Id) | Return User have Id same with input Id. |
| 20 | getUserNameWithId(Id) | Return username at object User have id same with input Id |
| 21 | getWardIdByUserId(userId) | Return ward id belong to user. |

1. **Sequense Diagram**

*Edit Account\_Sequense Diagram*

## 6. Create News

**a. Class Diagram:**

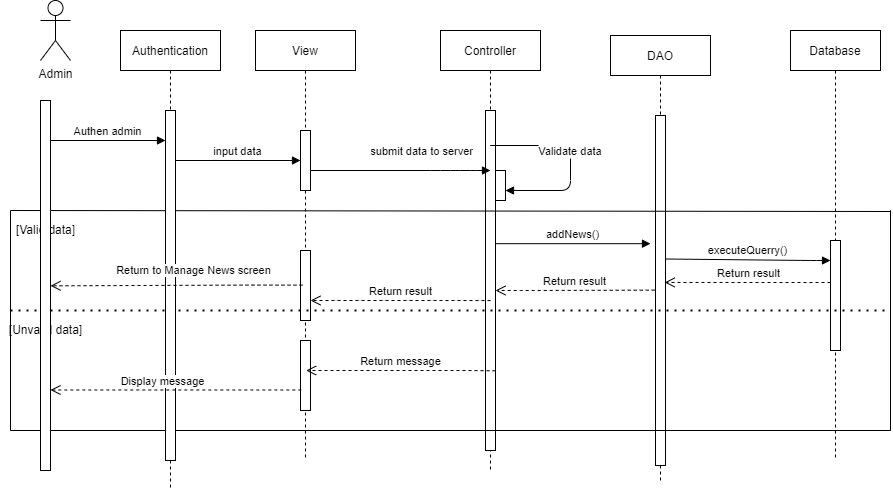


*Create News\_Class Diagram*

1. **Class Specification**

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 01 | getNewsById() | Get News by News id |
| 02 | getNewsForReader() | Get News with news status equad to 1 |
| 03 | getNewsListByCategoryId() | Get News with cate id |
| 04 | addNews() | Insert new News |
| 05 | updateNews() | Update News |
| 06 | getCategoryById() | Get name of category by category id |
| 07 | searchNews() | Search News contain input text |
| 08 | getCateList() | Get list category |
| 09 | hideNews() | Update status News equad to 0 |
| 10 | showNews() | Update status News equad to 1 |
| 11 | getAllNews() | Get all news |
| 12 | getCateName() | Get category name |
| 13 | getTopNewsByCategoryId() | Get top 4 news with closest publish date |
| 14 | updateReadCount | Update time of read |

1. **Sequense Diagram**



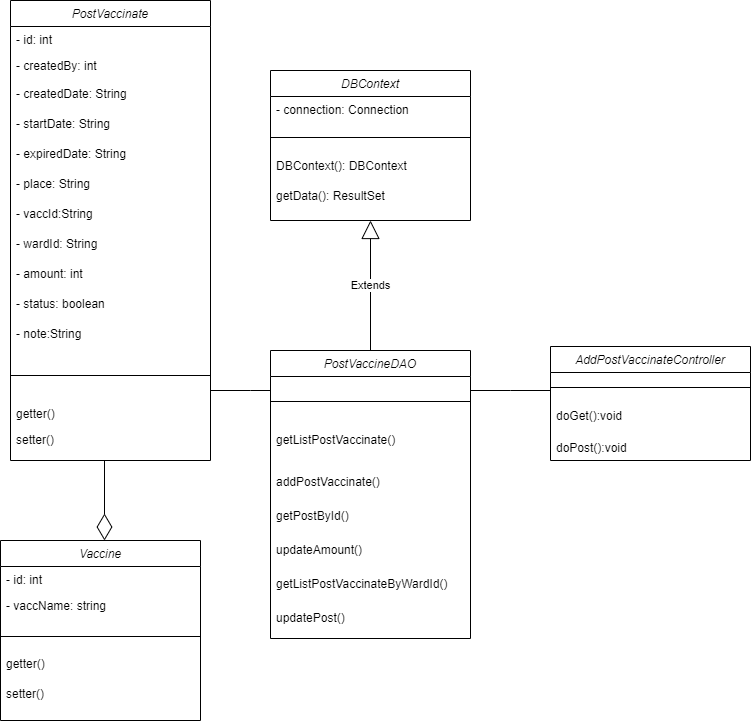
*Create News \_Sequense Diagram*







## 7. Create Post Vaccinate

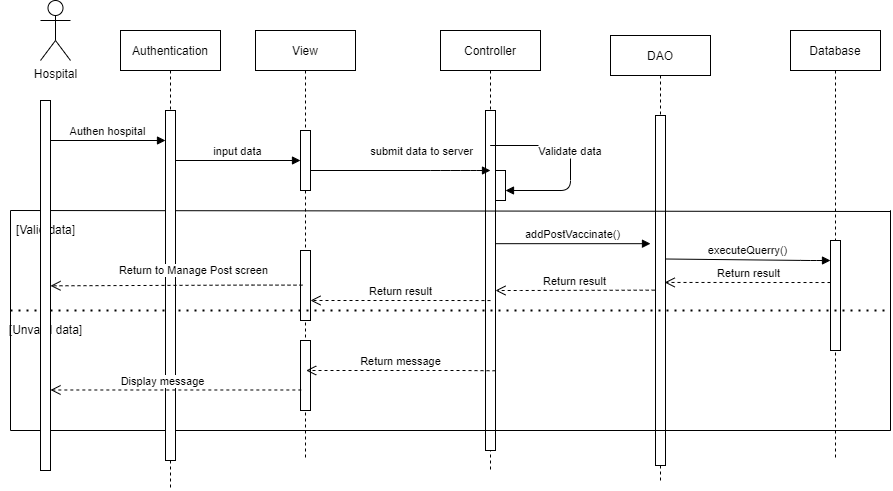
**a. Class Diagram:** 

*Create Post Vaccinate\_Class Diagram*

1. **Class Specification**

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 01 | getListPostVacinate() | Get all Post in Database |
| 02 | addPostVaccinate() | Add new Post into database |
| 03 | getPostById() | Get Post by id of post |
| 04 | updateAmount() | Update amount number vaccin. |
| 05 | getListPostVaccinateByWarId() | Get list post with wardId |
| 06 | updatePost() | Update all attributes of Post |

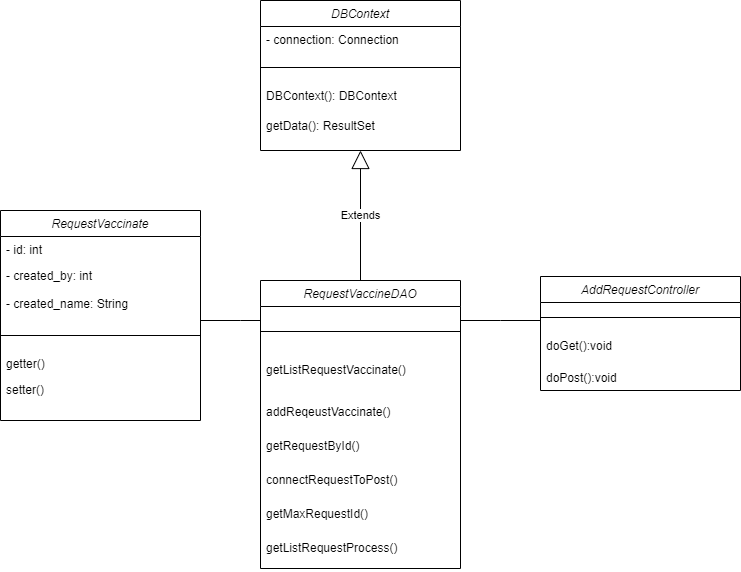
1. **Sequense Diagram**



*Create Post Vaccinate \_Sequense Diagram*

## 8. Create Request Vaccinate

**a. Class Diagram:**

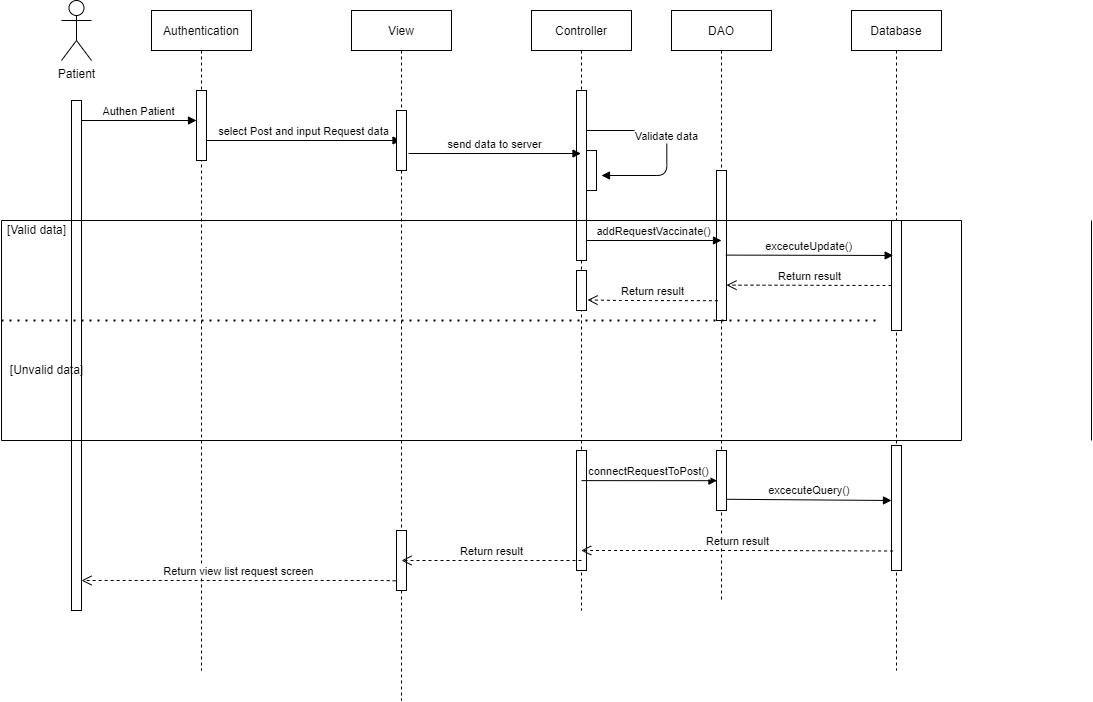


*Create Request Vaccinate\_Class Diagram*

1. **Class Specification**

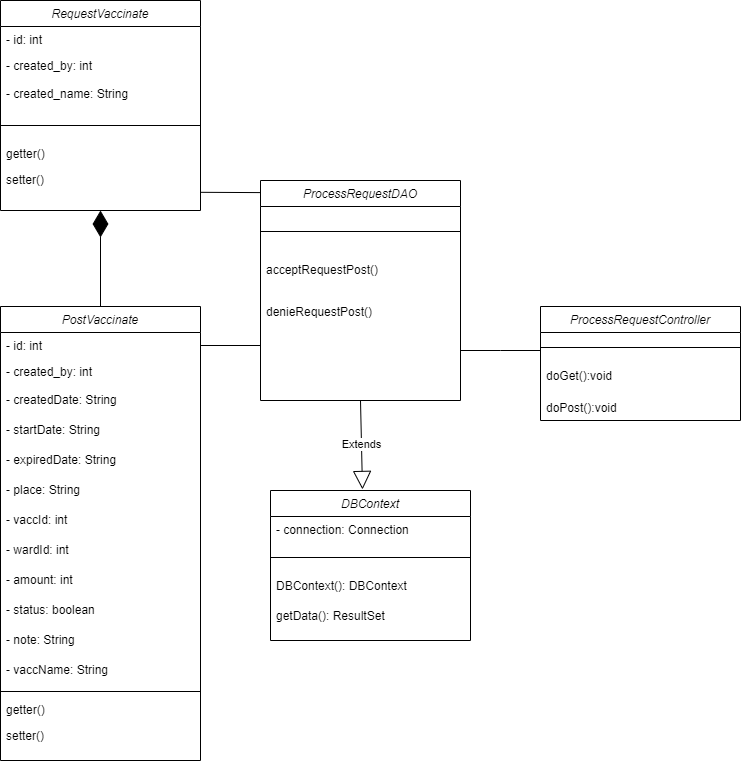
|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 01 | getListRequestVaccinate() | Get list request vaccinate of user |
| 02 | addRequestById() | Add new request. |
| 03 | connectRequestToPost() | Add request to Post |
| 04 | getMaxRequestId() | Get closest request id |
| 05 | getListRequestProcess() | Get list request with status equal to 2 |

1. **Sequense Diagram**



*Create Request Vaccinate \_Sequense Diagram*

## 9. Appcept/ Denie Request

**a. Class Diagram:** 

*Accept Request\_Class Diagram*

1. **Class Specification**

|  |  |  |
| --- | --- | --- |
| **No** | **Method** | **Description** |
| 01 | acceptRequestPost() | Set status request of post is 1 |
| 02 | denieRequestPost() | Set status request of post is 0 |

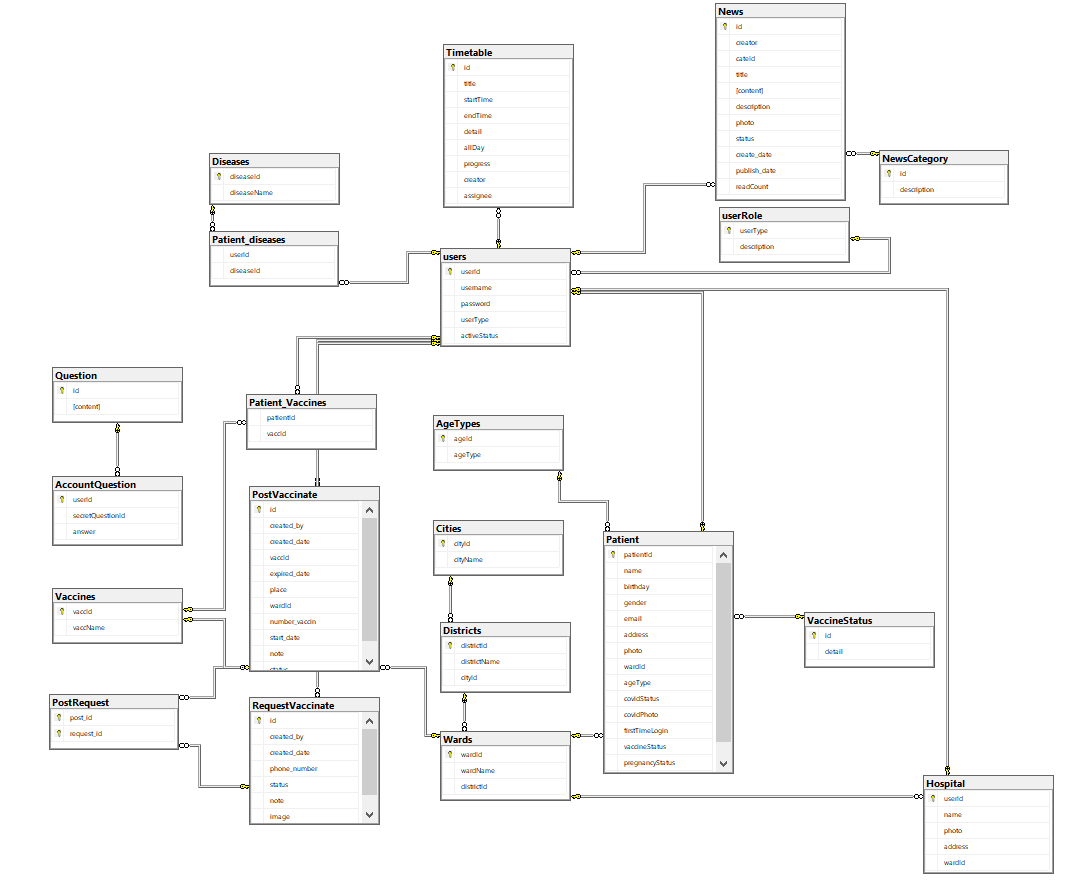
1. **Sequense Diagram**

*Accept Request \_Sequense Diagram*



# III. Database Design

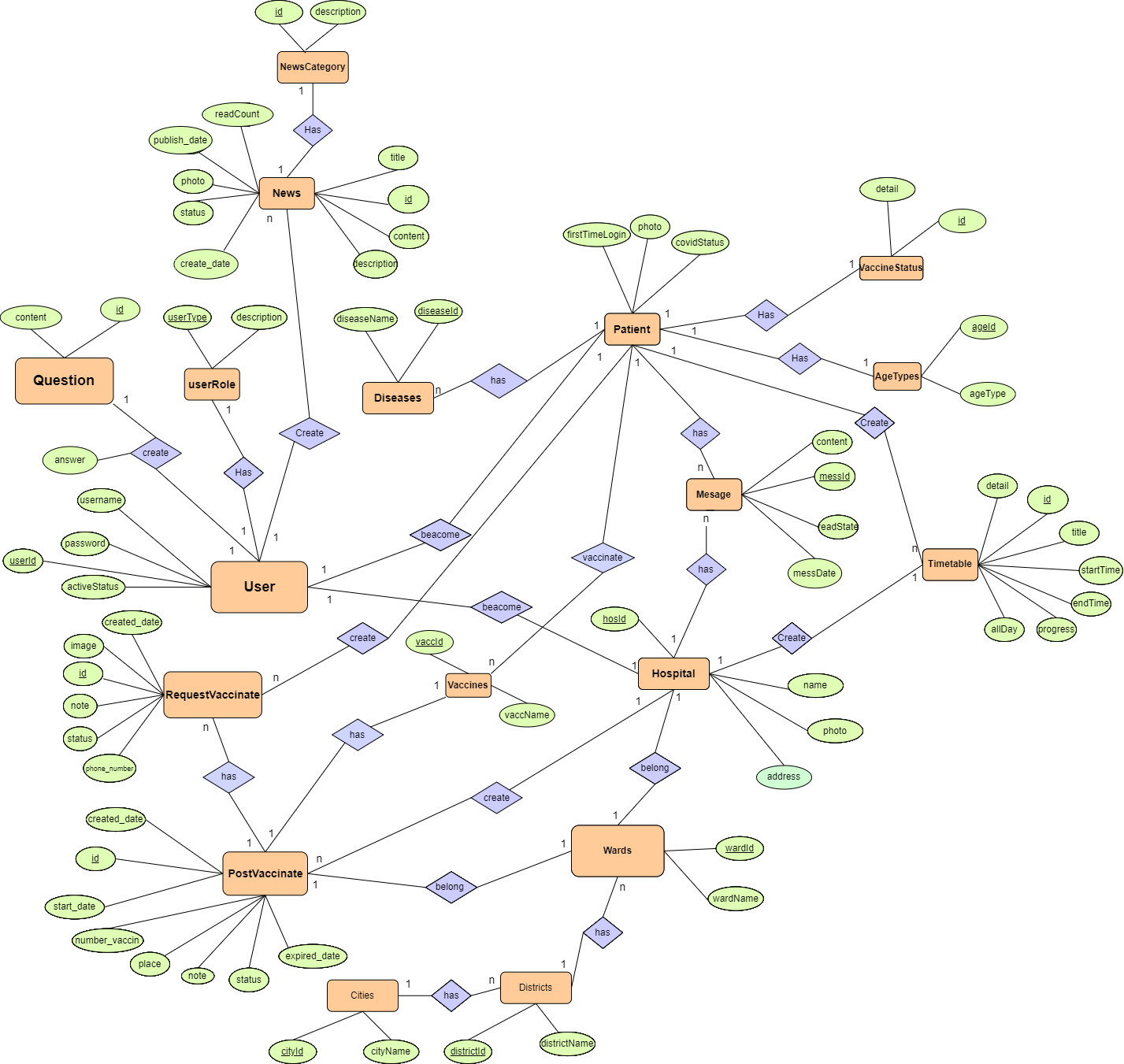
## Database Diagram:

*Img:Database Diagram.*

## 2. Table Description

|  |  |  |
| --- | --- | --- |
| **No** | **Table** | **Description** |
| 01 | User | Contain data of user |
| 02 | UserRole | Contain data role |
| 03 | Question | Contatin list secret question |
| 04 | AccountQuestion | Contatin secret question and answer of user account |
| 05 | Timetable | Contain data timetable. |
| 06 | Patient | Contain data user and add more information about diseases |
| 07 | Hospital | Contain data user and add more information about vaccin |
| 08 | News | Contain data of News |
| 09 | NewsCategory | Contain data of News Category |
| 10 | Diseases | Contain all diseases revole with Covid19 |
| 11 | VaccineStatus | Contain data patient Vaccinated |
| 12 | Patient\_Vaccines | Contain data patient Vaccinated or not |
| 13 | Vaccines | Contain type vaccin and name |
| 14 | PostVaccinate | Contain data of Post Vaccine |
| 15 | RequestVaccinate | Contain data of Request Vaccine |
| 16 | PostRequest | Connecting request and post |
| 17 | Districts | Contain data of all name districts in VietNam |
| 18 | Cities | Contain data of all name cities in VietNam |
| 19 | Wards | Contain data of all name wards in VietNam |
| 20 | Message | Contain data messsage |
| 21 | AgeType | Contain data type age |

## 3: ERD:



*Img:Database Diagram.*