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# CHAPTER 1 | INTRODUCTION

## 1.1 Purpose

The Software Design Document (SDD) is document to provide documentation, which will be used to aid in software development by provide the detail of how the software should be built. In the Software Design Document are narrative and graphical documentation of the software design for this project.

This document contains design description of the promotion provider. This includes the architectural feature of the system down though detail of what operations will perform. It also shows how the use cases promised in the SRS would be implementation in the system using this design.

## 1.2 Project Scope

This Software Design Document provides description of the design of the promotion provider. The dominant design methodology is an object-oriented design combines with Model-View-Controller

This Software Design Document is for a high level system, which will work as a proof of the concepts. This software design is focused on the high-level system and critical parts of the system.

## 1.3 Definition, Acronyms, and Abbreviation

### 1.3.1 Key definition

|                            |  |
|----------------------------|--|
| <b>Design</b>              | “The period of time in the software lift cycle during which the design for architect, software components, interfaces, and data are created, and verified to satisfy requirement.”[IEEE90] |
| <b>Entity Relationship</b> | “data modeling technique that creates a graphical representation of the entities, and the relationships between entities, within an information system.”                                   |
| <b>Diagram</b>             | [techtarget.com]   |
| <b>iOS</b>                 | “the operating system in the iPhone and iPod touch.”   |
| <b>System Architecture</b> | “a generic discipline to handle objects (existing or to be created) called “systems”,  |

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in a way that supports reasoning about the structural properties of these objects.”

[Lix.polytechnique.fr]

|               |   |
|---------------|---|
| <b>Client</b> | “a client is an application that runs on a personal computer or workstation and relies on a server to perform some operations. For example, an <i>e-mail client</i> is an application that enables you to send and receive e-mail.” |
|---------------|---|

### 1.3.2 Keys Acronyms and Abbreviations

| Key Acronyms | Abbreviation                     |
|--------------|----------------------------------|
| SRS          | System Requirement Specification |
| SDD          | Software Design Document         |
| ERD          | Entity Relationship Diagram      |
| GUI          | Graphic User Interface           |
| SD           | Sequence Diagram                 |

Table 4.1: Key Acronyms and Abbreviations

## 1.4 User Characteristic

Administrator should be able to:

- Login to web application
- Logout from web application
- Add shop owner account
- View shop owner account
- Delete shop owner account
- Add promotion
- Edit promotion
- Delete promotion
- Accept register request
- Reject Register request

Shop owner should be able to:

- Login to web application
- Logout from web application
- Add promotion
- Edit promotion

|               |                            |              |              |            |              |
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- Delete promotion
- Update profile
- Change password

Guest should be able to:

- Sent register request

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# CHAPTER 2 | SYSTEM ARCHITECTURE

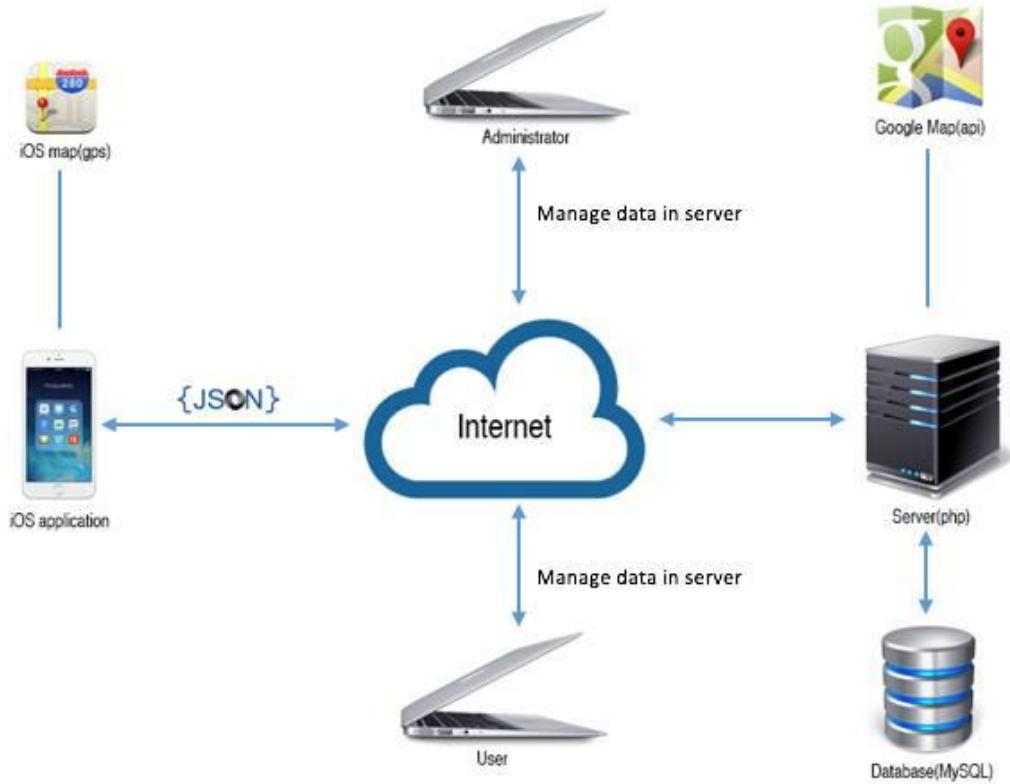


Figure 4.1: System Architecture

This project will have 2 sides, the first is client side that is the iPhone application. The client will use apple API to provide a map. The second is server side that is web and database. In this system client need to connect a server, then server will connect to the database and sent the data back to the client via the internet in the form of JSON. The client application cannot retrieve information without connect to server because every data and information of the restaurant or hotel will store in the database server. User (Hotel or restaurant) can add promotions into our system, and admin can also manage data in the system which are adding, editing and deleting.

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# CHAPTER 3 | DETAILED DESIGN

## 3.1 Class diagram

### 3.1.1 Promotion provider class diagram

#### 3.1.1.1 Overall Promotion provider class diagram

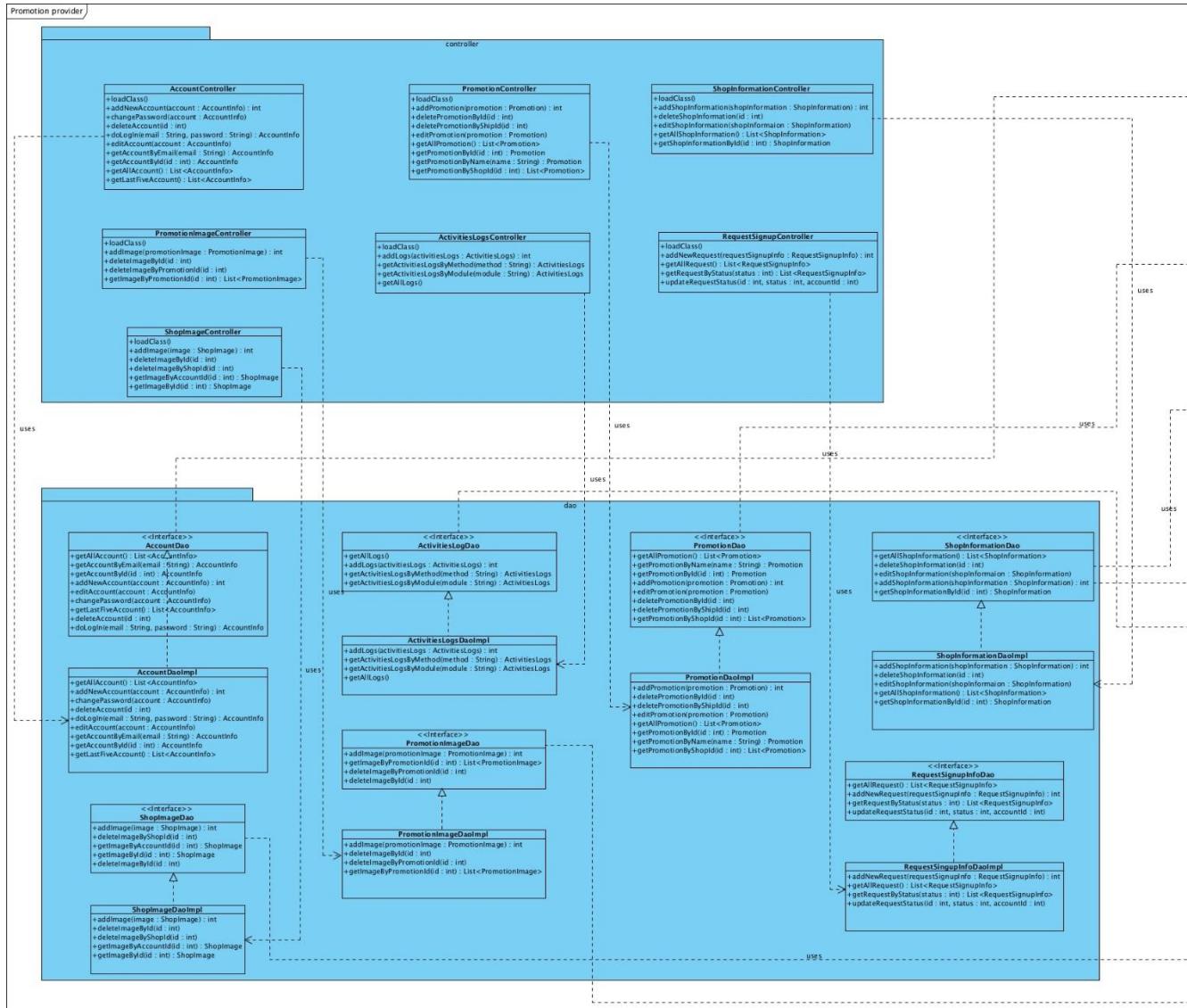


Figure 4.2: Overall Promotion provider class diagram (1)

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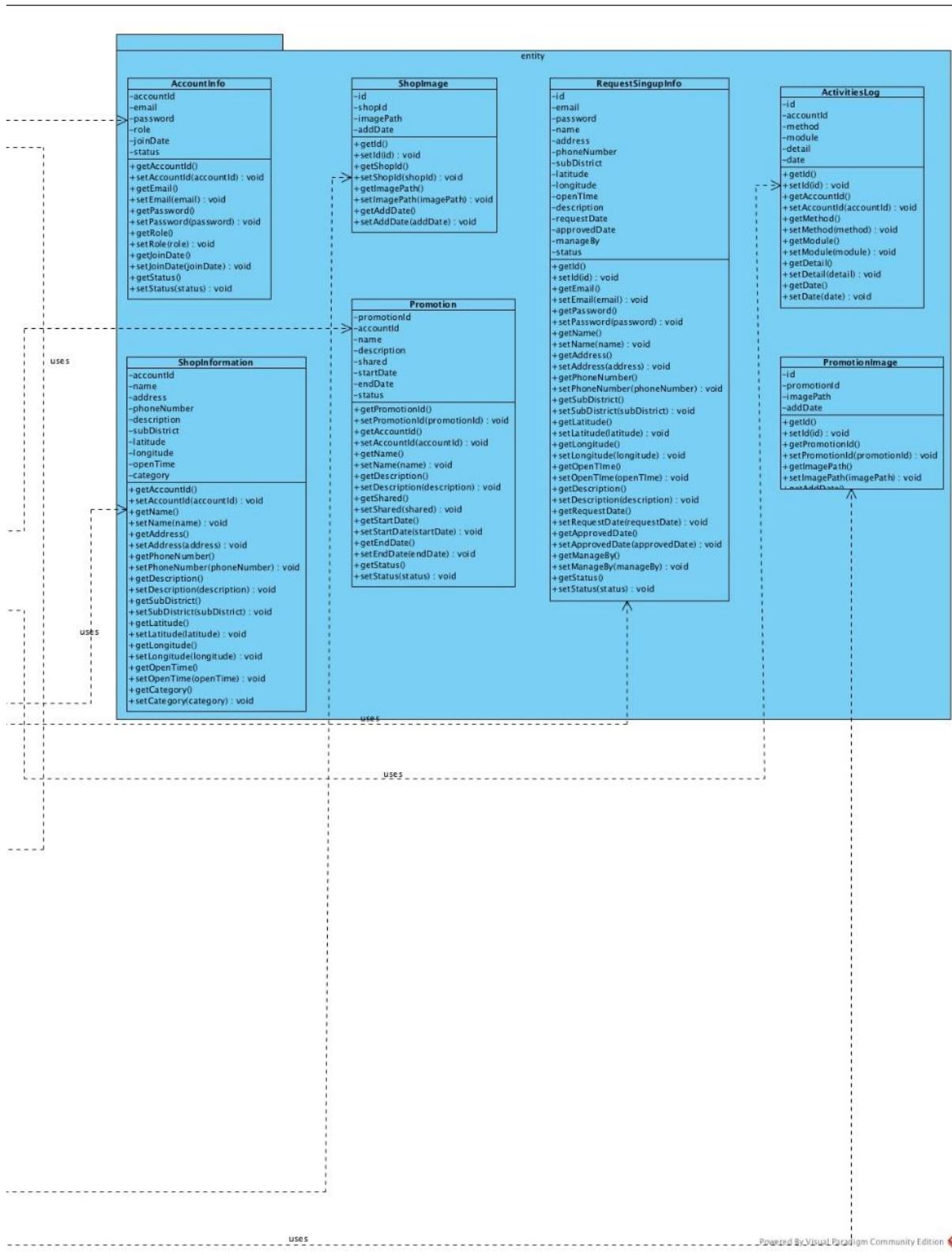


Figure 4.3: Overall Promotion provider class diagram (2)

|               |                            |              |              |            |              |
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### 3.1.1.2 Dao package class diagram

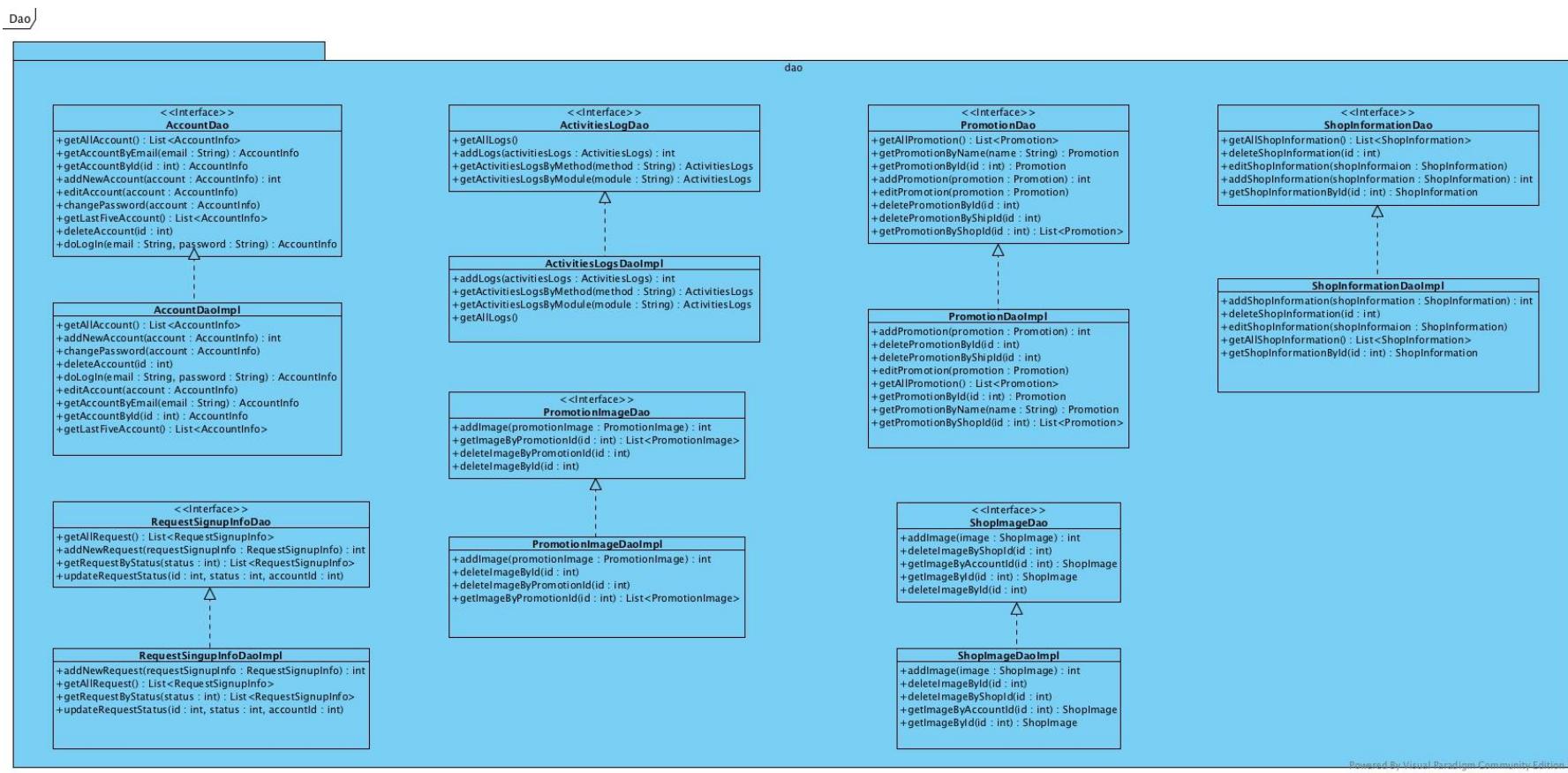


Figure 4.4: Dao package class diagram

|               |                            |              |              |            |              |
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### 3.1.1.3 Controller package class diagram

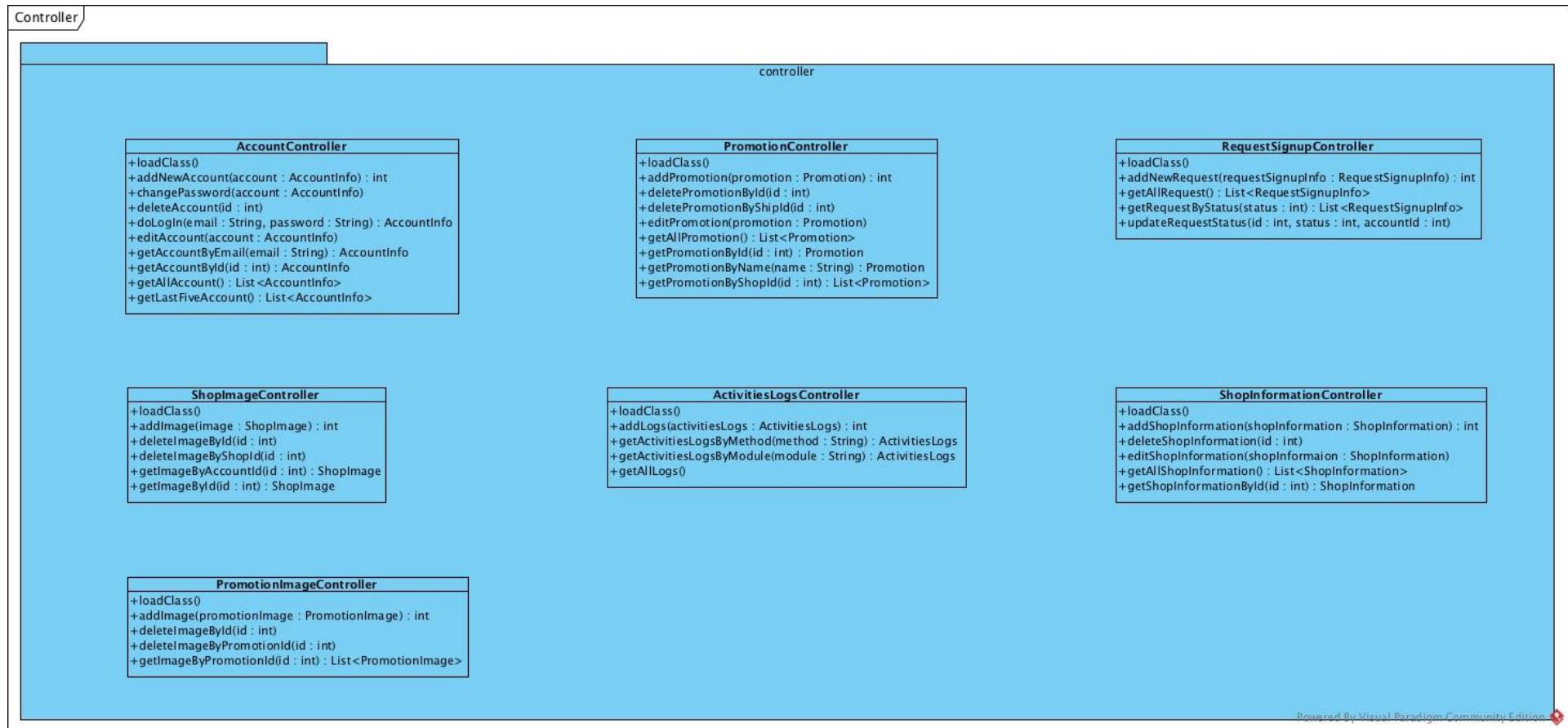


Figure 4.5: Controller class diagram

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### 3.1.1.4 Entity package class diagram

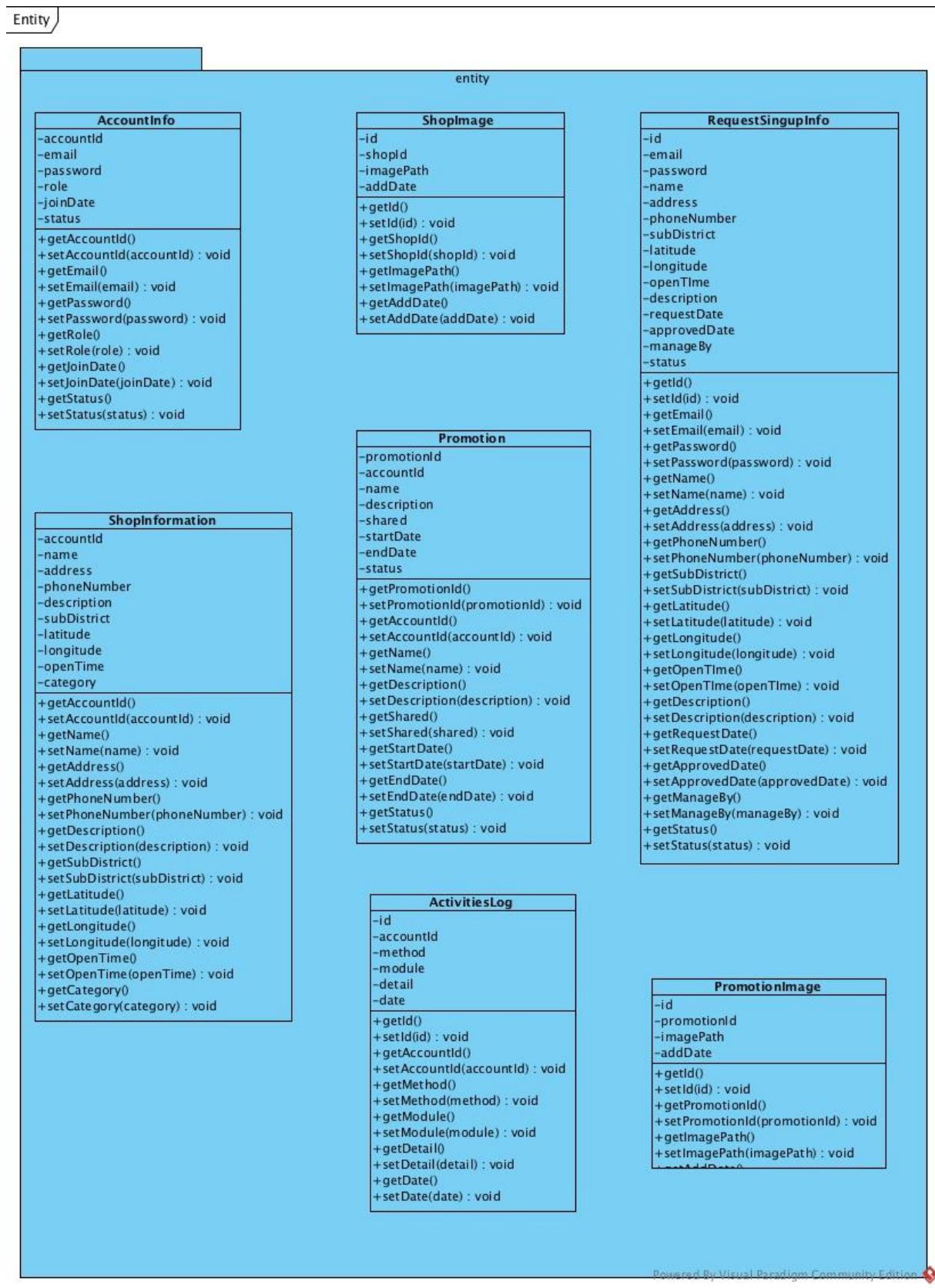


Figure 4.6: Entity package class diagram

|               |                            |              |              |            |              |
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### 3.1.2 Promotion provider class diagram description

#### 1. Class name: AccountInfo



Figure 4.7: AccountInfo Class

| Field Name | Description    | Remark         |
|------------|----------------|----------------|
| accountId  | Account Id     | Type: int      |
| email      | Email          | Type: String   |
| password   | Password       | Type: String   |
| role       | Role of user   | Type: String   |
| joinDate   | Join Date      | Type: Datetime |
| status     | Status of user | Type: int      |

| Method Name             | Description                                 | Remark            |
|-------------------------|---|-------------------|
| getAccountId()          | Method for getting attribute name accountId |                   |
| setAccountId(accountId) | Method for setting attribute name accountId | Return Type: void |
| getEmail()              | Method for getting attribute name email     |                   |
| setEmail(email)         | Method for setting attribute name email     | Return Type: void |
| getPassword()           | Method for getting attribute name password  |                   |
| setPassword(password)   | Method for setting attribute name password  | Return Type: void |
| getRole()               | Method for getting attribute name role      |                   |
| setRole(role)           | Method for setting attribute name role      | Return Type: void |
| getJoinDate()           | Method for getting attribute name joinDate  |                   |
| setJoinDate(joinDate)   | Method for setting attribute name joinDate  | Return Type: void |
| getStatus()             | Method for getting attribute name status    |                   |
| setStatuss(status)      | Method for setting attribute name status    | Return Type: void |

Table 4.2: AccountInfo Class Description

|               |                            |              |              |            |              |
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## 2. Class name: ShopInformation

| ShopInformation                     |  |
|-------------------------------------|--|
| -accountId                          |  |
| -name                               |  |
| -address                            |  |
| -phoneNumber                        |  |
| -description                        |  |
| -subDistrict                        |  |
| -latitude                           |  |
| -longitude                          |  |
| -openTime                           |  |
| -category                           |  |
| +getAccountId()                     |  |
| +setAccountId(accountId) : void     |  |
| +getName()                          |  |
| +setName(name) : void               |  |
| +getAddress()                       |  |
| +setAddress(address) : void         |  |
| +getPhoneNumber()                   |  |
| +setPhoneNumber(phoneNumber) : void |  |
| +getDescription()                   |  |
| +setDescription(description) : void |  |
| +getSubDistrict()                   |  |
| +setSubDistrict(subDistrict) : void |  |
| +getLatitude()                      |  |
| +setLatitude(latitude) : void       |  |
| +getLongitude()                     |  |
| +setLongitude(longitude) : void     |  |
| +getOpenTime()                      |  |
| +setOpenTime(openTime) : void       |  |
| +getCategory()                      |  |
| +setCategory(category) : void       |  |

Figure 4.8: ShopInformation Class

| Field Name  | Description       | Remark         |
|-------------|-------------------|----------------|
| accountId   | Account Id        | Type: int      |
| name        | Shop Name         | Type: String   |
| address     | Shop address      | Type: String   |
| phoneNumber | Shop phone number | Type: String   |
| description | Shop description  | Type: String   |
| subDistrict | Shop sub district | Type: String   |
| latitude    | Latitude          | Type: decimal  |
| longitude   | Longitude         | Type: decimal  |
| openTime    | Shop open time    | Type: Datetime |
| category    | Shop category     | Type: String   |

| Method Name             | Description                                 | Remark            |
|-------------------------|---|-------------------|
| getAccountId()          | Method for getting attribute name accountId |                   |
| setAccountId(accountId) | Method for setting attribute name accountId | Return Type: void |
| getName()               | Method for getting attribute name name      |                   |
| setName(name)           | Method for setting attribute name name      | Return Type: void |
| getAddress()            | Method for getting attribute name address   |                   |

|               |                            |              |              |            |              |
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|                             |   |                   |
|-----------------------------|---|-------------------|
| setAddress (address)        | Method for setting attribute name address     | Return Type: void |
| getPhoneNumber()            | Method for getting attribute name phoneNumber |                   |
| setPhoneNumber(phoneNumber) | Method for setting attribute name phoneNumber | Return Type: void |
| getDescription()            | Method for getting attribute name description |                   |
| setDescription(description) | Method for setting attribute name description | Return Type: void |
| getSubDistrict()            | Method for getting attribute name subDistrict |                   |
| setSubDistrict(subDistrict) | Method for setting attribute name subDistrict | Return Type: void |
| getLatitude()               | Method for getting attribute name latitude    |                   |
| setLatitude(latitude)       | Method for setting attribute name latitude    | Return Type: void |
| getLongitude()              | Method for getting attribute name logitude    |                   |
| setLongitude(logitude)      | Method for setting attribute name logitude    | Return Type: void |
| getOpenTime()               | Method for getting attribute name openTime    |                   |
| setOpenTime(openTime)       | Method for setting attribute name openTime    | Return Type: void |
| getCategory()               | Method for getting attribute name category    |                   |
| setCategory(category)       | Method for setting attribute name category    | Return Type: void |

Table 4.3: ShopInformation Class Description

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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3. Class name: ShopImage



Figure 4.9: ShopImage Class

| Field Name | Description | Remark         |
|------------|-------------|----------------|
| id         | Image Id    | Type: int      |
| shopId     | Shop Id     | Type: int      |
| imagePath  | Image Path  | Type: String   |
| addDate    | Add Date    | Type: Datetime |

| Method Name             | Description                                 | Remark            |
|-------------------------|---|-------------------|
| getId()                 | Method for getting attribute name id        |                   |
| setId(id)               | Method for setting attribute name id        | Return Type: void |
| getShopId()             | Method for getting attribute name shopId    |                   |
| setShopId(shopId)       | Method for setting attribute name shopId    | Return Type: void |
| getImagePath()          | Method for getting attribute name imagePath |                   |
| setImagePath(imagePath) | Method for setting attribute name imagePath | Return Type: void |
| getAddDate()            | Method for getting attribute name addDate   |                   |
| setAddDate(addDate)     | Method for setting attribute name addDate   | Return Type: void |

Table 4.4: ShopImage Class Description

4. Class name: Promotion

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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Figure 4.10: Promotion Class

| Field Name  | Description                | Remark         |
|-------------|----------------------------|----------------|
| promotionId | Promotion Id               | Type: int      |
| accountId   | Account Id                 | Type: int      |
| name        | Promotion name             | Type: String   |
| description | Promotion description      | Type: String   |
| shared      | Amount of shared promotion | Type: int      |
| startDate   | Date of start promotion    | Type: Datetime |
| endDate     | Date of end promotion      | Type: Datetime |
| status      | Status of promotion        | Type: int      |

| Method Name                 | Description                                   | Remark            |
|-----------------------------|---|-------------------|
| getPromotionId()            | Method for getting attribute name promotionId |                   |
| setPromotionId(promotionId) | Method for setting attribute name promotionId | Return Type: void |
| getAccountId()              | Method for getting attribute name accountId   |                   |
| setAccountId(accountId)     | Method for setting attribute name accountId   | Return Type: void |
| getName()                   | Method for getting attribute name name        |                   |

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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|                             |  |                   |
|-----------------------------|--|-------------------|
| setName(name)               | Method for setting attribute name<br>name        | Return Type: void |
| getDescription()            | Method for getting attribute name<br>description |                   |
| setDescription(description) | Method for setting attribute name<br>description | Return Type: void |
| getShared()                 | Method for getting attribute name<br>shared      |                   |
| setShared(shared)           | Method for setting attribute name<br>shared      | Return Type: void |
| getStartDate()              | Method for getting attribute name<br>startDate   |                   |
| setStartDate(startDate)     | Method for setting attribute name<br>startDate   | Return Type: void |
| getEndDate()                | Method for getting attribute name<br>endDate     |                   |
| setEndDate(startDate)       | Method for setting attribute name<br>endDate     | Return Type: void |
| getStatus()                 | Method for getting attribute name<br>status      |                   |
| setStatus(status)           | Method for setting attribute name<br>status      | Return Type: void |

Table 4.5: Promotion Class Description

## 5. Class name: ActivitiesLog

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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| ActivitiesLog                   |  |
|---------------------------------|--|
| -id                             |  |
| -accountId                      |  |
| -method                         |  |
| -module                         |  |
| -detail                         |  |
| -date                           |  |
| +getId()                        |  |
| +setId(id) : void               |  |
| +getAccountId()                 |  |
| +setAccountId(accountId) : void |  |
| +getMethod()                    |  |
| +setMethod(method) : void       |  |
| +getModule()                    |  |
| +setModule(module) : void       |  |
| +getDetail()                    |  |
| +setDetail(detail) : void       |  |
| +getDate()                      |  |
| +setDate(date) : void           |  |

Figure 4.11: ActivitiesLog Class

| Field Name | Description            | Remark         |
|------------|------------------------|----------------|
| id         | Activities logs Id     | Type: int      |
| accountId  | Account Id             | Type: int      |
| method     | Method name            | Type: String   |
| module     | Module name            | Type: String   |
| detail     | Activities logs detail | Type: String   |
| date       | Date                   | Type: Datetime |

| Method Name             | Description                                 | Remark            |
|-------------------------|---|-------------------|
| getId()                 | Method for getting attribute name Id        |                   |
| setId(Id)               | Method for setting attribute name Id        | Return Type: void |
| getAccountId()          | Method for getting attribute name accountId |                   |
| setAccountId(accountId) | Method for setting attribute name accountId | Return Type: void |
| getMethod()             | Method for getting attribute name method    |                   |
| setMethod(method)       | Method for setting attribute name method    | Return Type: void |
| getModule()             | Method for getting attribute name module    |                   |
| setModule(module)       | Method for setting attribute name module    | Return Type: void |
| getDetail()             | Method for getting attribute name detail    |                   |
| setDetail(detail)       | Method for setting attribute name detail    | Return Type: void |

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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|               |  |                   |
|---------------|--|-------------------|
| getDate()     | Method for getting attribute name date |                   |
| setDate(Date) | Method for setting attribute name date | Return Type: void |

Table 4.6: ActivitiesLog Class Description

## 6. Class name: RequestSignupInfo

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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| RequestSignupInfo                     |  |
|---------------------------------------|--|
| -id                                   |  |
| -email                                |  |
| -password                             |  |
| -name                                 |  |
| -address                              |  |
| -phoneNumber                          |  |
| -subDistrict                          |  |
| -latitude                             |  |
| -longitude                            |  |
| -openTlme                             |  |
| -description                          |  |
| -requestDate                          |  |
| -approvedDate                         |  |
| -manageBy                             |  |
| -status                               |  |
| +getId()                              |  |
| +setId(id) : void                     |  |
| +getEmail()                           |  |
| +setEmail(email) : void               |  |
| +getPassword()                        |  |
| +setPassword(password) : void         |  |
| +getName()                            |  |
| +setName(name) : void                 |  |
| +getAddress()                         |  |
| +setAddress(address) : void           |  |
| +getPhoneNumber()                     |  |
| +setPhoneNumber(phoneNumber) : void   |  |
| +getSubDistrict()                     |  |
| +setSubDistrict(subDistrict) : void   |  |
| +getLatitude()                        |  |
| +setLatitude(latitude) : void         |  |
| +getLongitude()                       |  |
| +setLongitude(longitude) : void       |  |
| +getOpenTlme()                        |  |
| +setOpenTlme(openTlme) : void         |  |
| +getDescription()                     |  |
| +setDescription(description) : void   |  |
| +getRequestDate()                     |  |
| +setRequestDate(requestDate) : void   |  |
| +getApprovedDate()                    |  |
| +setApprovedDate(approvedDate) : void |  |
| +getManageBy()                        |  |
| +setManageBy(manageBy) : void         |  |
| +getStatus()                          |  |
| +setStatus(status) : void             |  |

Figure 4.12: RequestSignupInfo Class

| Field Name  | Description       | Remark       |
|-------------|-------------------|--------------|
| id          | Id                | Type: int    |
| email       | Email             | Type: String |
| password    | Password          | Type: String |
| name        | Name              | Type: String |
| address     | Address           | Type: String |
| phoneNumber | Shop phone number | Type: String |
| subDistrict | Shop sub district | Type: String |

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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|              |                                       |                |
|--------------|---------------------------------------|----------------|
| latitude     | Latitude                              | Type: decimal  |
| longitude    | Longitude                             | Type: decimal  |
| openTime     | Shop open time                        | Type: Datetime |
| description  | Shop description                      | Type: String   |
| requestDate  | Request sign up date                  | Type: Datetime |
| approvedDate | Approved sign up date                 | Type: Datetime |
| manageBy     | Who approve or reject sign up request | Type: int      |
| status       | Status of sign up request             | Type: int      |

| Method Name                 | Description                                   | Remark            |
|-----------------------------|---|-------------------|
| getId()                     | Method for getting attribute name id          |                   |
| setId(id)                   | Method for setting attribute name id          | Return Type: void |
| getEmail()                  | Method for getting attribute name email       |                   |
| setEmail(email)             | Method for setting attribute name email       | Return Type: void |
| getPassword()               | Method for getting attribute name password    |                   |
| setPassword(password)       | Method for setting attribute name password    | Return Type: void |
| getName()                   | Method for getting attribute name name        |                   |
| setName(name)               | Method for setting attribute name name        | Return Type: void |
| getAddress()                | Method for getting attribute name address     |                   |
| setAddress (address)        | Method for setting attribute name address     | Return Type: void |
| getPhoneNumber()            | Method for getting attribute name phoneNumber |                   |
| setPhoneNumber(phoneNumber) | Method for setting attribute name phoneNumber | Return Type: void |
| getSubDistrict()            | Method for getting attribute name subDistrict |                   |
| setSubDistrict(subDistrict) | Method for setting attribute name subDistrict | Return Type: void |
| getLatitude()               | Method for getting attribute name latitude    |                   |
| setLatitude(latitude)       | Method for setting attribute name latitude    | Return Type: void |
| getLongitude()              | Method for getting attribute name longitude   |                   |
| setLongitude(logitude)      | Method for setting attribute name logitude    | Return Type: void |
| getOpenTime()               | Method for getting attribute name openTime    |                   |

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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|                               |  |                   |
|-------------------------------|--|-------------------|
| setOpenTime(openTime)         | Method for setting attribute name openTime     | Return Type: void |
| getDescription()              | Method for getting attribute name description  |                   |
| setDescription(description)   | Method for setting attribute name description  | Return Type: void |
| getRequestDate()              | Method for getting attribute name requestDate  |                   |
| setRequestDate(requestDate)   | Method for setting attribute name requestDate  | Return Type: void |
| getApprovedDate()             | Method for getting attribute name approvedDate |                   |
| setApprovedDate(approvedDate) | Method for setting attribute name ApprovedDate | Return Type: void |
| getManageBy()                 | Method for getting attribute name manageBy     |                   |
| setManageBy(manageBy)         | Method for setting attribute name manageBy     | Return Type: void |
| getStatus()                   | Method for getting attribute name status       |                   |
| setStatus(status)             | Method for setting attribute name status       | Return Type: void |

Table 4.7: RequestsSignupInfo Class Description

## 7. Class name: PromotionImage

|               |                            |              |              |            |              |
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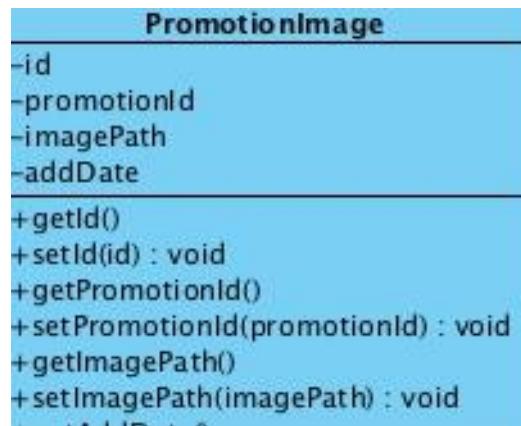


Figure 4.13: PromotionImage Class

| Field Name  | Description        | Remark       |
|-------------|--------------------|--------------|
| id          | Promotion image Id | Type: int    |
| promotionId | Promotion Id       | Type: int    |
| imagePath   | Image path         | Type: String |
| addDate     | Add date           | Type: String |

| Method Name                 | Description                                   | Remark            |
|-----------------------------|---|-------------------|
| getId()                     | Method for getting attribute name id          |                   |
| setId(id)                   | Method for setting attribute name id          | Return Type: void |
| getPromotionId()            | Method for getting attribute name promotionId |                   |
| setPromotionId(promotionId) | Method for setting attribute name promotionId | Return Type: void |
| getImagePath()              | Method for getting attribute name imagePath   |                   |
| setImagePath(imagePath)     | Method for setting attribute name imagePath   | Return Type: void |
| getAddDate()                | Method for getting attribute name addDate     |                   |
| setAddDate(addDate)         | Method for setting attribute name addDate     | Return Type: void |

Table 4.8: PromotionImage Class Description

## 8. Class name: AccountDao

|               |                            |              |              |            |              |
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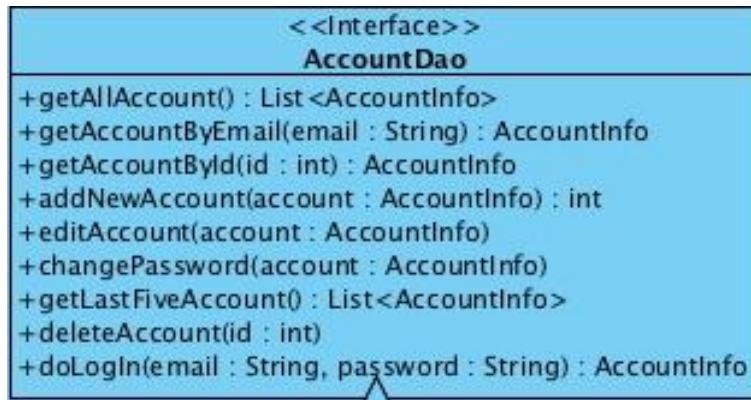


Figure 4.14: AccountDao Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                              | Description   | Remark                            |
|--|---|-----------------------------------|
| getAllAccount()                          | Method for getting all account from database                              | Return Type:<br>List<AccountInfo> |
| getAccountByEmail(email: String)         | Method for getting account information from database by using email       | Return Type:<br>AccountInfo       |
| getAccountById(id: int)                  | Method for getting account information from database by using account id  | Return Type:<br>AccountInfo       |
| addNewAccount(account: AccountInfo)      | Method for adding new account information into database                   | Return Type: int                  |
| editAccount(account: AccountInfo)        | Method for edit account information into database                         |                                   |
| changePassword(account: AccountInfo)     | Method for changing new password  |                                   |
| getLastFiveAccount()                     | Method for getting latest five account in database                        | Return Type:<br>List<AccountInfo> |
| deleteAccount(id: int)                   | Method for deleting account information from database by using account id |                                   |
| doLogin(email: String, password: String) | Method for logging in to web server                                       | Return Type:<br>AccountInfo       |

Table 4.9: AccountDao Class Description

## 9. Class name: AccountDaoImpl

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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Figure 4.15: AccountDaoImpl Class

| Field Name                               | Description   | Remark                            |
|--|---|-----------------------------------|
| -  | -   | -                                 |
| Method Name                              | Description   | Remark                            |
| getAllAccount()                          | Method for getting all account from database                              | Return Type:<br>List<AccountInfo> |
| addNewAccount(account: AccountInfo)      | Method for adding new account information into database                   | Return Type: int                  |
| changePassword(account: AccountInfo)     | Method for changing new password  |                                   |
| deleteAccount(id: int)                   | Method for deleting account information from database by using account id |                                   |
| doLogin(email: String, password: String) | Method for logging in to web server                                       | Return Type:<br>AccountInfo       |
| editAccount(account: AccountInfo)        | Method for edit account information into database                         |                                   |
| getAccountByEmail(email: String)         | Method for getting account information from database by using email       | Return Type:<br>AccountInfo       |
| getAccountById(id: int)                  | Method for getting account information from database by using account id  | Return Type:<br>AccountInfo       |
| getLastFiveAccount()                     | Method for getting latest five account in database                        | Return Type:<br>List<AccountInfo> |

Table 4.10: AccountDaoImpl Class Description

## 10. Class name: RequestSignupInfoDao

|               |                            |              |              |            |              |
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Figure 4.16: RequestSignupInfoDao Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name   | Description  | Remark                                  |
|---|--|---|
| getAllRequest()   | Method for getting all request sign up from database                         | Return Type:<br>List<RequestSignupInfo> |
| addNewRequest(requestSignupInfo: RequestSignupInfo)       | Method for adding new request sign up information into database              | Return Type: int                        |
| getRequestByStatus(status: int)                           | Method for getting request sign up information from database by using status | Return Type:<br>List<RequestSignupInfo> |
| updateRequestStatus(id: int, status: int, accountId: int) | Method for updating status of request sign up into database                  |   |

Table 4.11: RequestSignupInfoDao Class Description

## 11. Class name: RequestSignupInfoDaoImpl

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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Figure 4.17: RequestSignupInfoDaoImpl Class

| Field Name  | Description  | Remark                               |
|---|--|--------------------------------------|
| -   | -  | -                                    |
| Method Name   | Description  | Remark                               |
| addNewRequest(requestSignupInfo: RequestSignupInfo)       | Method for adding new request sign up information into database              | Return Type: int                     |
| getAllRequest()   | Method for getting all request sign up from database                         | Return Type: List<RequestSignupInfo> |
| getRequestByStatus(status: int)                           | Method for getting request sign up information from database by using status | Return Type: List<RequestSignupInfo> |
| updateRequestStatus(id: int, status: int, accountId: int) | Method for updating status of request sign up into database                  |                                      |

Table 4.12: RequestSignupInfoDaoImpl Class Description

## 12. Class name: ActivitiesLogDao

|               |                            |              |              |            |              |
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Figure 4.18: ActivitiesLogDao Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                               | Description  | Remark                         |
|---|--|--------------------------------|
| getAllLogs()                              | Method for getting all logs from database            |                                |
| addLogs(activitiesLogs: ActivitiesLogs)   | Method for adding new logs information into database |                                |
| getActivitiesLogsByMethod(method: String) | Method for getting activities logs by using method   | Return Type:<br>ActivitiesLogs |
| getActivitiesLogsByModule(module: String) | Method for getting activities logs by using module   | Return Type:<br>ActivitiesLogs |

Table 4.13: ActivitiesLogDao Class Description

### 13. Class name: ActivitiesLogsDaoImpl

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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Figure 4.19: ActivitiesLogsDaoImpl Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                                  | Description   | Remark                         |
|--|---|--------------------------------|
| addLogs(activitiesLogs:<br>ActivitiesLogs)   | Method for adding new logs<br>information into database |                                |
| getActivitiesLogsByMethod(method:<br>String) | Method for getting activities<br>logs by using method   | Return Type:<br>ActivitiesLogs |
| getActivitiesLogsByModule(module:<br>String) | Method for getting activities<br>logs by using module   | Return Type:<br>ActivitiesLogs |
| getAllLogs()                                 | Method for getting all logs from<br>database            |                                |

Table 4.14: ActivitiesLogsDaoImpl Class Description

#### 14. Class name: PromotionImageDao

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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Figure 4.20: PromotionImageDao Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                              | Description   | Remark                            |
|--|---|-----------------------------------|
| addImage(promotionImage: PromotionImage) | Method for adding new image promotion into database       | Return Type: int                  |
| getImageByPromotionId(id: int)           | Method for getting promotion image by using promotion id  | Return Type: List<PromotionImage> |
| deleteImageByPromotionId(id: int)        | Method for deleting promotion image by using promotion id |                                   |
| deleteImageById(id: int)                 | Method for deleting promotion image by using image id     |                                   |

Table 4.15: PromotionImageDao Class Description

## 15. Class name: PromotionImageDaoImpl

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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Figure 4.21: *PromotionImageDaoImpl Class*

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                              | Description   | Remark                            |
|--|---|-----------------------------------|
| addImage(promotionImage: PromotionImage) | Method for adding new image promotion into database       | Return Type: int                  |
| getImageByPromotionId(id: int)           | Method for getting promotion image by using promotion id  | Return Type: List<PromotionImage> |
| deleteImageByPromotionId(id: int)        | Method for deleting promotion image by using promotion id |                                   |
| deleteImageById(id: int)                 | Method for deleting promotion image by using image id     |                                   |

Table 4.16: *PromotionImageDaoImpl Class Description*

## 16. Class name: PromotionDao

|               |                            |              |              |            |              |
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Figure 4.22: PromotionDao Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                          | Description  | Remark                          |
|--------------------------------------|--|---------------------------------|
| getAllPromotion()                    | Method for getting all promotion information from database                     | Return Type:<br>List<Promotion> |
| getPromotionByName(name: String)     | Method for getting promotion information from database by using promotion name | Return Type: Promotion          |
| getPromotionById(id: int)            | Method for getting promotion information from database by using promotion id   | Return Type: Promotion          |
| addPromotion(promotion: Promotion)   | Method for adding new promotion information into database                      | Return Type: int                |
| editPromotion(promotion: Promotion)  | Method for editing new promotion information into database                     |                                 |
| deletePromotionById(id: int)         | Method for deleting promotion information by using promotion id                |                                 |
| deletePromotionByShopId(shopId: int) | Method for deleting promotion information by using shop id                     |                                 |
| getPromotionByShopId(id: int)        | Method for getting promotion information by using shop id                      | Return Type:<br>list<Promotion> |

Table 4.17: PromotionDao Class Description

## 17. Class name: PromotionDaoImpl

|               |                            |              |              |            |              |
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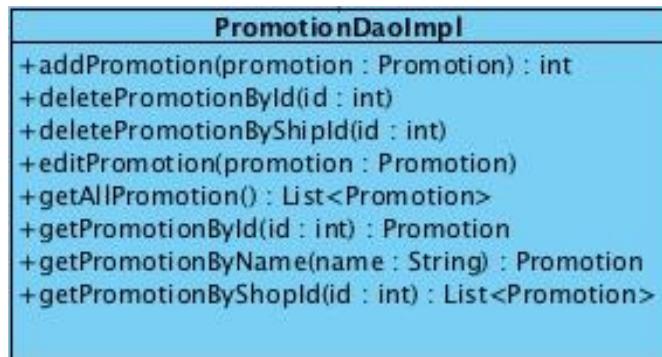


Figure 4.23: PromotionDaoImpl Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                          | Description  | Remark                       |
|--------------------------------------|--|------------------------------|
| addPromotion(promotion: Promotion)   | Method for adding new promotion information into database                      | Return Type: int             |
| deletePromotionById(id: int)         | Method for deleting promotion information by using promotion id                |                              |
| deletePromotionByShopId(shopId: int) | Method for deleting promotion information by using shop id                     |                              |
| editPromotion(promotion: Promotion)  | Method for editing new promotion information into database                     |                              |
| getAllPromotion()                    | Method for getting all promotion information from database                     | Return Type: List<Promotion> |
| getPromotionByName(name: String)     | Method for getting promotion information from database by using promotion name | Return Type: Promotion       |
| getPromotionById(id: int)            | Method for getting promotion information from database by using promotion id   | Return Type: Promotion       |
| getPromotionByShopId(id: int)        | Method for getting promotion information by using shop id                      | Return Type: list<Promotion> |

Table 4.18: PromotionDaoImpl Class Description

## 18. Class name: ShopImageDao

|               |                            |              |              |            |              |
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Figure 4.24: *ShopImageDao Class*

| Field Name                                | Description   | Remark                 |
|---|---|------------------------|
| -   | -   | -                      |
| Method Name                               | Description   | Remark                 |
| <code>addImage(image: ShopImage)</code>   | Method for adding new shop image into database                  | Return Type: int       |
| <code>deleteImageByShopId(id: int)</code> | Method for deleting shop image by using shop id                 |                        |
| <code>getImageByAccountId(id: int)</code> | Method for getting shop image from database by using account id | Return Type: ShopImage |
| <code>getImageById(id: int)</code>        | Method for getting shop image from database by using image id   | Return Type: ShopImage |
| <code>deleteImageById(id: int)</code>     | Method for deleting shop image by using image id                |                        |

Table 4.19: *ShopImageDao Class Description*

## 19. Class name: ShopImageDaoImpl

|               |                            |              |              |            |              |
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Figure 4.25: *ShopImageDaoImpl* Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                  | Description   | Remark                 |
|------------------------------|---|------------------------|
| addImage(image: ShopImage)   | Method for adding new shop image into database                  | Return Type: int       |
| deleteImageById(id: int)     | Method for deleting shop image by using image id                |                        |
| deleteImageByShopId(id: int) | Method for deleting shop image by using shop id                 |                        |
| getImageByAccountId(id: int) | Method for getting shop image from database by using account id | Return Type: ShopImage |
| getImageById(id: int)        | Method for getting shop image from database by using image id   | Return Type: ShopImage |

Table 4.20: *ShopImageDaoImpl* Class Description

## 20. Class name: ShopInformationDao

|               |                            |              |              |            |              |
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Figure 4.26: ShopInformationDao Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name   | Description  | Remark                       |
|---|--|------------------------------|
| getAllShopInformation()                               | Method for getting all shop information from database              | List<ShopInformation>        |
| deleteShopInformation(id: int)                        | Method for deleting shop information by using shop id              |                              |
| editShopInformation(shopInformation: ShopInformation) | Method for editing shop information                                |                              |
| addShopInformation(shopInformation: ShopInformation)  | Method for adding new shop information into database               | Return Type: int             |
| getShopInformationById(id: int)                       | Method for getting shop information from database by using shop id | Return Type: ShopInformation |

Table 4.21: ShopInformationDao Class Description

## 21. Class name: ShopInformationDaoImpl

|               |                            |              |              |            |              |
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Figure 4.27: *ShopInformationDaoImpl* Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name   | Description  | Remark                       |
|---|--|------------------------------|
| addShopInformation(shopInformation: ShopInformation)  | Method for adding new shop information into database               | Return Type: int             |
| deleteShopInformation(id: int)                        | Method for deleting shop information by using shop id              |                              |
| editShopInformation(shopInformation: ShopInformation) | Method for editing shop information                                |                              |
| getAllShopInformation()                               | Method for getting all shop information from database              | List<ShopInformation>        |
| getShopInformationById(id: int)                       | Method for getting shop information from database by using shop id | Return Type: ShopInformation |

Table 4.22: *ShopInformationDaoImpl* Class Description

## 22. Class name: AccountController

|               |                            |              |              |            |              |
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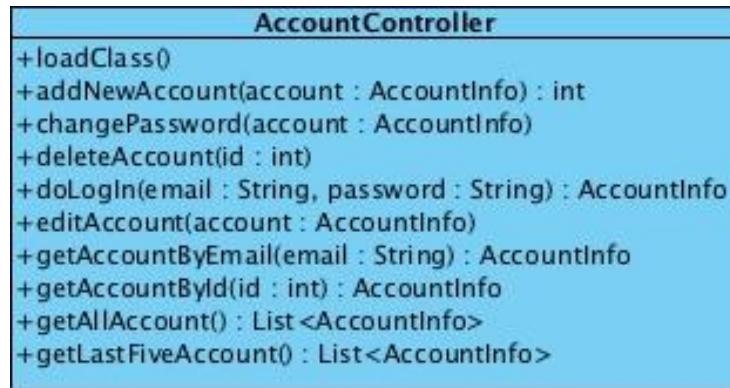


Figure 4.28: AccountController Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                              | Description   | Remark                         |
|--|---|--------------------------------|
| loadClass()                              | Method for initialize class                           |                                |
| addNewAccount(account: AccountInfo)      | Method for adding new account into database           | Return Type: int               |
| changePassword(account: AccountInfo)     | Method for changing password                          |                                |
| deleteAccount(id: int)                   | Method for deleting account from database             |                                |
| doLogin(email: String, password: String) | Method for logging in to system                       | Return Type: AccountInfo       |
| editAccount(account: AccountInfo)        | Method for editing account information                |                                |
| getAccountByEmail(email: String)         | Method for getting account information by using email | Return Type: AccountInfo       |
| getAccountById(id: int)                  | Method for getting account information by using id    | Return Type: AccountInfo       |
| getAllAccount ()                         | Method for getting all account information            | Return Type: List<AccountInfo> |
| getLastFiveAccount ()                    | Method for getting latest five account information    | Return Type: List<AccountInfo> |

Table 4.23: AccountController Class Description

### 23. Class name: ShopImageController

|               |                            |              |              |            |              |
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Figure 4.29: ShopImageController Class

| Field Name                   | Description   | Remark                 |
|------------------------------|---|------------------------|
| Method Name                  | Description   | Remark                 |
| -                            | -   | -                      |
| loadClass()                  | Method for initialize class                                   |                        |
| addImage(image: ShopImage)   | Method for adding new shop image into database                | Return Type: int       |
| deleteImageById(id: int)     | Method for deleting shop image from database by using id      |                        |
| deleteImageByShopId(id: int) | Method for deleting shop image from database by using shop id |                        |
| getImageByAccountId(id: int) | Method for getting shop image by using account id             | Return Type: ShopImage |
| getImageById(id: int)        | Method for getting shop image by using id                     | Return Type: ShopImage |

Table 4.24: ShopImageController Class Description

## 24. Class name: PromotionImageController

|               |                            |              |              |            |              |
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Figure 4.30: PromotionImageController Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                              | Description   | Remark                            |
|--|---|-----------------------------------|
| loadClass()                              | Method for initialize class   |                                   |
| addImage(promotionImage: PromotionImage) | Method for adding new promotion image into database                     | Return Type: int                  |
| deleteImageById(id: int)                 | Method for deleting promotion image from database by using id           |                                   |
| deleteImageByPromotionId(id: int)        | Method for deleting promotion image from database by using promotion id |                                   |
| getImageByPromotionId(id: int)           | Method for getting promotion image by using promotion id                | Return Type: List<PromotionImage> |

Table 4.25: PromotionImageController Class Description

## 25. Class name: PromotionController

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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Figure 4.31: PromotionController Class

| Field Name | Description | Remark |
|------------|-------------|--------|
| -          | -           | -      |

| Method Name                                  | Description  | Remark                       |
|--|--|------------------------------|
| loadClass()                                  | Method for initialize class  |                              |
| addPromotion(promotionImage: PromotionImage) | Method for adding new promotion into database                                  | Return Type: int             |
| deletePromotionById(id: int)                 | Method for deleting promotion from database by using id                        |                              |
| deletePromotionByShopId(id: int)             | Method for deleting promotion from database by using shop id                   |                              |
| editPromotion(promotion: Promotion)          | Method for editing promotion information                                       |                              |
| getAllPromotion()                            | Method for getting all promotion   | Return Type: List<Promotion> |
| getPromotionById(id: int)                    | Method for getting promotion information from database by using promotion id   | Return Type: Promotion       |
| getPromotionByName(name: String)             | Method for getting promotion information from database by using promotion name | Return Type: Promotion       |
| getPromotionByShopId(id: int)                | Method for getting promotion information from database by using shop id        | Return Type: Promotion       |

Table 4.26: PromotionController Class Description

## 26. Class name: ActivitiesLogsController

|               |                            |              |              |            |              |
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| ActivitiesLogsController                                     |
|--|
| +loadClass()   |
| +addLogs(activitiesLogs : ActivitiesLogs) : int              |
| +getActivitiesLogsByMethod(method : String) : ActivitiesLogs |
| +getActivitiesLogsByModule(module : String) : ActivitiesLogs |
| +getAllLogs()  |

Figure 4.32: ActivitiesLogsController Class

| Field Name                                | Description   | Remark                            |
|---|---|-----------------------------------|
| Method Name                               | Description   | Remark                            |
| -   | -   | -                                 |
| loadClass()                               | Method for initialize class   |                                   |
| addLogs(activitiesLogs: ActivitiesLogs)   | Method for adding new activities logs into database                               | Return Type: int                  |
| getActivitiesLogsByMethod(method: String) | Method for getting activities logs information from database by using method name | Return Type: ActivitiesLogs       |
| getActivitiesLogsByModule(module: String) | Method for getting activities logs information from database by using module name | Return Type: ActivitiesLogs       |
| getAllLogs()                              | Method for getting all activities logs  | Return Type: List<ActivitiesLogs> |

Table 4.27: ActivitiesLogsController Class Description

27. Class name: RequestSignupController

|               |                            |              |              |            |              |
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| RequestSignupController                                       |
|---|
| +loadClass()  |
| +addNewRequest(requestSignupInfo : RequestSignupInfo) : int   |
| +getAllRequest() : List<RequestSignupInfo>                    |
| +getRequestByStatus(status : int) : List <RequestSignupInfo>  |
| +updateRequestStatus(id : int, status : int, accountId : int) |

Figure 4.33: RequestSignupController Class

| Field Name  | Description  | Remark                                  |
|---|--|---|
| Method Name   | Description  | Remark                                  |
| -   | -  | -                                       |
| loadClass()   | Method for initialize class  |   |
| addNewRequest(requestSignupInfo: RequestSignupInfo)       | Method for adding new request sign up information into database              | Return Type: int                        |
| getAllRequest()   | Method for getting all request sign up information from database             | Return Type:<br>List<RequestSignupInfo> |
| getRequestBystatus(status: int)                           | Method for getting request sign up information from database by using status | Return Type:<br>List<RequestSignupInfo> |
| updateRequestStatus(id: int, status: int, accountId: int) | Method for getting update status of request sign up                          |   |

Table 4.28: RequestSignupController Class Description

## 28. Class name: ShopInformationController

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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| ShopInformationController                                    |
|--|
| +loadClass()   |
| +addShopInformation(shopInformation : ShopInformation) : int |
| +deleteShopInformation(id : int)                             |
| +editShopInformation(shopInformation : ShopInformation)      |
| +getAllShopInformation() : List<ShopInformation>             |
| +getShopInformationById(id : int) : ShopInformation          |

Figure 4.34: ShopInformationController Class

| Field Name  | Description  | Remark                                |
|---|--|---------------------------------------|
| Method Name   | Description  | Remark                                |
| -   | -  | -                                     |
| loadClass()   | Method for initialize class  |                                       |
| addShopInformation(shopInformation: ShopInformation)  | Method for adding new shop information into database               | Return Type: int                      |
| deleteShopInformation(id: int)                        | Method for deleting shop information from database                 |                                       |
| editShopInformation(shopInformation: ShopInformation) | Method for editing shop information                                |                                       |
| getAllShopInformation()                               | Method for getting all shop information from database              | Return Type:<br>List<ShopInformation> |
| getShopInformationById(id: int)                       | Method for getting shop information from database by using shop id | Return Type:<br>ShopInformation       |

Table 4.29: ShopInformationController Class Description

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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## 3.2 ER-Diagram

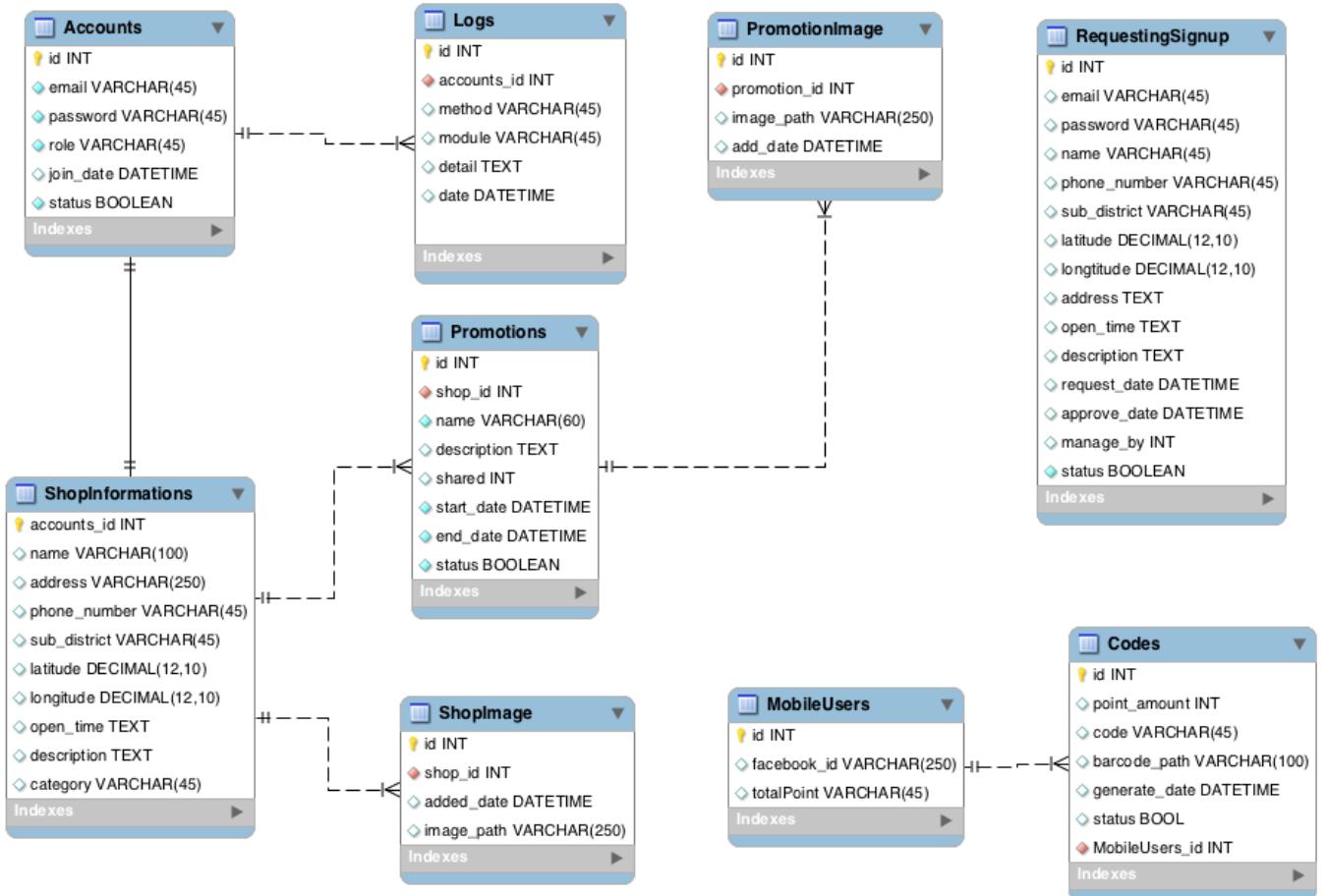


Figure 4.35: ER - Diagram

|               |                            |              |              |            |              |
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### 3.2.1 Accounts Table

| Column Name | Data Type    | Description | Remark |
|-------------|--------------|-------------|--------|
| id          | int          | Account id  | PK     |
| email       | VARCHAR (45) | Email       |        |
| password    | VARCHAR (45) | Password    |        |
| role        | VARCHAR (45) | Role        |        |
| join_date   | DATETIME     | Join date   |        |
| status      | BOOLEAN      | Status      |        |

Table 4.30: Accounts Table

### 3.2.2 ShopInformations Table

| Column Name  | Data Type       | Description       | Remark |
|--------------|-----------------|-------------------|--------|
| account_id   | int             | Account id        | PK     |
| name         | VARCHAR (100)   | Shop name         |        |
| address      | VARCHAR (250)   | Shop address      |        |
| phone_number | VARCHAR (45)    | Shop phone number |        |
| sub_district | VARCHAR (45)    | Shop sub district |        |
| latitude     | DECIMAL (12,10) | Shop latitude     |        |
| longitude    | DECIMAL (12,10) | Shop longitude    |        |
| open_time    | TEXT            | Shop open time    |        |
| description  | TEXT            | Shop description  |        |
| category     | VARCHAR (45)    | Shop category     |        |

Table 4.31: ShopInformations Table

### 3.2.3 Logs Table

| Column Name | Data Type    | Description      | Remark      |
|-------------|--------------|------------------|-------------|
| id          | int          | Logs id          | Primary Key |
| account_id  | int          | Account id       | Foreign Key |
| method      | VARCHAR (45) | Logs method name |             |
| module      | VARCHAR (45) | Logs module name |             |
| detail      | TEXT         | Logs detail      |             |
| date        | DATETIME     | Logs date        |             |

Table 4.32: Logs Table

### 3.2.4 Promotions Table

| Column Name | Data Type    | Description                  | Remark      |
|-------------|--------------|------------------------------|-------------|
| id          | int          | Promotion id                 | Primary Key |
| shop_id     | int          | Shop id                      | Foreign Key |
| name        | VARCHAR (60) | Promotion name               |             |
| description | TEXT         | Promotion description        |             |
| shared      | int          | Amount of promotion shared   |             |
| start_date  | DATETIME     | Start date of this promotion |             |
| end_date    | DATETIME     | End date of this promotion   |             |
| status      | BOOLEAN      | Promotion status             |             |

Table 4.33: Promotions Table

|               |                            |              |              |            |              |
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### 3.2.5 ShopImage Table

| Column Name | Data Type     | Description       | Remark      |
|-------------|---------------|-------------------|-------------|
| id          | int           | Image id          | Primary Key |
| shop_id     | int           | Shop id           | Foreign Key |
| add_date    | DATETIME      | Add date of image |             |
| image_path  | VARCHAR (250) | Shop image path   |             |

Table 4.34: ShopImage Table

### 3.2.6 PromotionImage Table

| Column Name  | Data Type     | Description       | Remark      |
|--------------|---------------|-------------------|-------------|
| id           | int           | Image id          | Primary Key |
| promotion_id | int           | Promotion id      | Foreign Key |
| add_date     | DATETIME      | Add date of image |             |
| image_path   | VARCHAR (250) | Image path        |             |

Table 4.35: PromotionImage Table

### 3.2.7 MobileUsers Table

| Column Name | Data Type     | Description      | Remark      |
|-------------|---------------|------------------|-------------|
| id          | int           | User id          | Primary Key |
| facebook_id | VARCHAR (250) | User facebook id |             |
| total_point | VARCHAR (45)  | User total point |             |

Table 4.36: MobileUsers Table

### 3.2.8 RequestingSignup Table

| Column Name  | Data Type       | Description                  | Remark      |
|--------------|-----------------|------------------------------|-------------|
| id           | int             | Request id                   | Primary Key |
| email        | VARCHAR (45)    | Email                        |             |
| password     | VARCHAR (45)    | Password                     |             |
| name         | VARCHAR (100)   | Request sign up name         |             |
| phone_number | VARCHAR (45)    | Request sign up phone number |             |
| sub_district | VARCHAR (45)    | Request sign up sub district |             |
| latitude     | DECIMAL (12,10) | Request sign up latitude     |             |
| longitude    | DECIMAL (12,10) | Request sign up longitude    |             |
| address      | TEXT            | Request sign up address      |             |
| open_time    | TEXT            | Request sign up open time    |             |
| description  | TEXT            | Request sign up description  |             |
| request_date | DATETIME        | Request sign up request date |             |
| approve_date | DATETIME        | Request sign up approve date |             |
| manage_by    | int             | Request sign up manager      |             |
| status       | BOOLEAN         | Request sign up status       |             |

Table 4.37: RequestingSignup Table

### 3.2.9 Codes Table

| Column Name   | Data Type                  | Description  |              | Remark                  |
|---------------|----------------------------|--------------|--------------|-------------------------|
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|                       |               |                    |             |
|-----------------------|---------------|--------------------|-------------|
| <b>id</b>             | int           | Code id            | Primary Key |
| <b>point_amount</b>   | int           | Code point amount  |             |
| <b>code</b>           | VARCHAR (45)  | Code               |             |
| <b>barcode_path</b>   | VARCHAR (100) | Barcode path       |             |
| <b>generate_date</b>  | DATETIME      | Code generate date |             |
| <b>status</b>         | BOOLEAN       | Code status        |             |
| <b>MobileUsers_id</b> | int           | Mobile user id     | Foreign Key |

Table 4.38: Codes Table

|               |                            |              |              |            |              |
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### 3.3 Sequence Diagram

#### 3.3.1 URS-01: Admin can login to web server

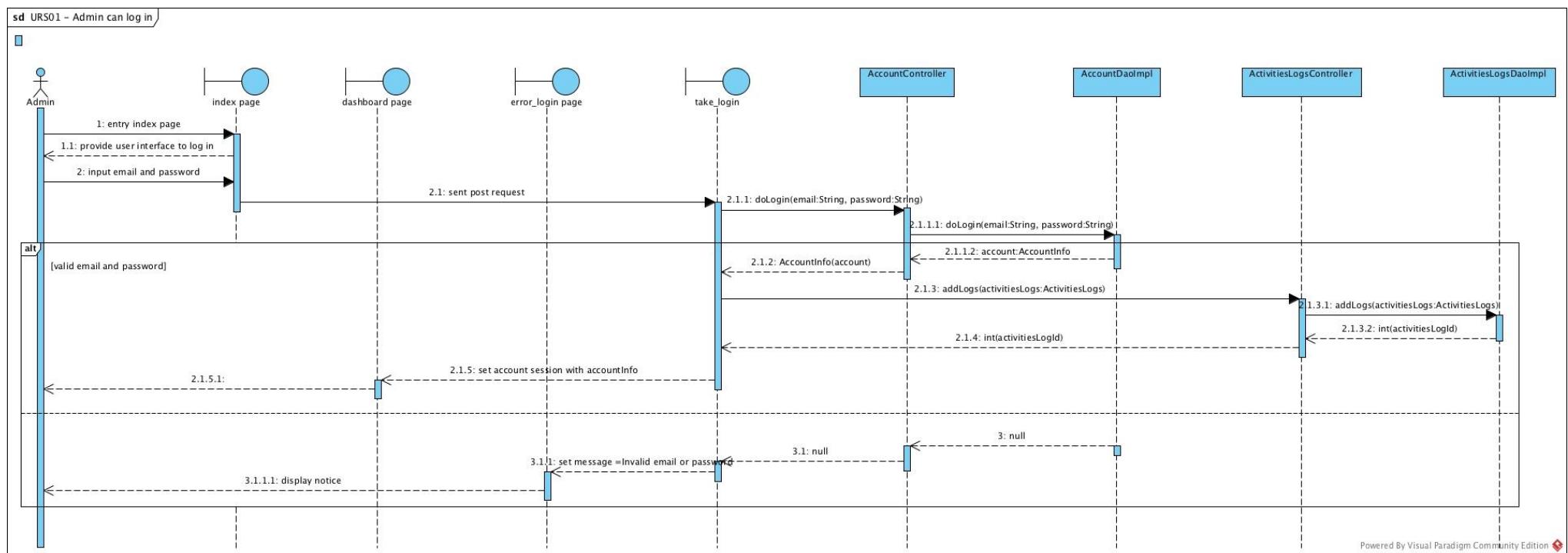


Figure 4.36: SD-01 Admin can login to web server sequence diagram

**SD-01** Admin can login to web server sequence diagram

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### 3.3.2 URS-02: Admin can logout from web server

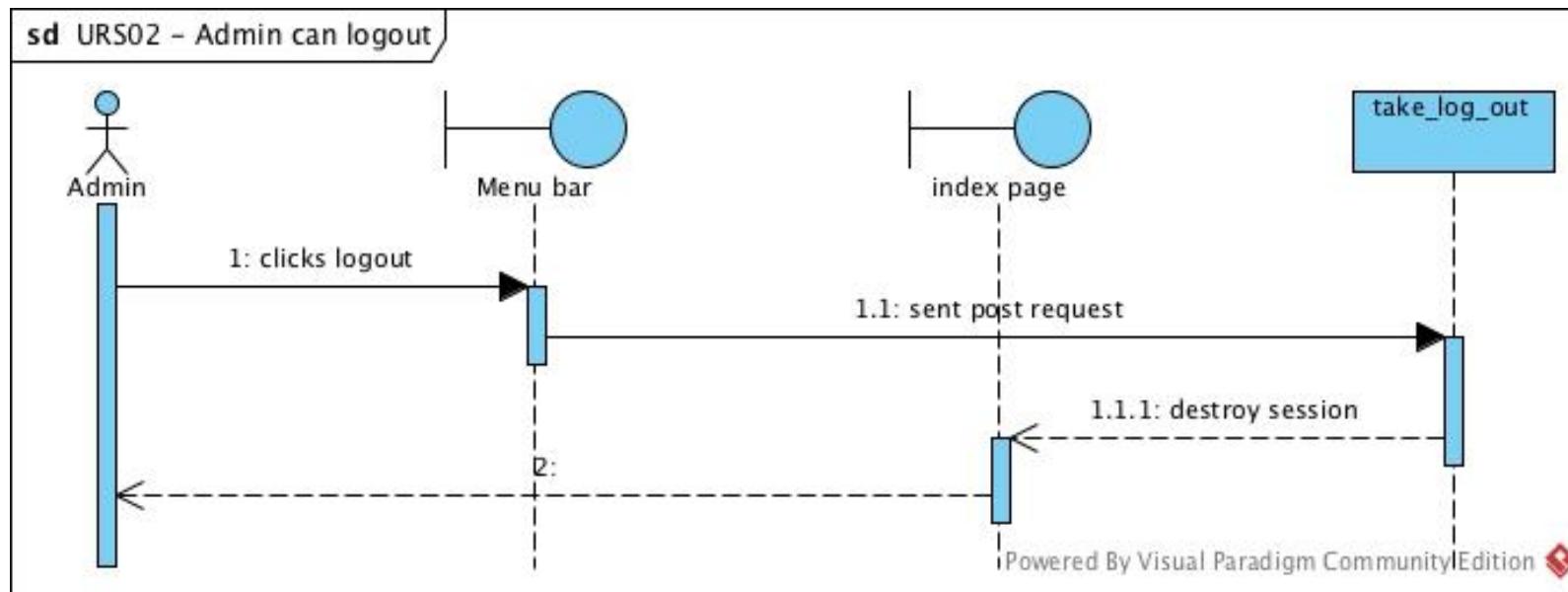


Figure 4.37: SD-02 Admin can logout from web server sequence diagram

**SD-02** Admin can logout from web server sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.3 URS-03: Admin can add shop owner account

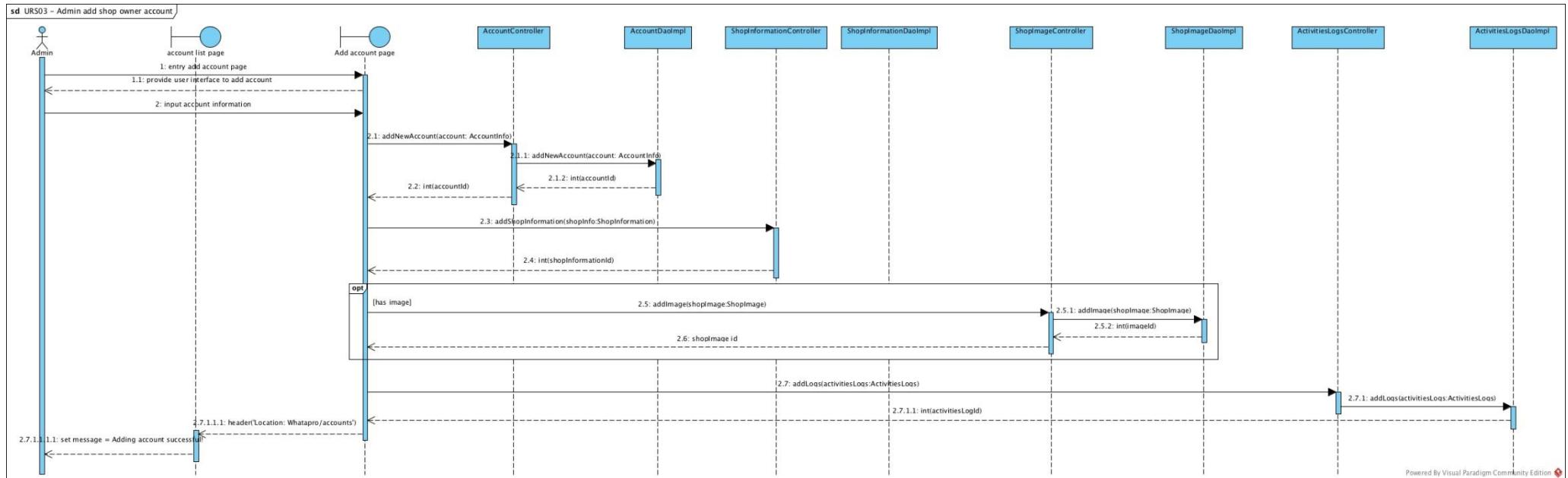


Figure 4.38: SD-03 Admin can add shop owner account sequence diagram

**SD-03** Admin can add shop owner account sequence diagram

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|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.4 URS-04: Admin can edit shop owner account

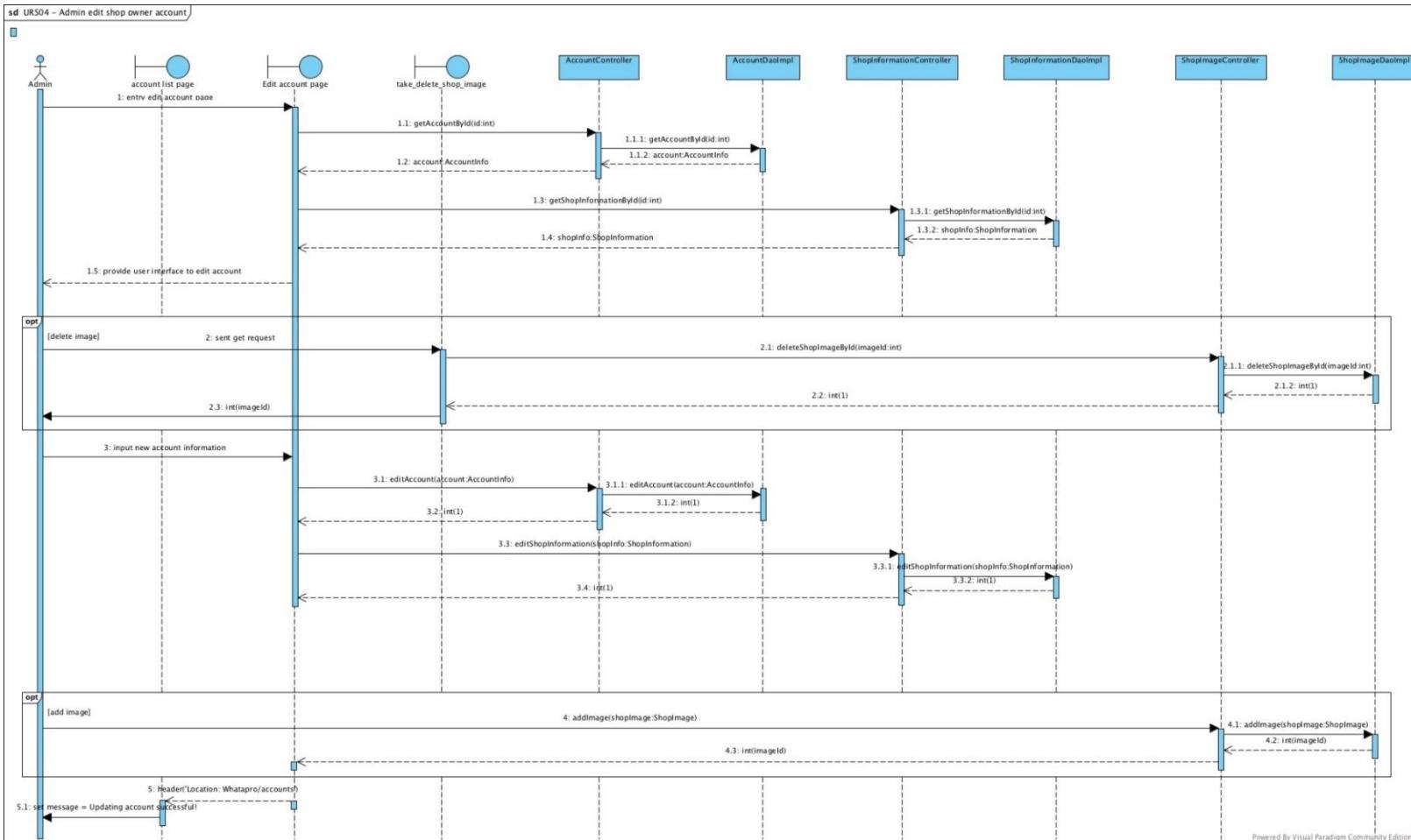


Figure 4.39: SD-04 Admin can edit shop owner account sequence diagram

### SD-04 Admin can edit shop owner account sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.5 URS-05: Admin can delete shop owner account

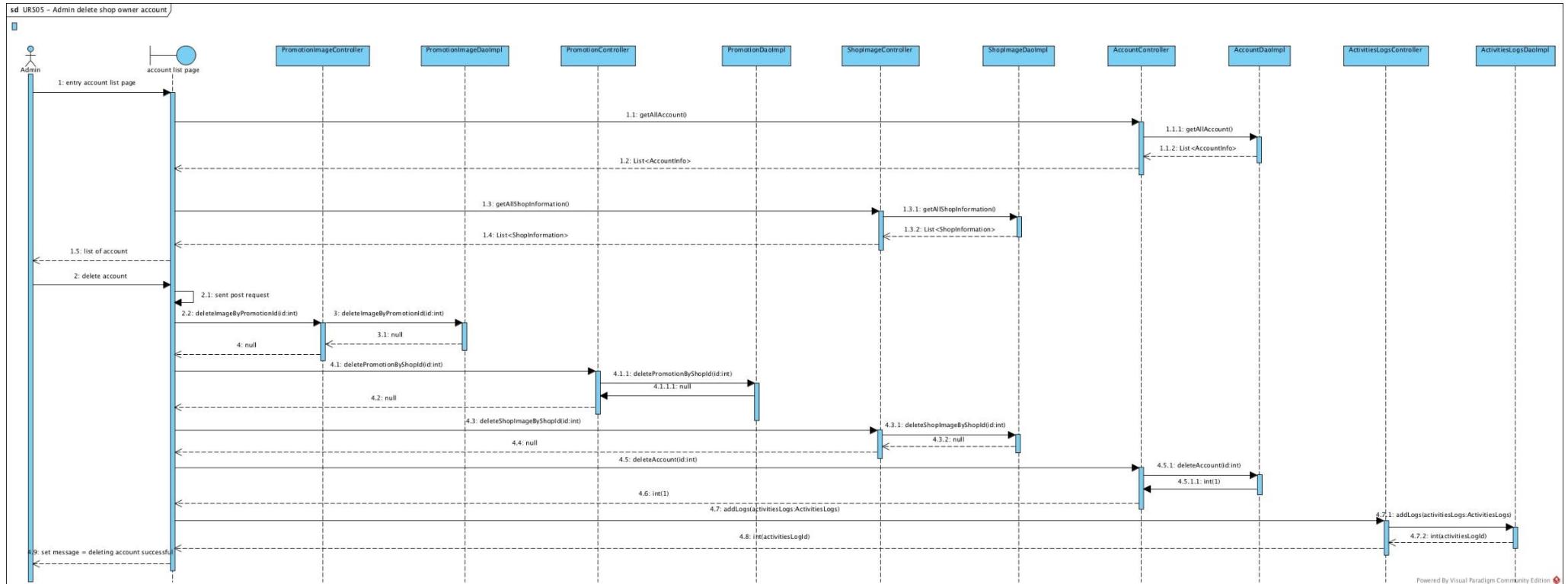


Figure 4.40: SD-05 Admin can delete shop owner account sequence diagram

### SD-05 Admin can delete shop owner account sequence diagram

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| Document Type | Software Design Document   | Release Date | 29 July 2015 | Print Date | 29 July 2015 |

### 3.3.6 URS-06: Admin can add promotion to shop owner

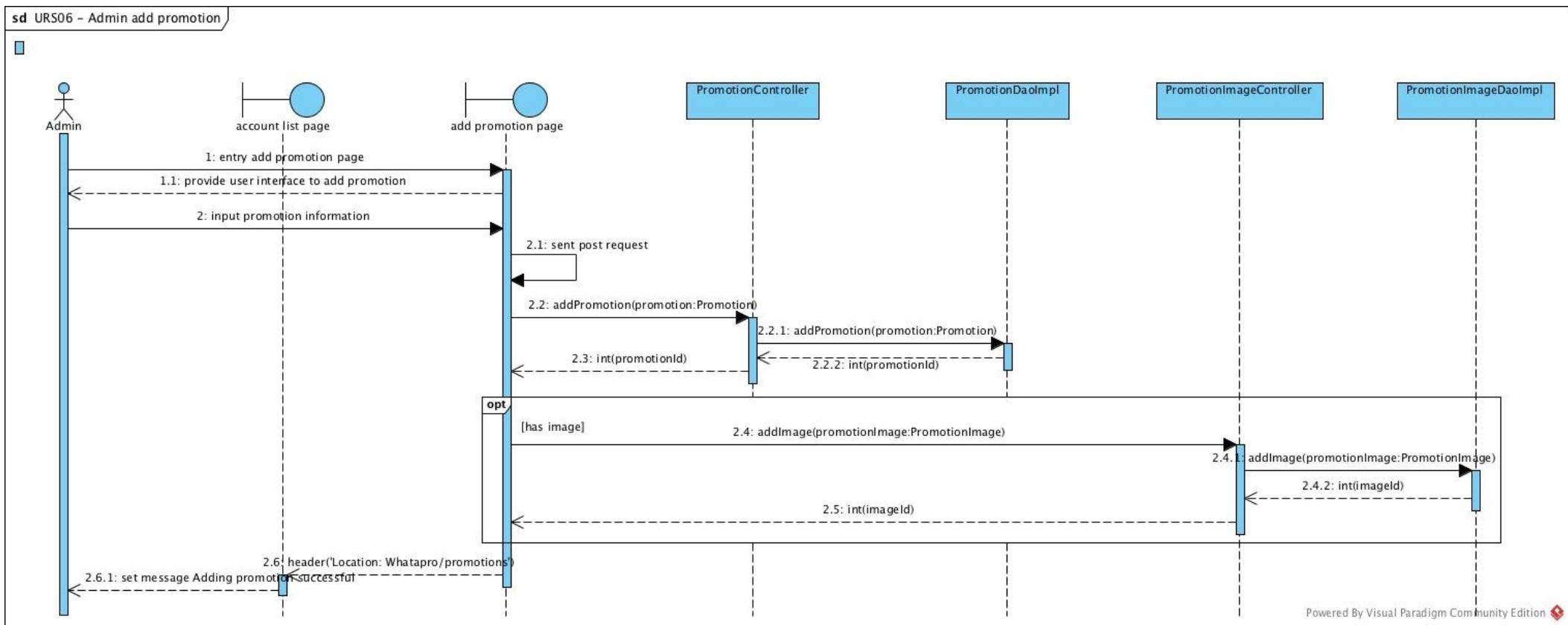


Figure 4.41: SD-06 Admin can add promotion to shop owner sequence diagram

### SD-06 Admin can add promotion to shop owner sequence diagram

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### 3.3.7 URS-07: Admin can edit shop owner promotion

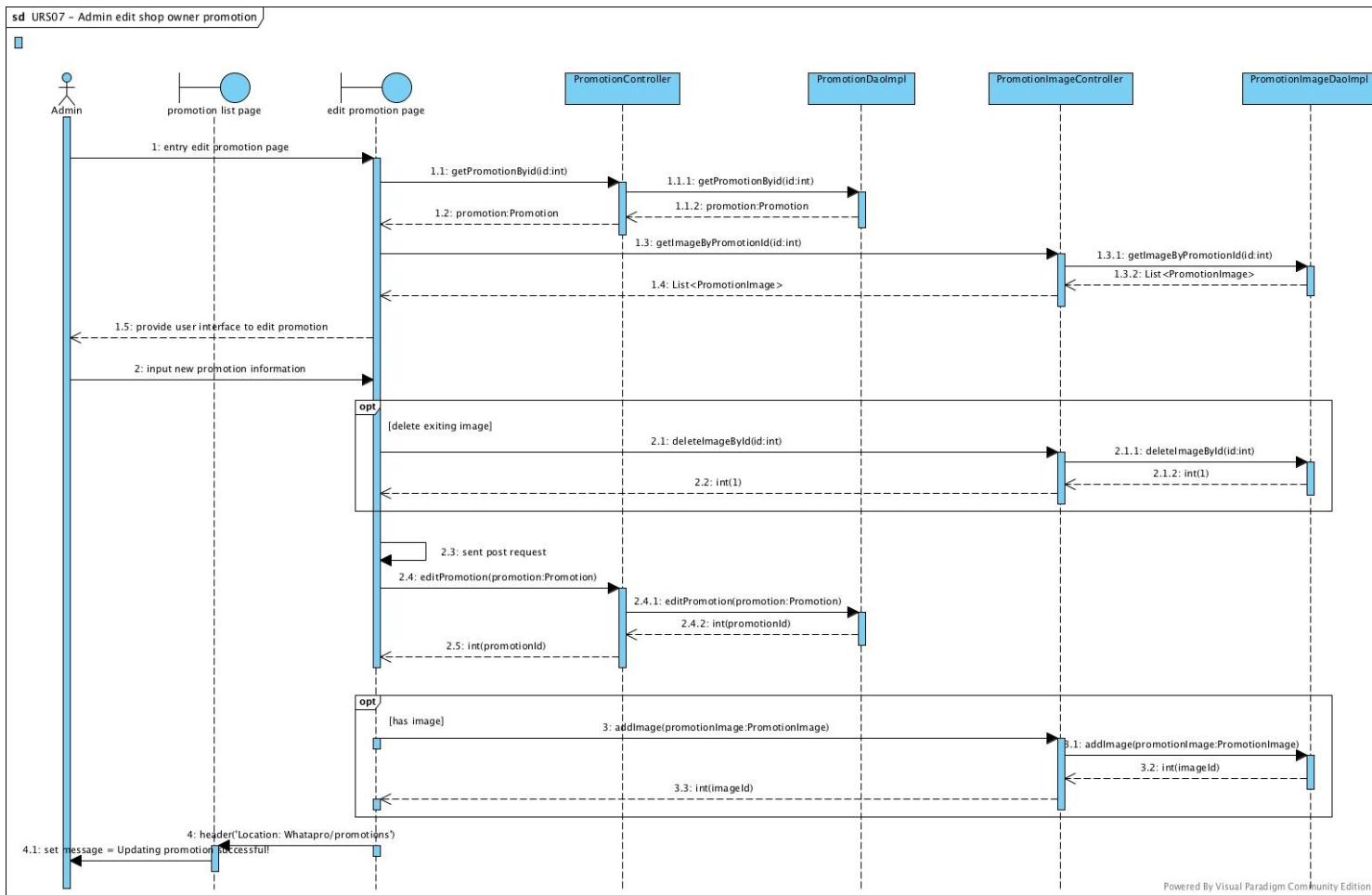


Figure 4. 42: SD-07 Admin can edit shop owner promotion sequence diagram

**SD-07** Admin can edit shop owner promotion sequence diagram

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### 3.3.8 URS-08: Admin can delete shop owner promotion

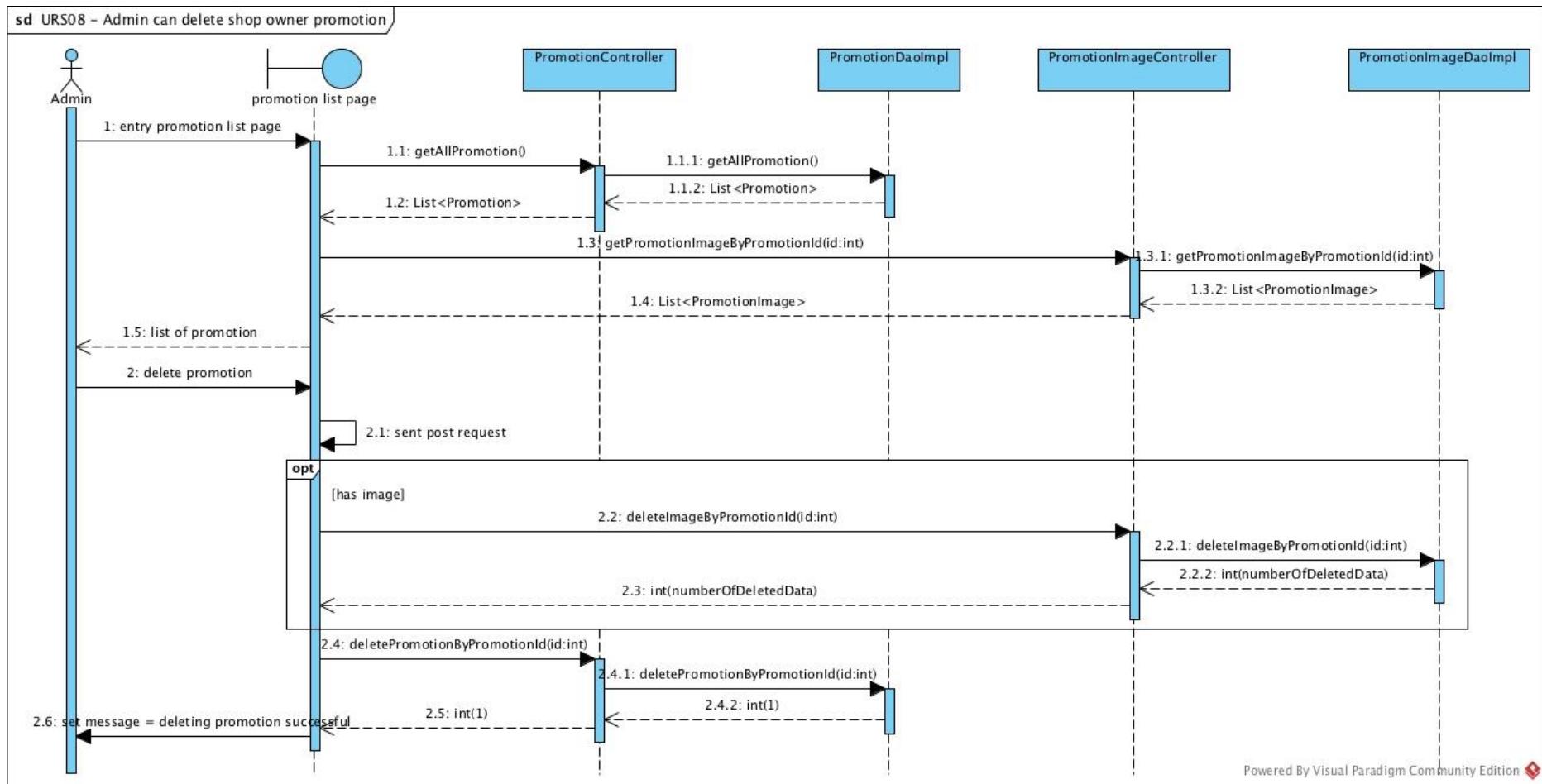


Figure 4.43: SD-08 Admin can delete shop owner promotion sequence diagram

#### SD-08 Admin can delete shop owner promotion sequence diagram

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### 3.3.9 URS-09: Admin can accept register request

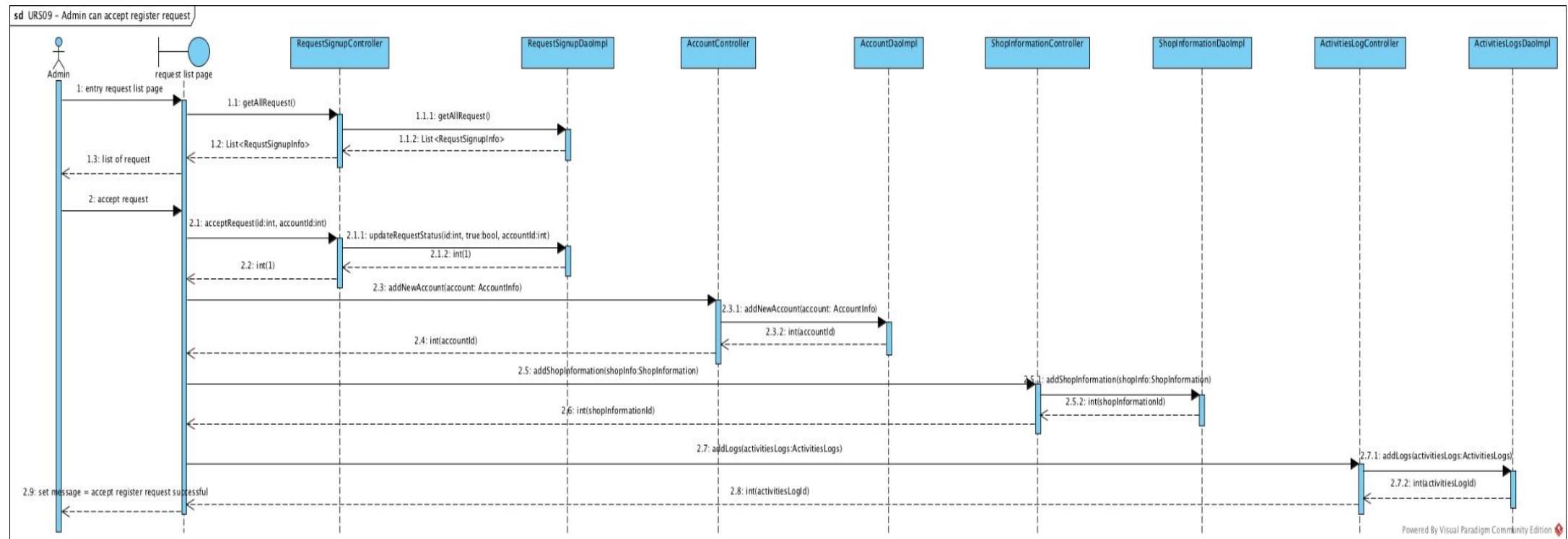


Figure 4.44: SD-09 Admin can accept register request sequence diagram

### SD-09 Admin can accept register request sequence diagram

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### 3.3.10 URS-10: Admin can reject register request

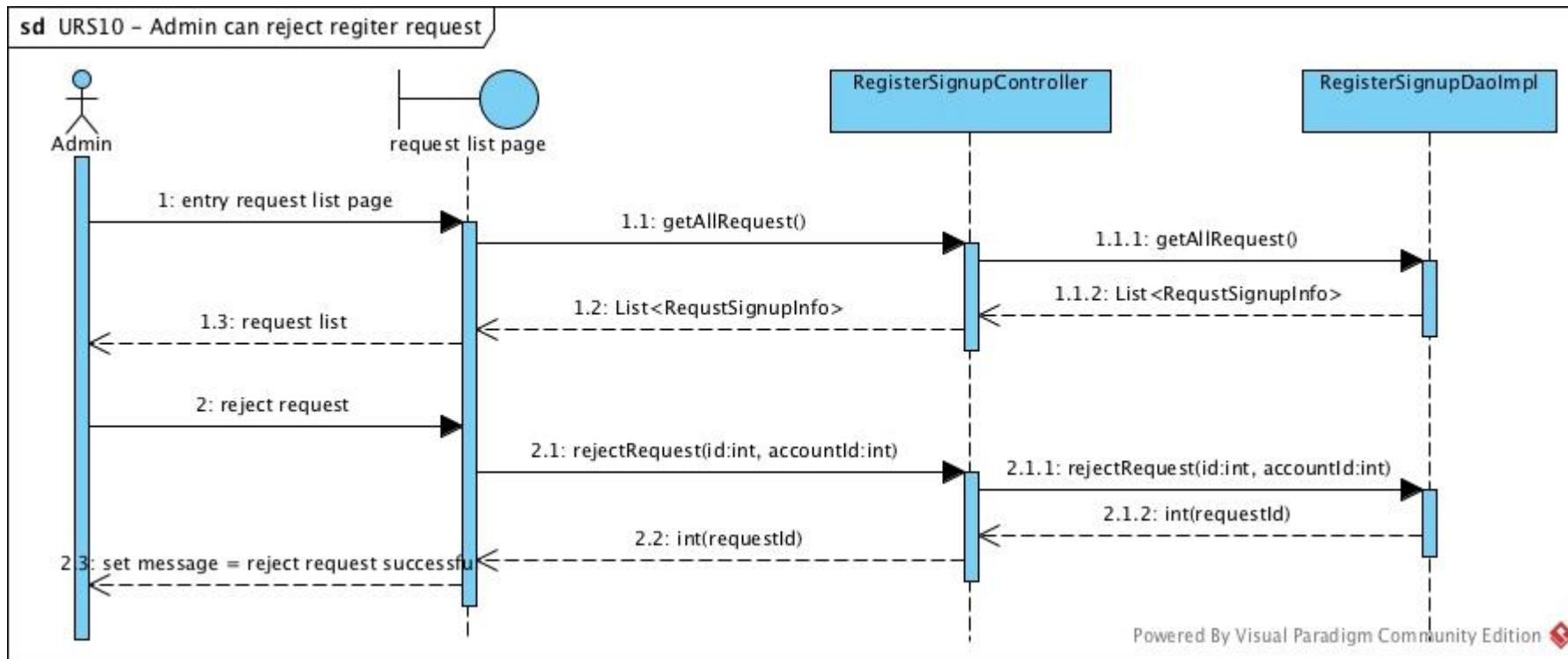


Figure 4.45: SD-10 Admin can reject register request sequence diagram

### SD-10 Admin can reject register request sequence diagram

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### 3.3.11 URS-11: Admin can view account list

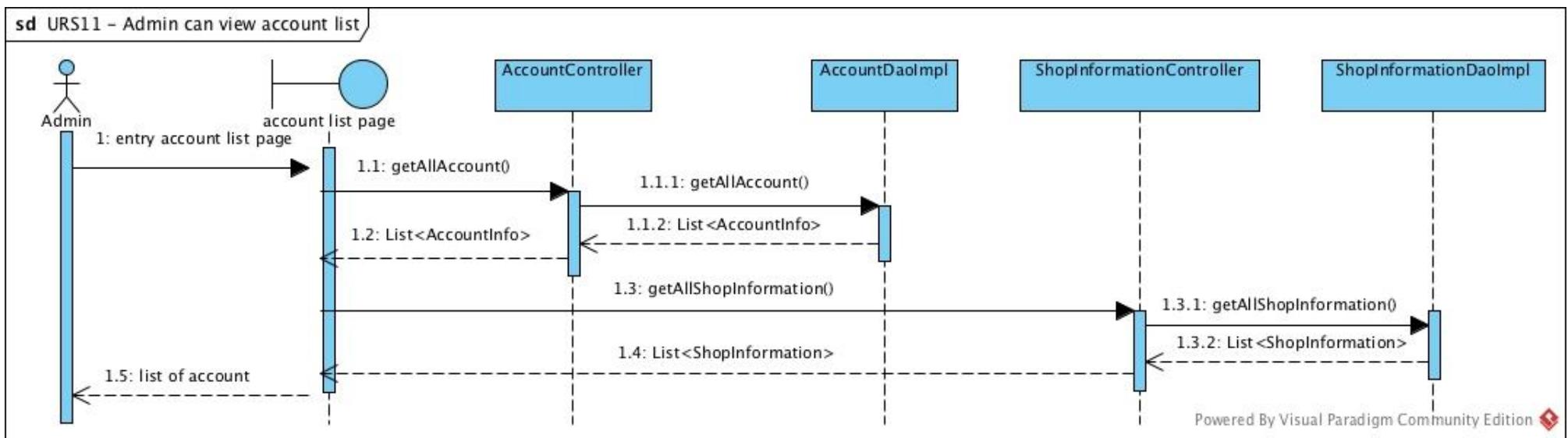


Figure 4.46: SD-11 Admin can view account list sequence diagram

**SD-11 Admin can view account list sequence diagram**

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.12 URS-12: Admin can view account information

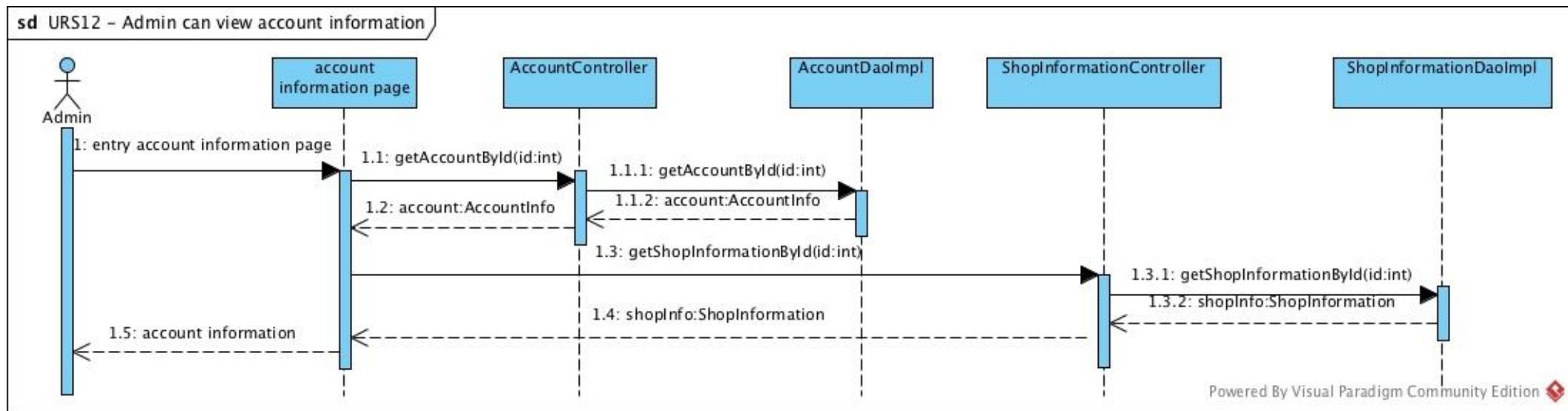


Figure 4.47: SD-12 Admin can view account information sequence diagram

**SD-12** Admin can view account information sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.13 URS-13: Admin can view promotion list

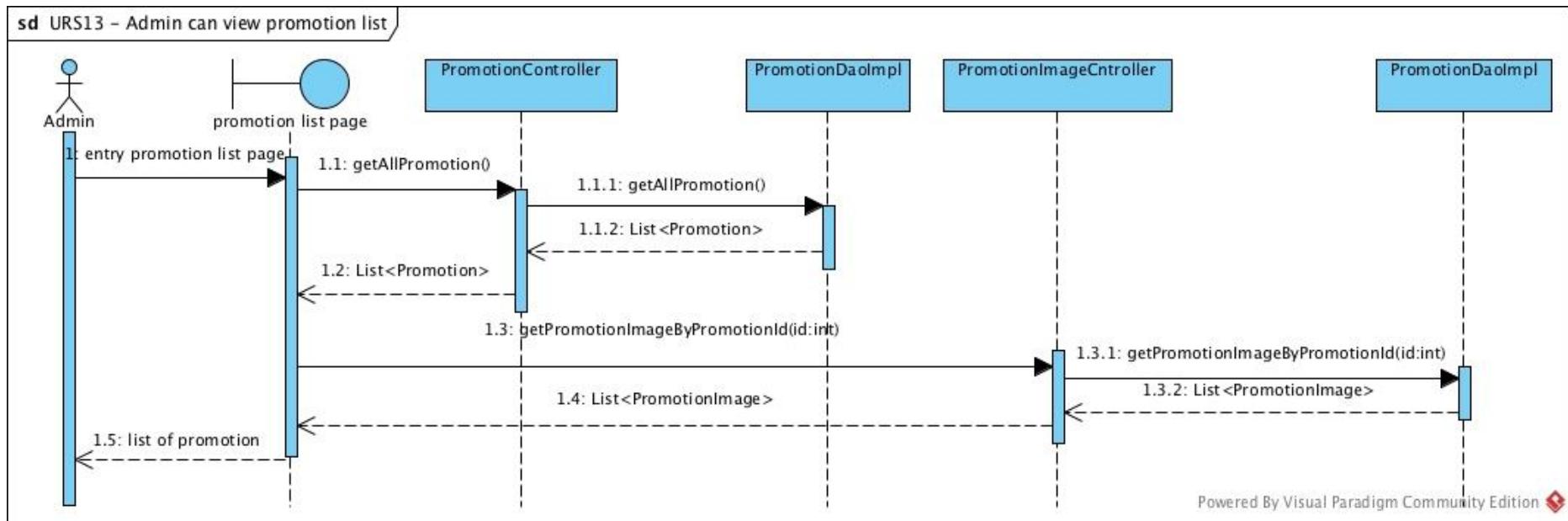


Figure 4.48: SD-13 Admin can view promotion list sequence diagram

**SD-13 Admin can view promotion list sequence diagram**

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.14 URS-14: Admin can view promotion information

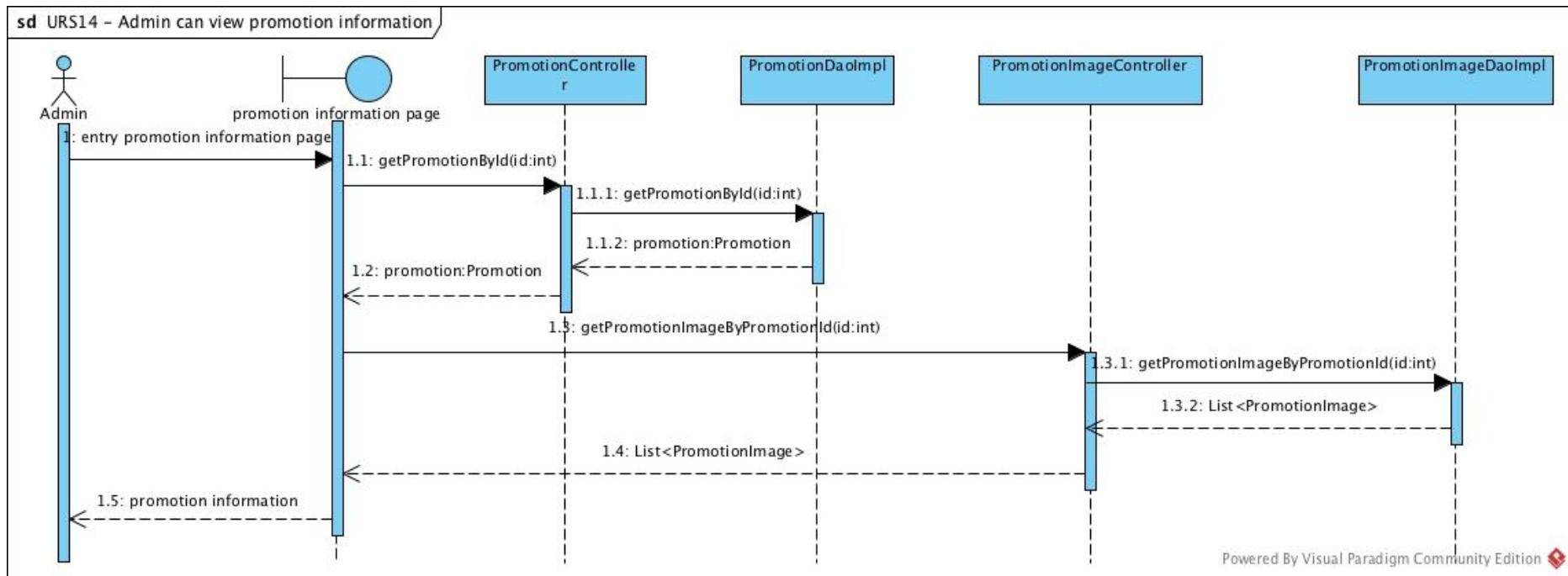


Figure 4.49: SD-14 Admin can view promotion information sequence diagram

**SD-14** Admin can view promotion information sequence diagram

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### 3.3.15 URS-15: Admin can view user logs

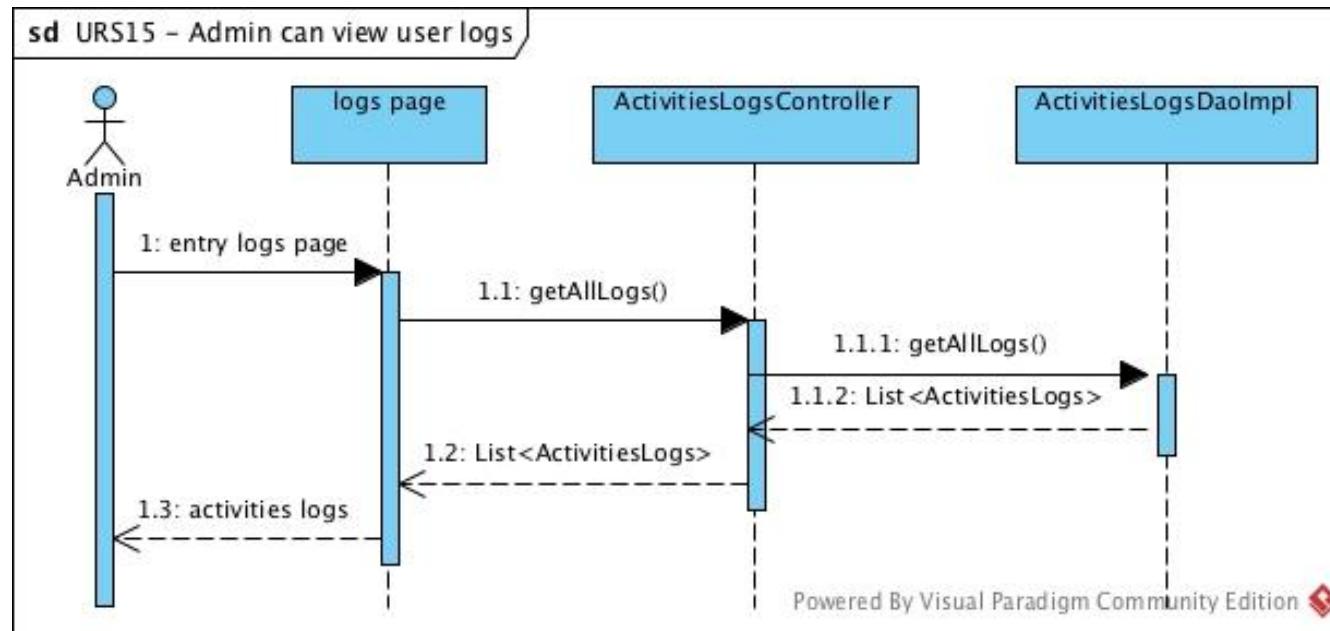


Figure 4.50: SD-15 Admin can view user logs sequence diagram

**SD-15** Admin can view user logs sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.16 URS-16: Admin can view redeem code list

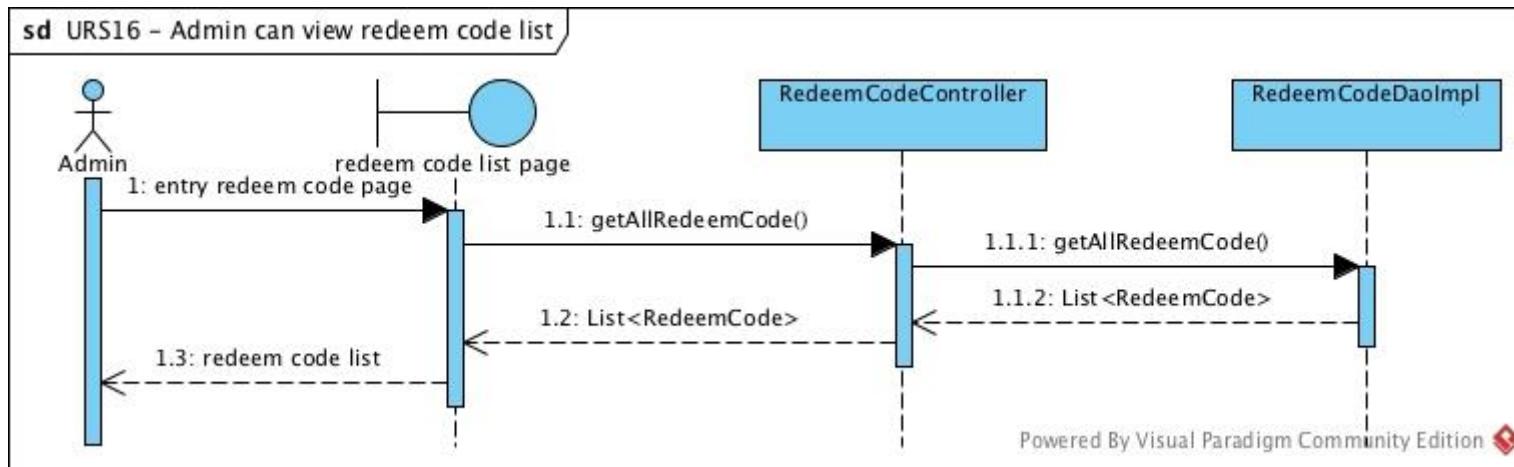


Figure 4.51: SD-16 Admin can view redeem code list sequence diagram

**SD-16** Admin can view redeem code list sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.17 URS-17: Admin can view redeem code information

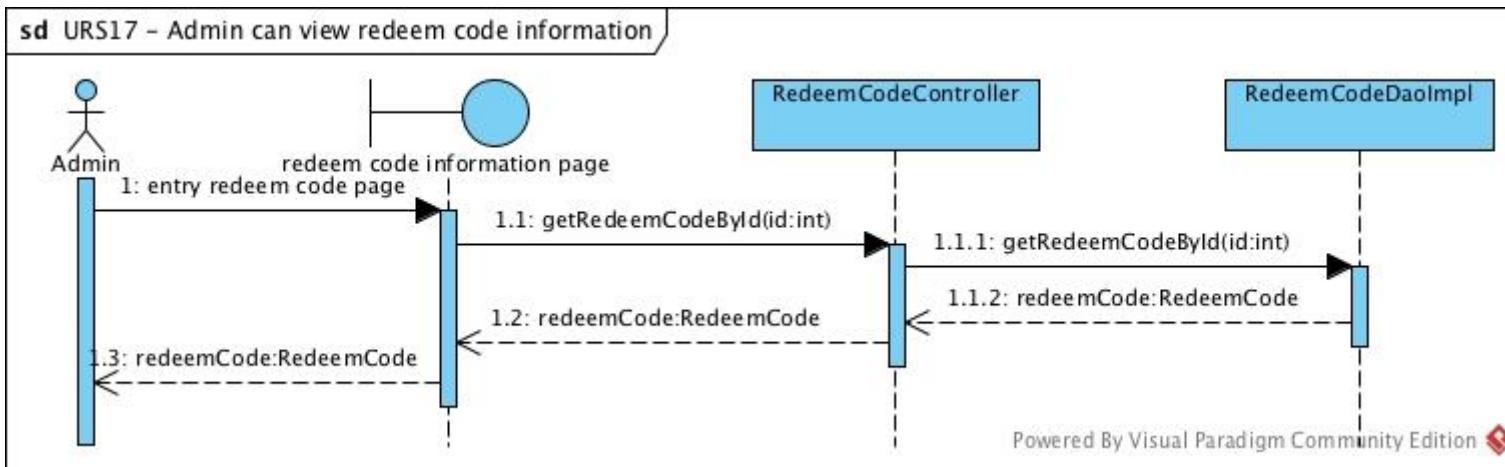


Figure 4.52: SD-17 Admin can view redeem code information sequence diagram

**SD-17** Admin can view redeem code information sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.18 URS-18: Admin can view mobile user list

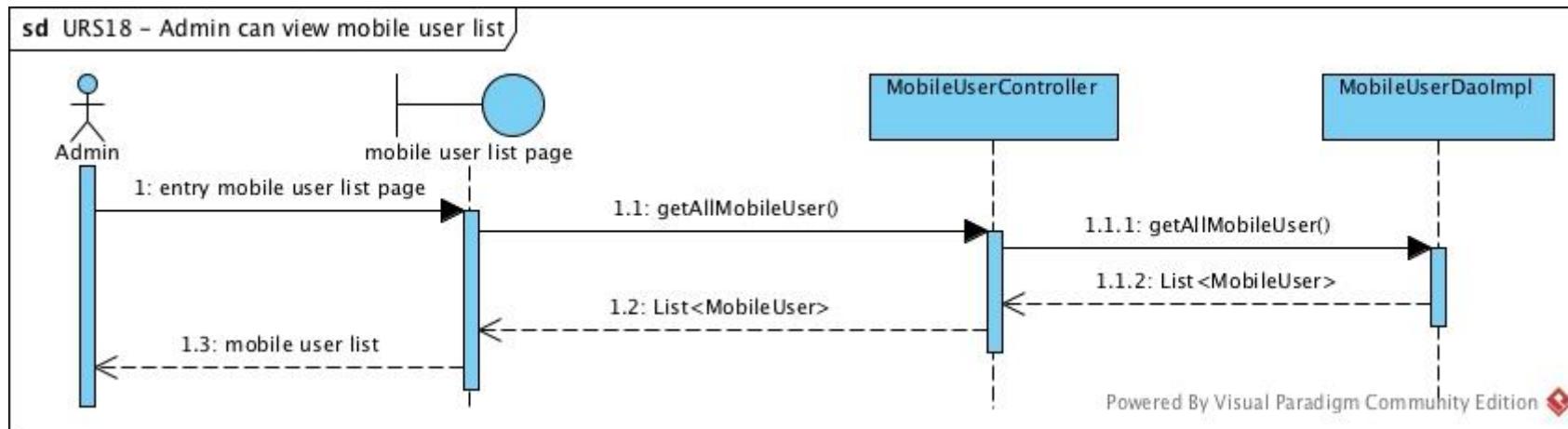


Figure 4.53: SD-18 Admin can view mobile user list sequence diagram

**SD-18** Admin can view mobile user list sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.19 URS-19: Admin can view mobile user information

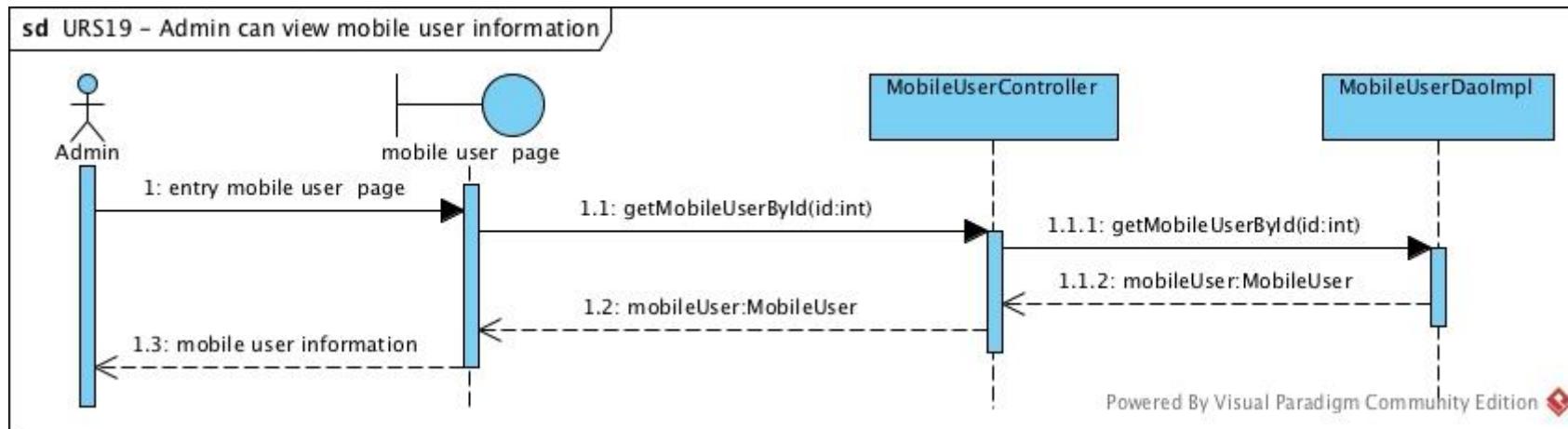


Figure 4.54: SD-19 Admin can view mobile user information sequence diagram

SD-19 Admin can view mobile user information sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.20 URS-20: Admin can search account by shop name

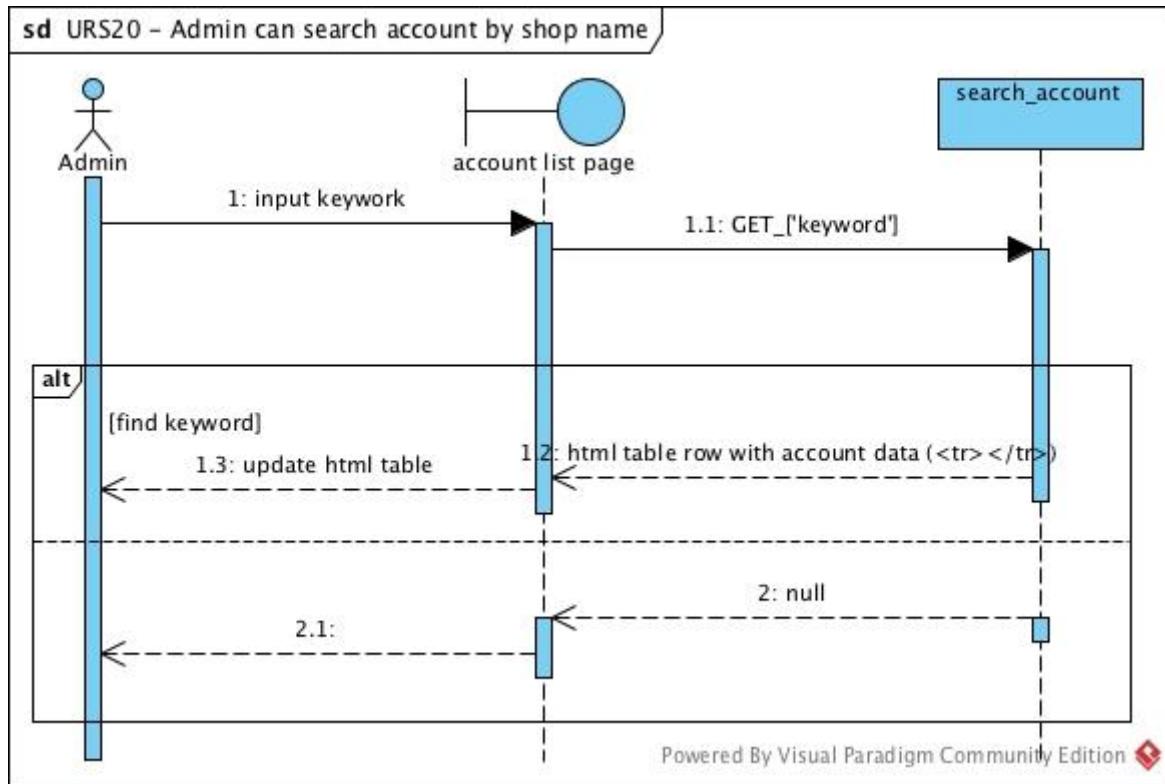


Figure 4.55: SD-20 Admin can search account by shop name sequence diagram

**SD-20** Admin can search account by shop name sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.21 URS-21: Admin can search account by email

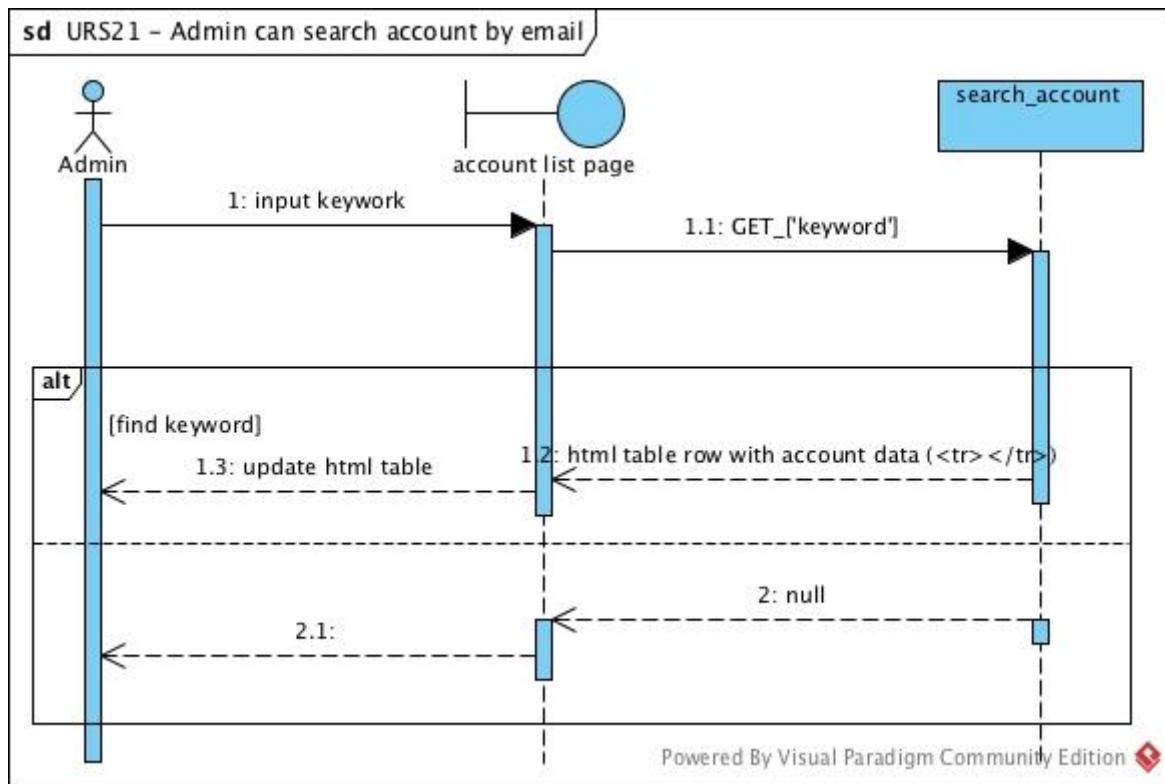


Figure 4.56: SD-21 Admin can search account by email sequence diagram

**SD-21** Admin can search account by email sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.22 URS-22: Admin can search account by id

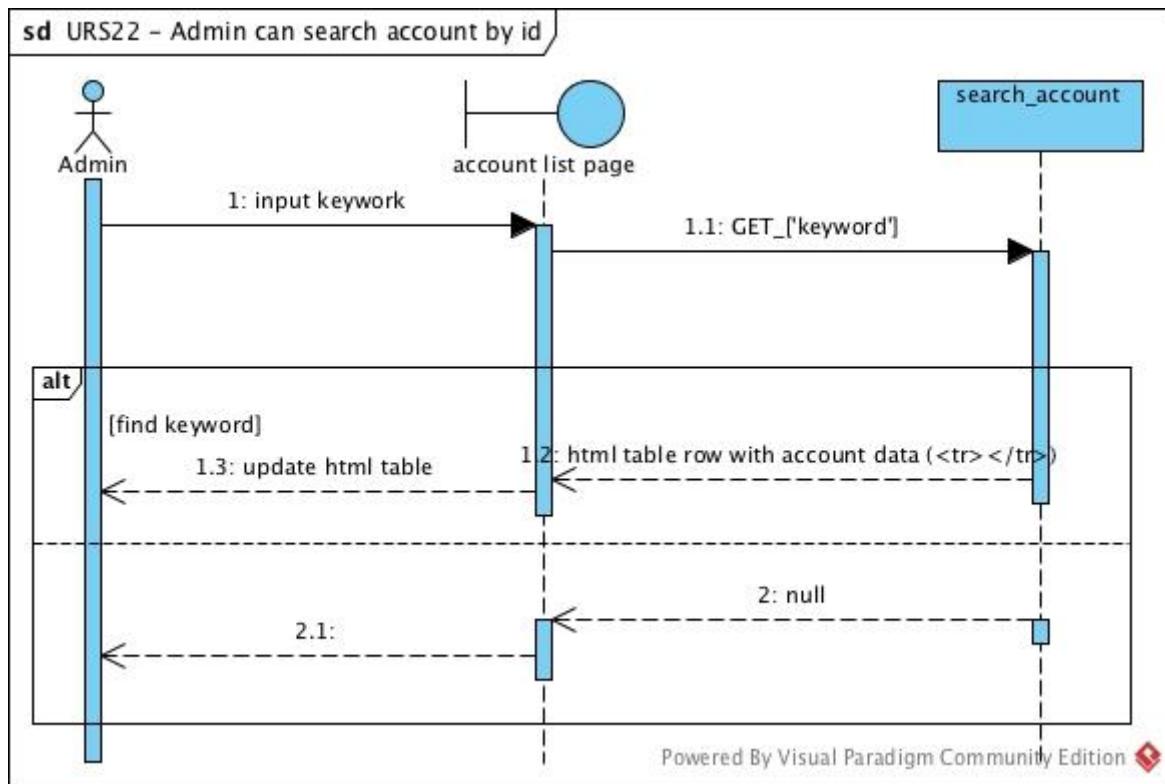


Figure 4.57: SD-22 Admin can search account by id sequence diagram

**SD-22** Admin can search account by id sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.23 URS-23: Admin can search promotion by name

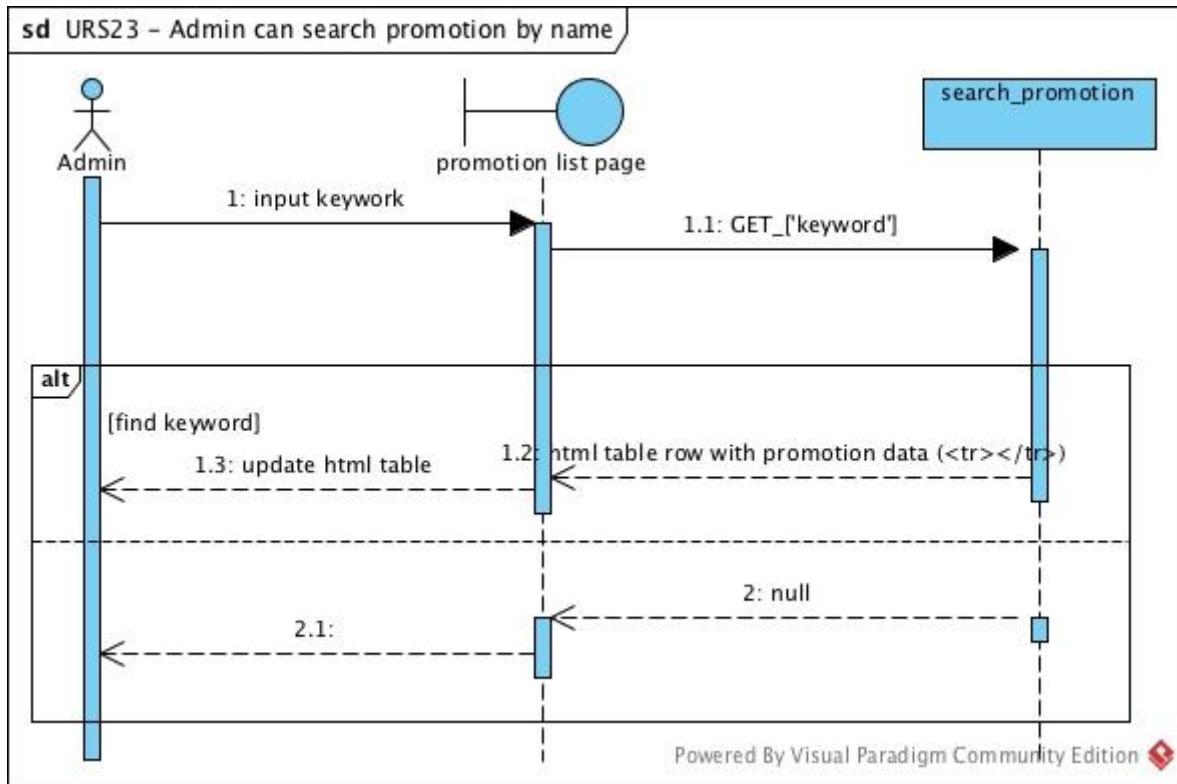


Figure 4.58: SD-23 Admin can search promotion by name sequence diagram

**SD-23** Admin can search promotion by name sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.24 URS-24: Admin can search promotion by id

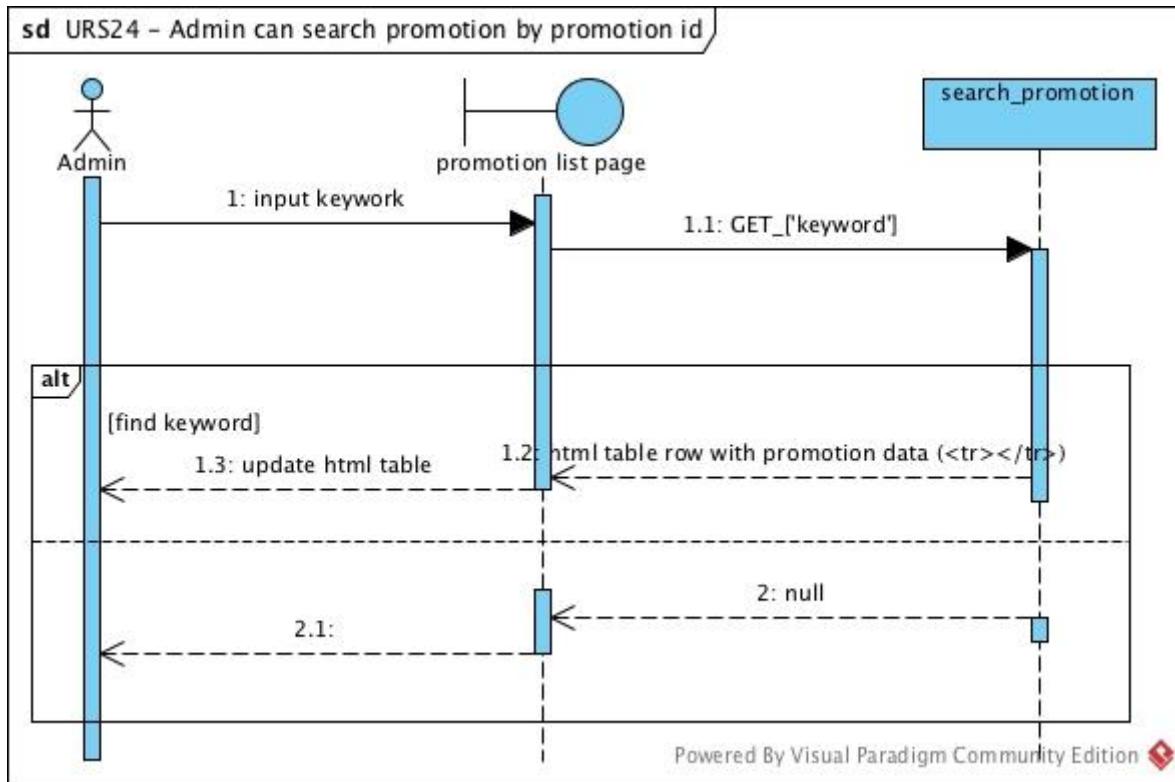


Figure 4.59: SD-24 Admin can search promotion by id sequence diagram

**SD-24** Admin can search promotion by id sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.25 URS-25: Admin can search promotion by shop name

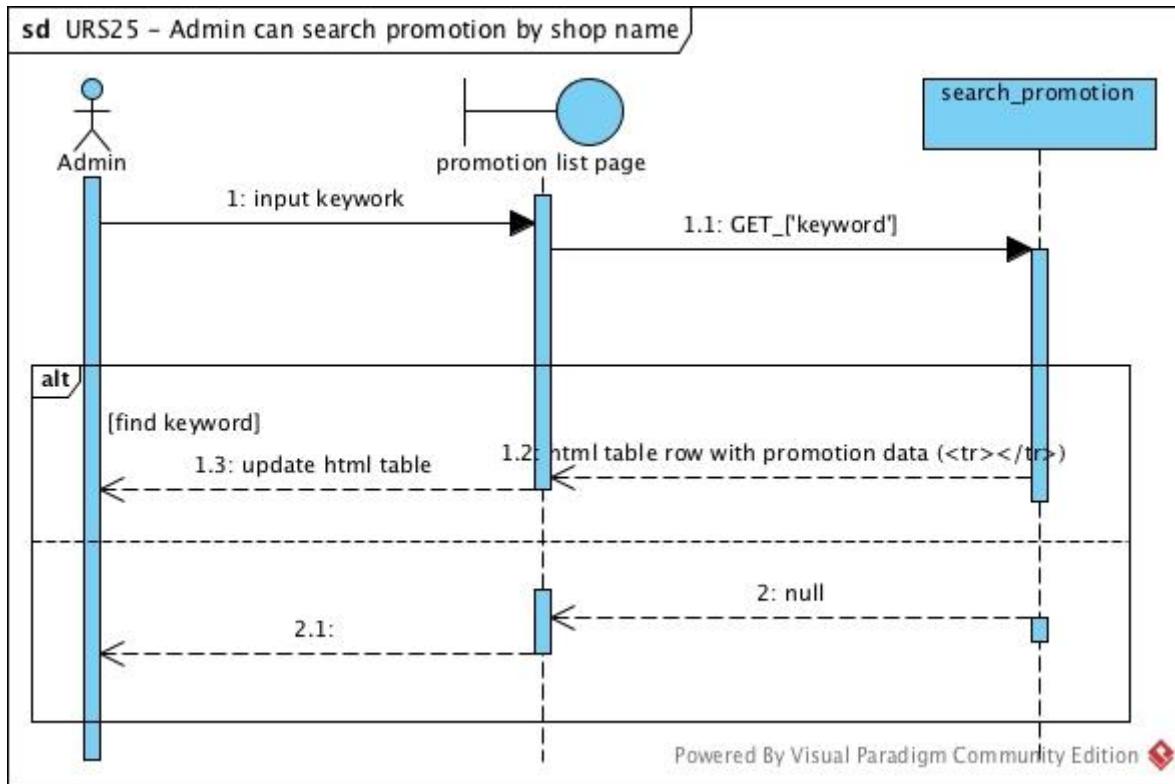


Figure 4.60: SD-25 Admin can search promotion by shop name sequence diagram

**SD-25** Admin can search promotion by shop name sequence diagram

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### 3.3.26 URS-26: Admin can search logs by function

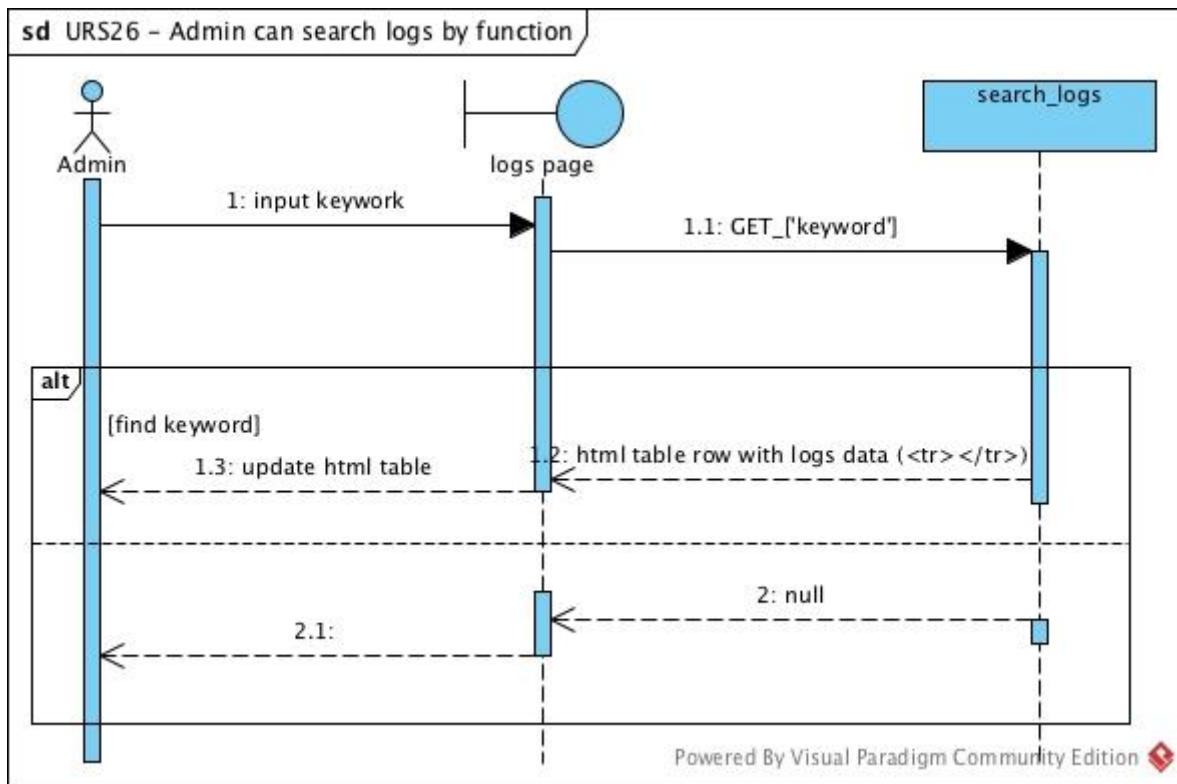


Figure 4.61: SD-26 Admin can search logs by function sequence diagram

**SD-26** Admin can search logs by function sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.27 URS-27: Admin can search logs by shop name

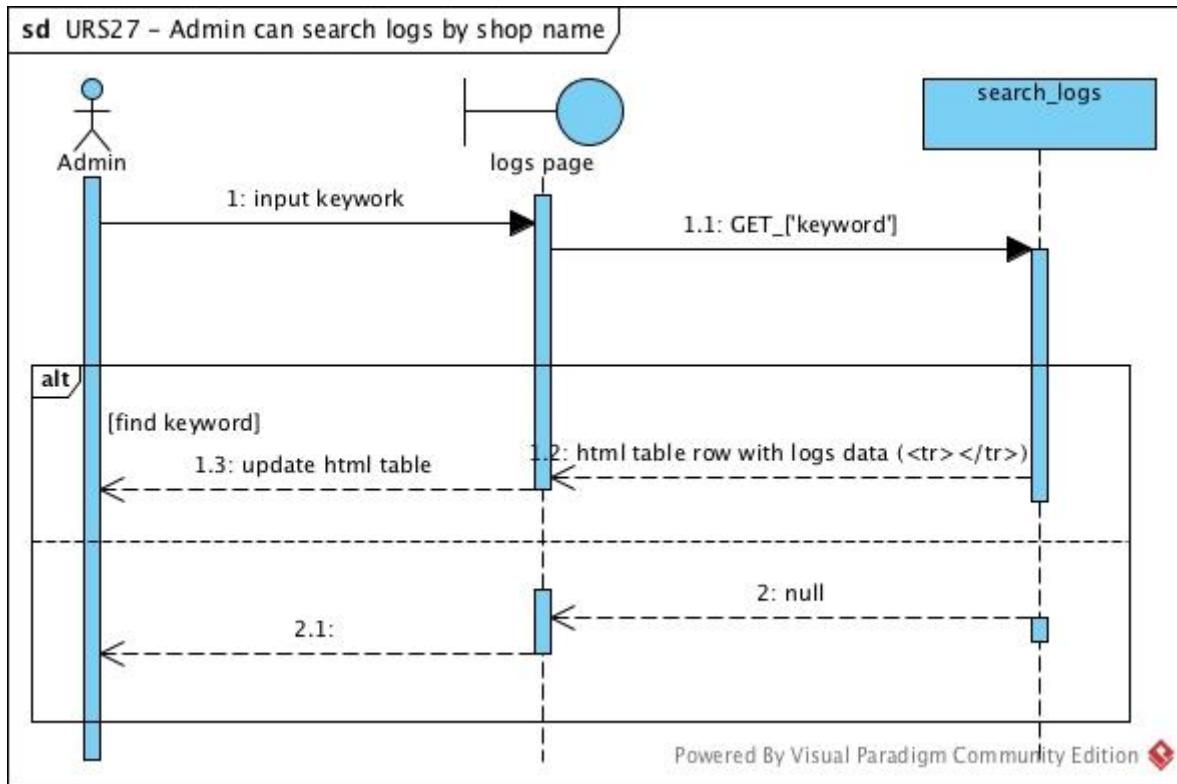


Figure 4.62: SD-27 Admin can search logs by shop name sequence diagram

**SD-27** Admin can search logs by shop name sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.28 URS-28: Admin can search logs by email

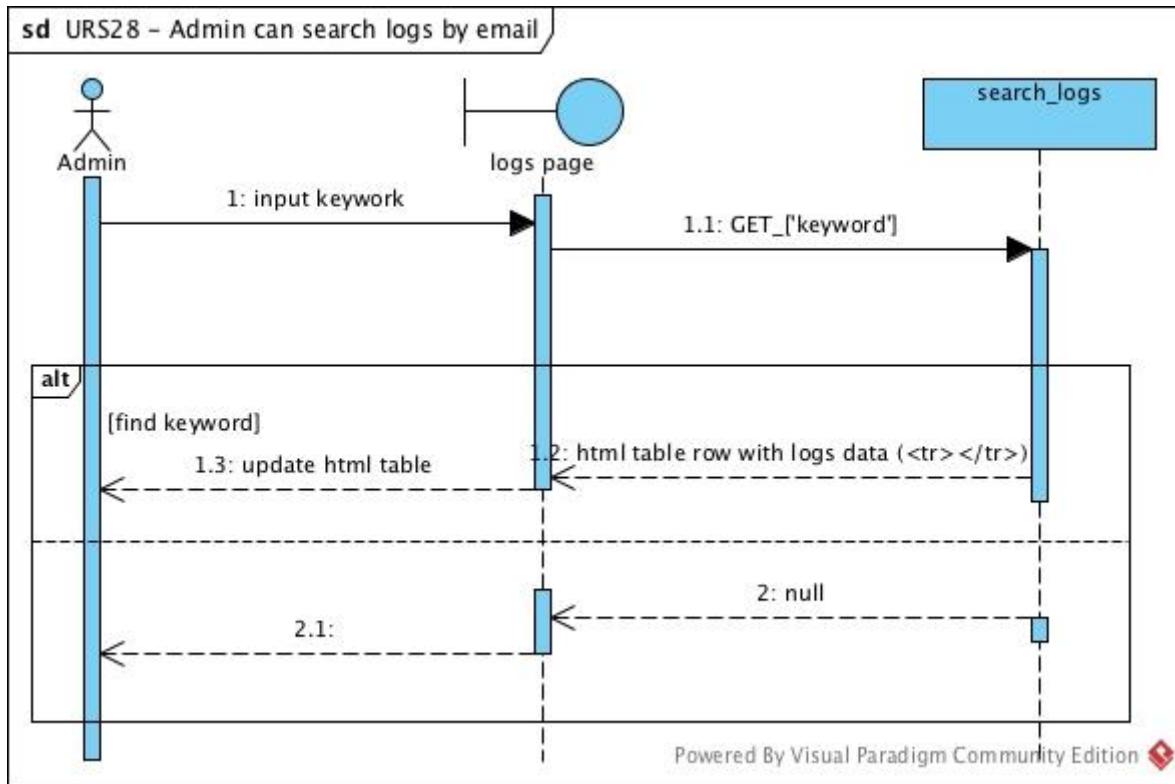


Figure 4.63: SD-28 Admin can search logs by email sequence diagram

**SD-28** Admin can search logs by email sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.29 URS-29: Admin can change password

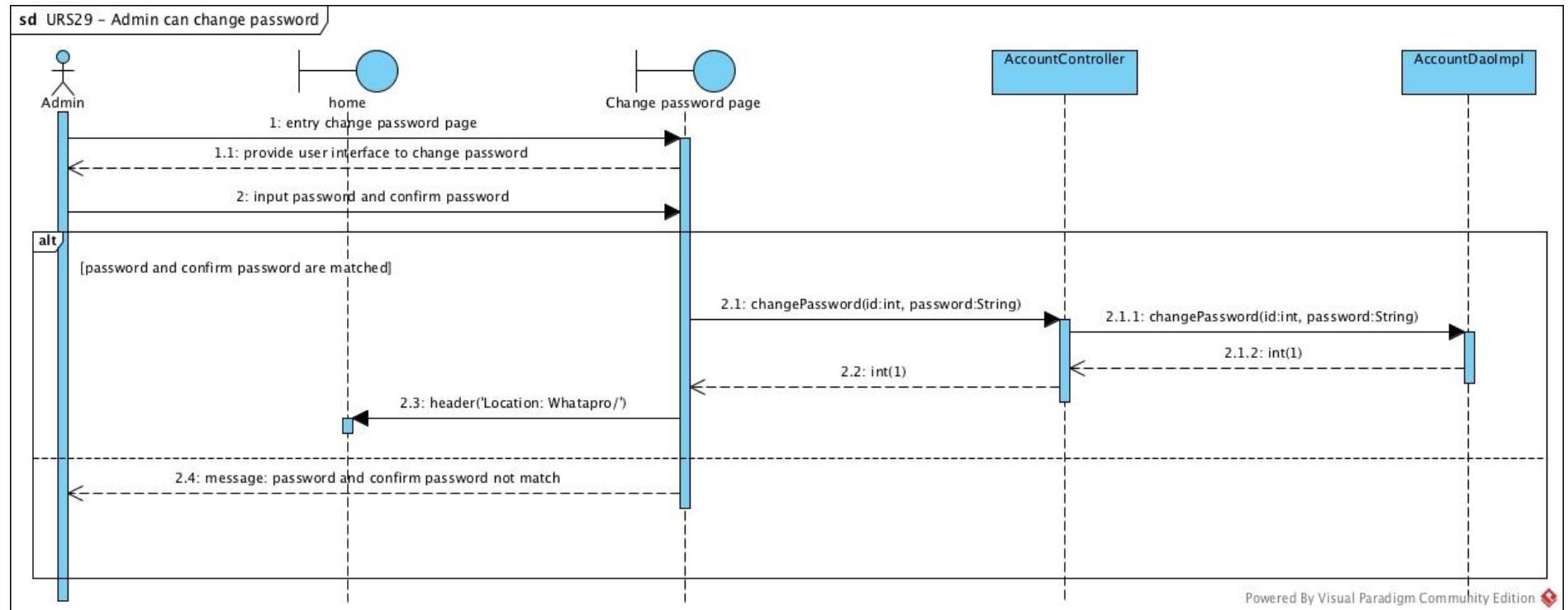


Figure 4.64: SD-29 Admin can change password sequence diagram

**SD-29** Admin can change password sequence diagram

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### 3.3.30 URS-30: Shop owner can add promotion

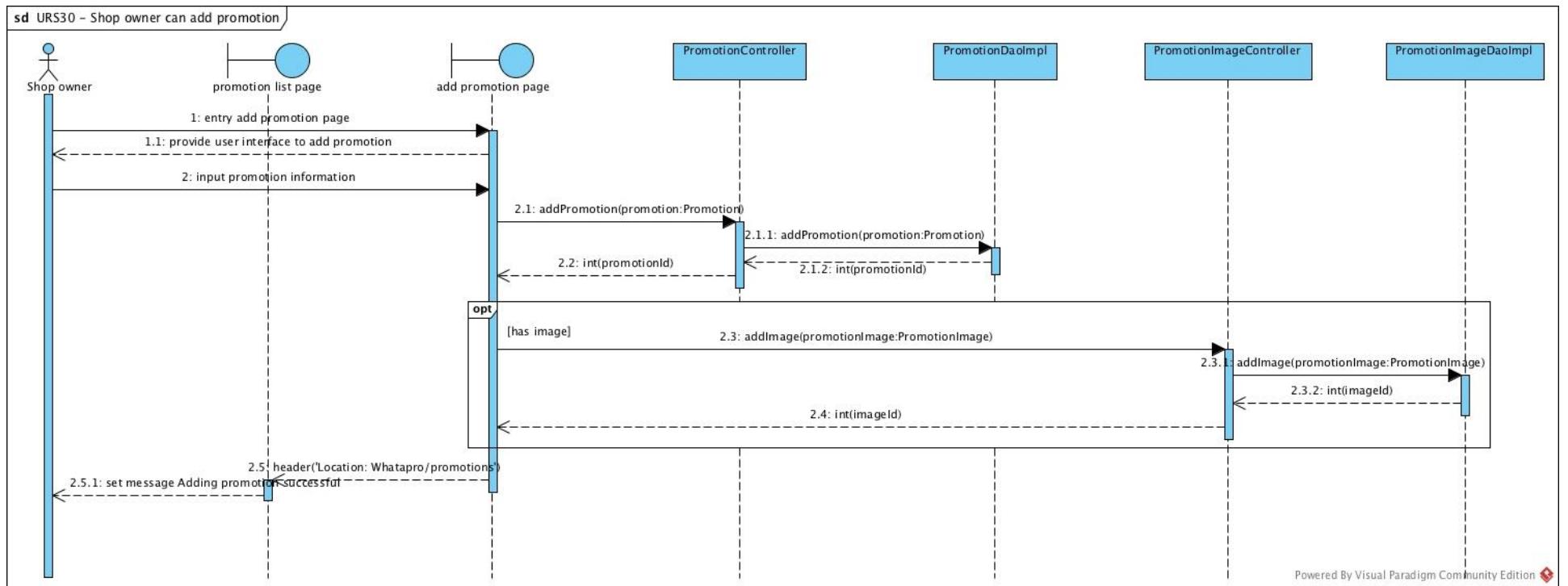


Figure 4.65: SD-30 Shop owner can add promotion sequence diagram

#### SD-30 Shop owner can add promotion sequence diagram

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### 3.3.31 URS-31: Shop owner can edit promotion

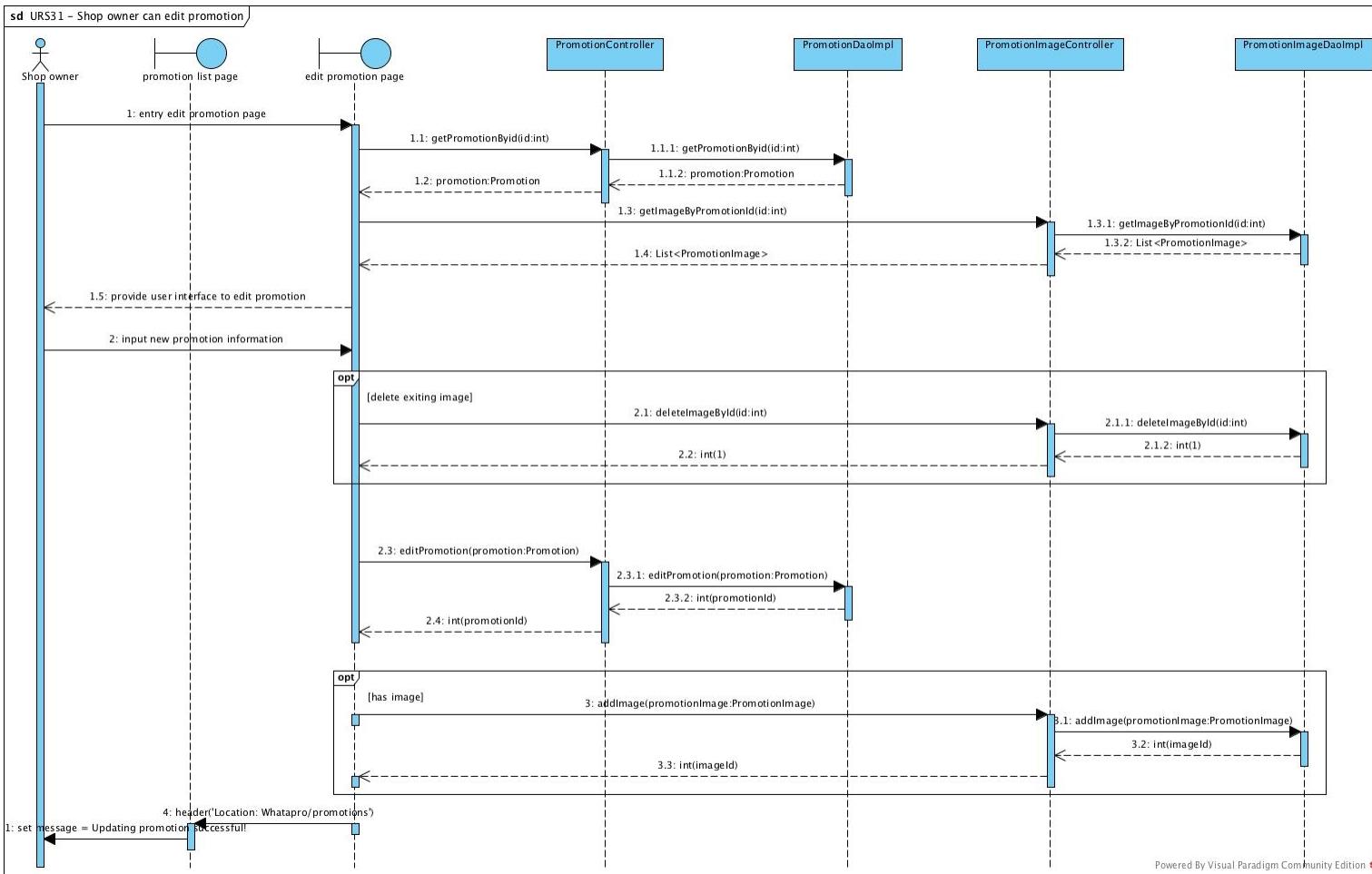


Figure 4.66: SD-31 Shop owner can edit promotion sequence diagram

#### SD-31 Shop owner can edit promotion sequence diagram

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### 3.3.32 URS-32: Shop owner can delete promotion

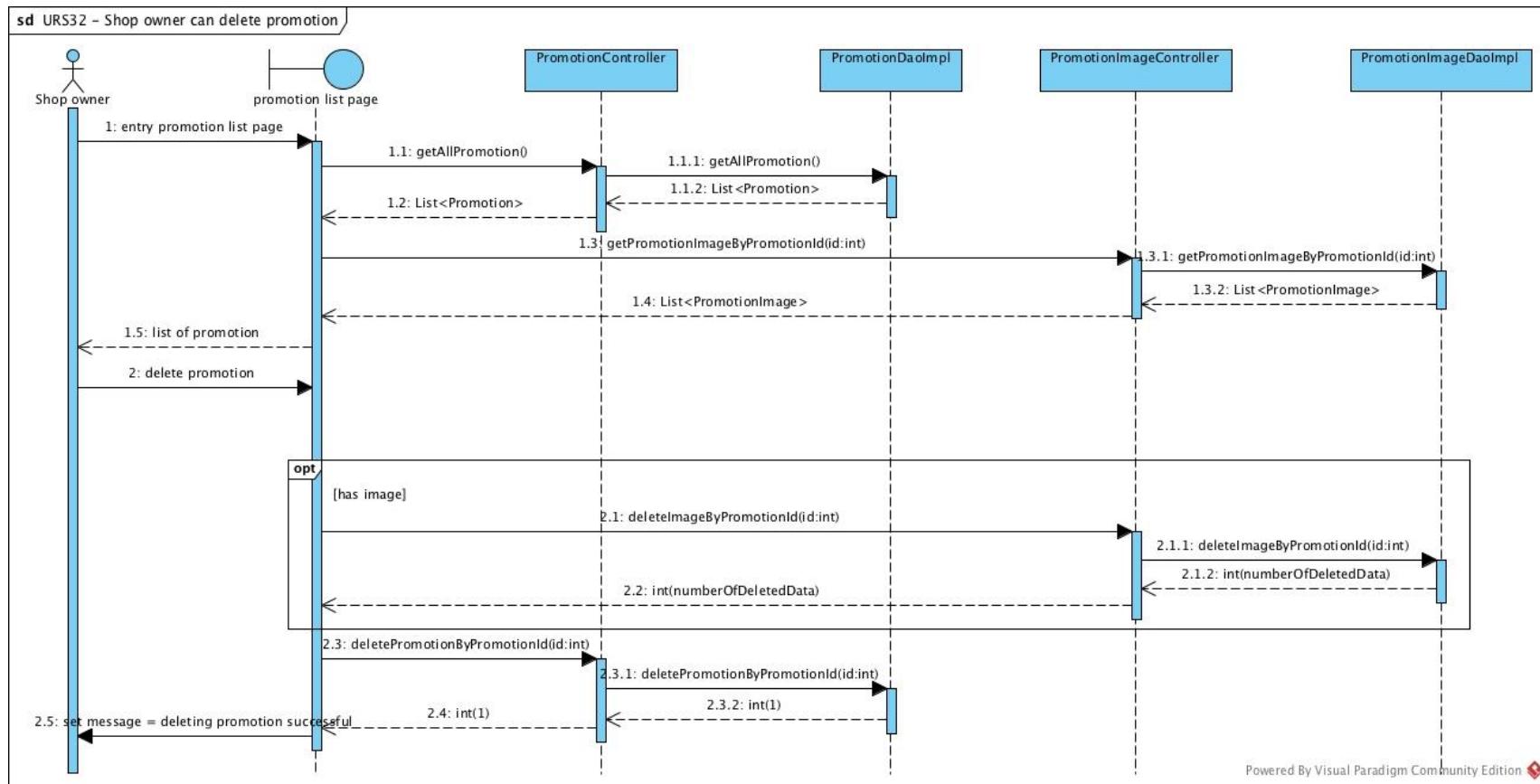


Figure 4.67: SD-32 Shop owner can delete promotion sequence diagram

**SD-32** Shop owner can delete promotion sequence diagram

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### 3.3.33 URS-33: Shop owner can update their profile

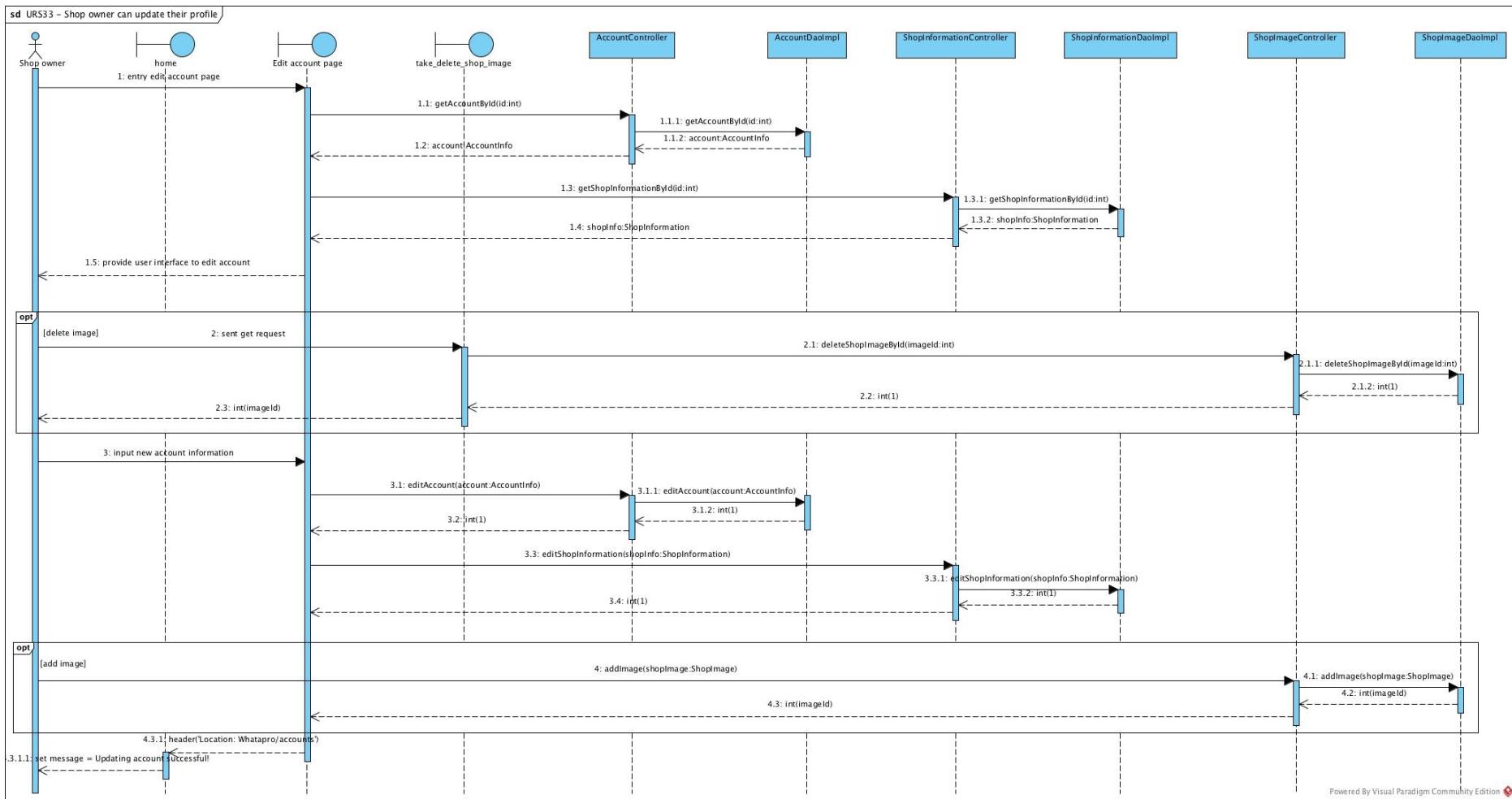


Figure 4.68: SD-33 Shop owner can update their profile sequence diagram

### SD-33 Shop owner can update their profile sequence diagram

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### 3.3.34 URS-34: Shop owner can change password

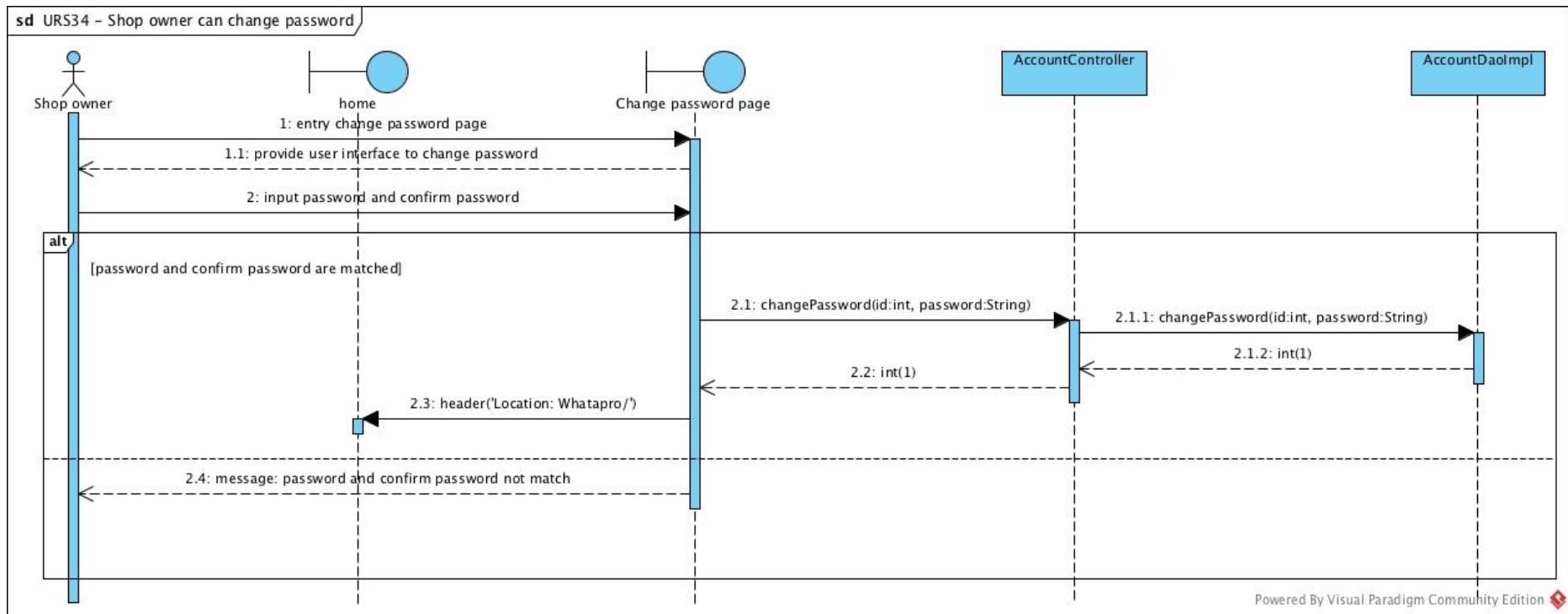


Figure 4.69: SD-34 Shop owner can change password sequence diagram

**SD-34** Shop owner can change password sequence diagram

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### 3.3.35 URS-35: Shop owner can login to system

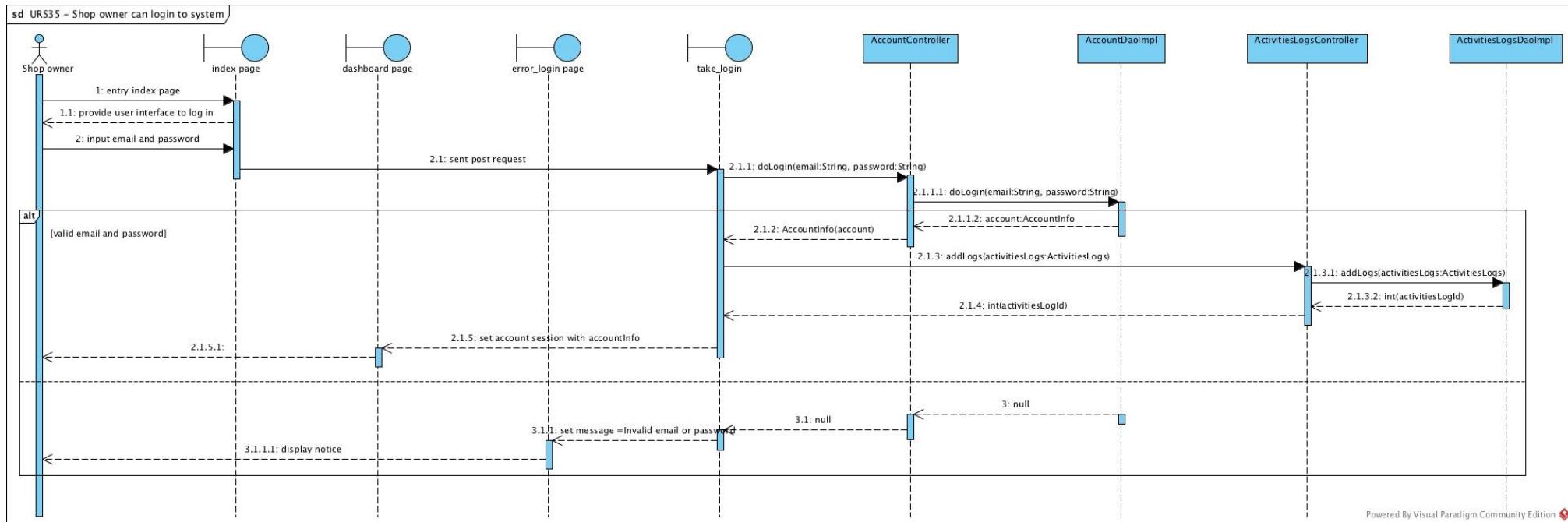


Figure 4.70: SD-35 Shop owner can log in to system sequence diagram

### SD-35 Shop owner can log in to system sequence diagram

|               |                            |              |              |            |              |
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### 3.3.36 URS-36: Shop owner can logout

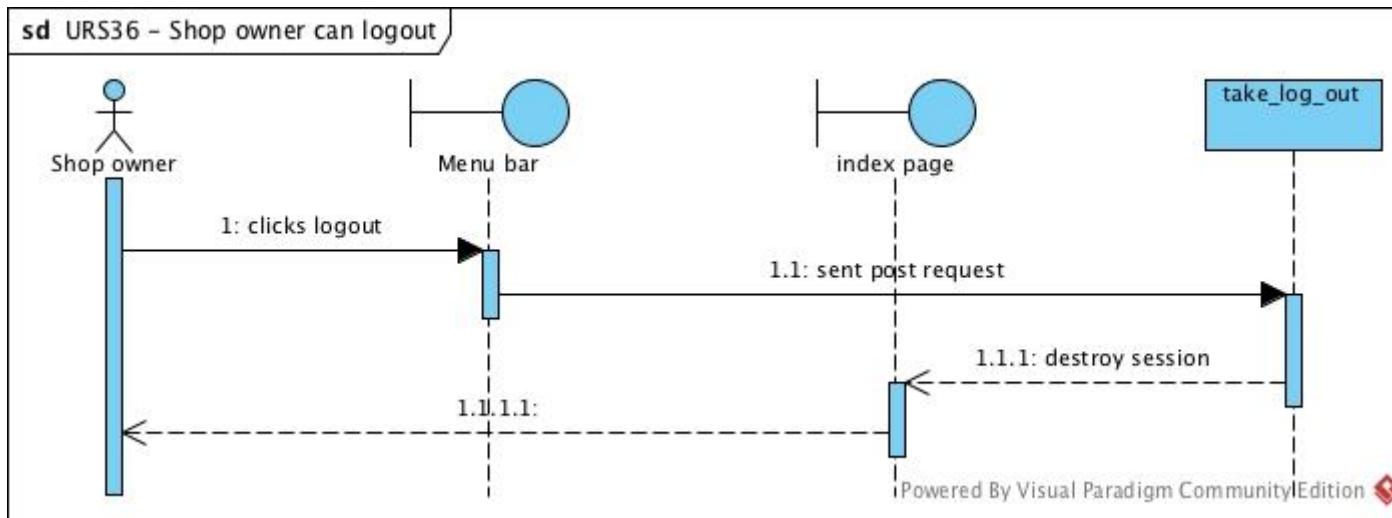


Figure 4.71: SD-36 Shop owner can logout sequence diagram

SD-36 Shop owner can logout sequence diagram

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3.3.38 URS-38: Shop owner can view promotion list

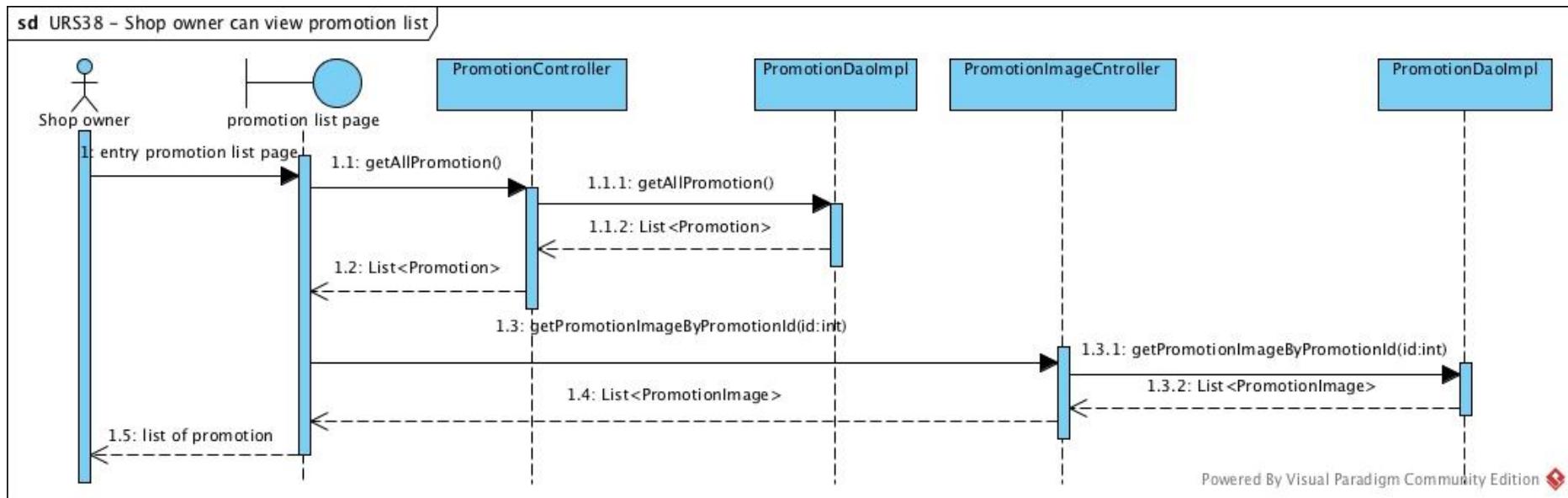


Figure 4.72: SD-38 Shop owner can view promotion list sequence diagram

**SD-38** Shop owner can view promotion list sequence diagram

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### 3.3.39 URS-39: Shop owner can view promotion information

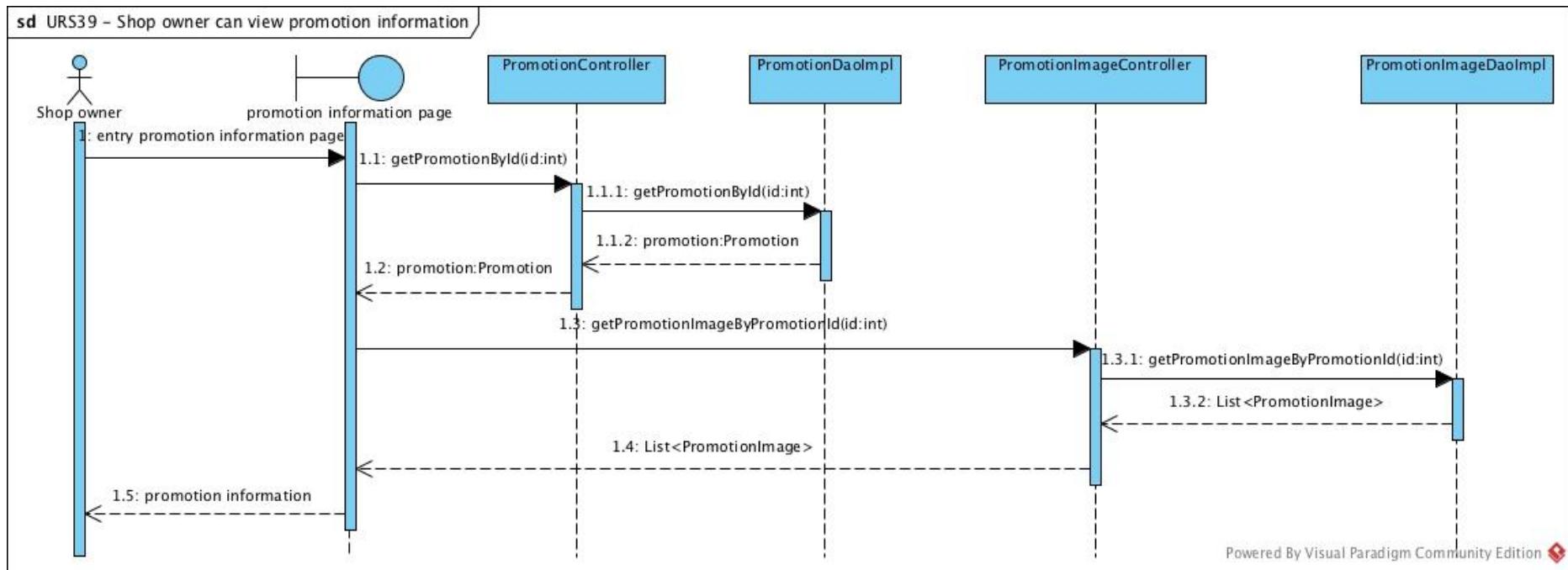


Figure 4.73: SD-39 Shop owner can view promotion information sequence diagram

**SD-39** Shop owner can view promotion information sequence diagram

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### 3.3.40 URS-40: Guest can sent register request

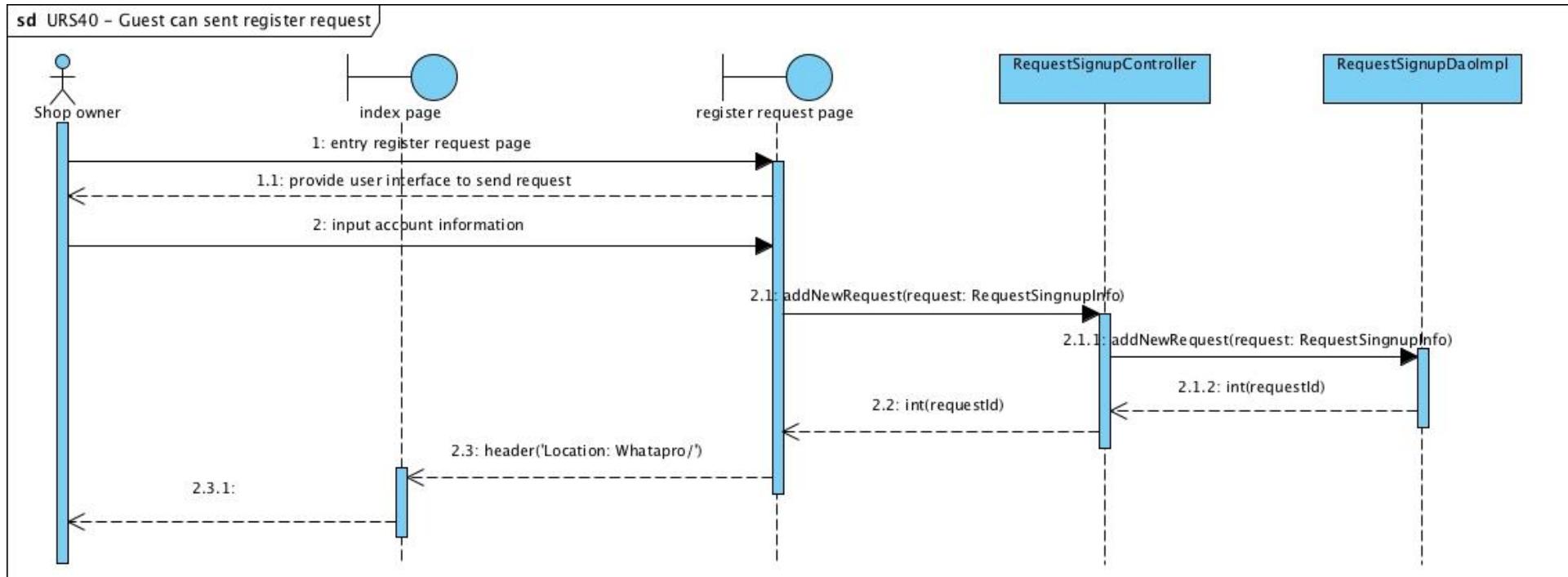


Figure 4.74: SD-40 Guest can sent register request sequence diagram

#### SD-40 Guest can sent register request sequence diagram

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# CHAPTER 4 | USER INTERFACE DESIGN

## 1. Index page

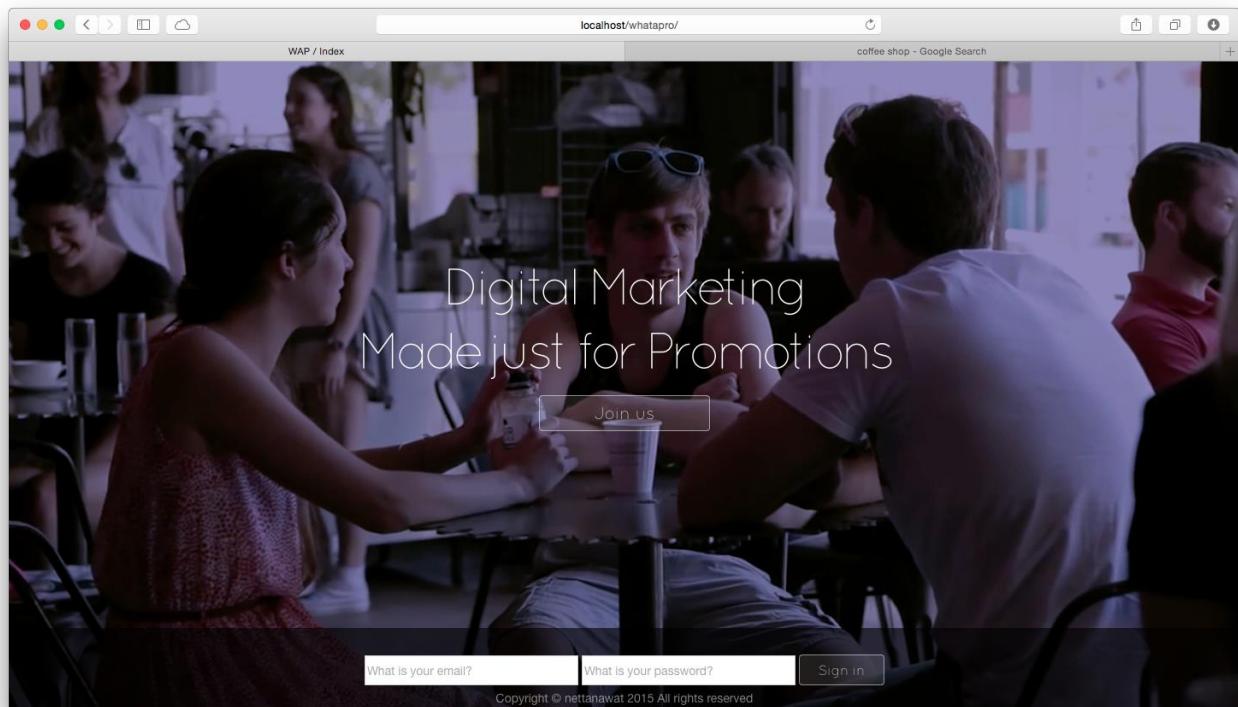


Figure 4.75: Index page

This layout presented the main page of web service.

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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## 2. Promotion list page

The screenshot shows a web browser window titled 'localhost/whatapro/promotions'. The top navigation bar includes links for Dashboard, Account, Promotion, Request, Mobile user, Redeem Code, Activities Log, and a user email 'nettawanawat@gmail.com'. Below the navigation is a search bar labeled 'Search promotion by promotion name, shop name or promotion id' and a 'New promotion' button. A table lists one promotion entry:

| ID | Promotion name | Shop name    | Start date | End date   | Image | Status | Action |
|----|----------------|--------------|------------|------------|-------|--------|--------|
| 1  | 10% discount   | Coffee smith | 2015-07-14 | 2015-07-30 |       | active |        |

Figure 4.76: Promotion list page

This layout presented the promotion page, allowing to add, edit, and delete promotion.

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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### 3. Account list page

The screenshot shows a web browser window titled "localhost/whatapro/accounts". The main content area is titled "Accounts". At the top, there is a search bar with placeholder text "Search account by email, shop name or account id" and a button labeled "+ New Account". Below the search bar is a table with the following columns: Id, Email, Role, Join Date, Shop name, Image, Status, and Action. The table contains 15 rows of data. The "Shop name" column for the last row (Id 15) displays "Coffee smith" and shows two small thumbnail images of coffee shop interiors. The "Action" column for each row contains three icons: a pencil, a delete symbol, and a refresh symbol.

| ID | Email                     | Role  | Join Date           | Shop name    | Image | Status | Action                    |
|----|---------------------------|-------|---------------------|--------------|-------|--------|---------------------------|
| 1  | nettanawat@gmail.com      | admin | 2015-07-28 00:00:00 | -            |       | active | [Edit] [Delete] [Refresh] |
| 10 | admin1@gmail.com          | admin | 2015-07-28 00:00:00 | -            |       | active | [Edit] [Delete] [Refresh] |
| 11 | admin2@gmail.com          | admin | 2015-07-28 00:00:00 | -            |       | active | [Edit] [Delete] [Refresh] |
| 12 | admin3@gmail.com          | admin | 2015-07-28 00:00:00 | -            |       | active | [Edit] [Delete] [Refresh] |
| 13 | iamadmin@gmail.com        | admin | 2015-07-28 00:00:00 | -            |       | active | [Edit] [Delete] [Refresh] |
| 14 | iamfuckingadmin@gmail.com | admin | 2015-07-28 00:00:00 | -            |       | active | [Edit] [Delete] [Refresh] |
| 15 | coffeesmith@gmail.com     | user  | 2015-07-28 20:07:34 | Coffee smith |       | active | [Edit] [Delete] [Refresh] |

Figure 4.77: Account list page

This layout presented the account page, allowing to add, edit, and delete account.

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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## 4. Request list page

The screenshot shows a web browser window with the URL `localhost/whatapro/requests`. The title bar includes the WPS Office logo and the user name `nettawat@gmail.com`. The main content area is titled "Request sign up". Below the title is a table with the following data:

| Id | Shop name | Email            | Phone number | Address   | Request date        | Manage by | Approve/reject date | Status  | Action  |        |
|----|-----------|------------------|--------------|---|---------------------|-----------|---------------------|---------|---------|--------|
|    |           |                  |              |   |                     |           |                     |         | Approve | Reject |
| 1  | Sam bar   | sambar@gmail.com | 054 333 923  | 40 Nimmarnhemin Rd., T.Suthep, A.Muang, Chiang Mai, 50200 | 2015-07-28 21:01:37 | -         |                     | waiting |         |        |

Figure 4.78: Request list page

This layout is for admin to see request list and choose to accept or reject from this page.

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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## 5. Add promotion page

The screenshot shows a web application interface for adding a new promotion. The URL in the address bar is `localhost/whatapro/promotion/add`. The top navigation bar includes links for Dashboard, Account, Promotion, Request, Mobile user, Redeem Code, Activities Log, and a user email `nettawat@gmail.com`. The main content area is titled "New promotion". It contains the following fields:

- Promotion name:
- Select shop:
- Start date:
- End date:
- Select image(s):
- Description:

At the bottom left are "Back" and "Submit" buttons.

Figure 4.79: Add promotion page

This layout is presenting an application form to add new promotion.

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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## 6. Add account page

The screenshot shows a web application interface titled 'New account'. At the top, there is a navigation bar with links for Dashboard, Account, Promotion, Request, Mobile user, Redeem Code, Activities Log, and a user email 'nettananawat@gmail.com'. Below the navigation bar, the main form is titled 'New account'. It contains several input fields: 'Shop name' (WAP shop), 'Email address' (wapbar@wap.com), 'Create a password' (Your Password), 'Confirm Password' (Confirm Password), 'Phone number' (053222222), 'Open and Close' (Mon - Sat from 09.00-23.00), and 'Address' (40 Nimmamhemin Rd., T.Suthep, A.Muang, Chiang Mai, 50200). There is also a section titled 'Pin your shop location on the map' which displays two maps of Chiang Mai, Thailand, showing street layouts and landmarks like Wat Chiang Man, Wat Chedi Luang, and Mahidol Chiang Mai Hospital.

Figure 4.80: Add account page

This layout is presenting an application form to add new account.

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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## 7. Promotion information page

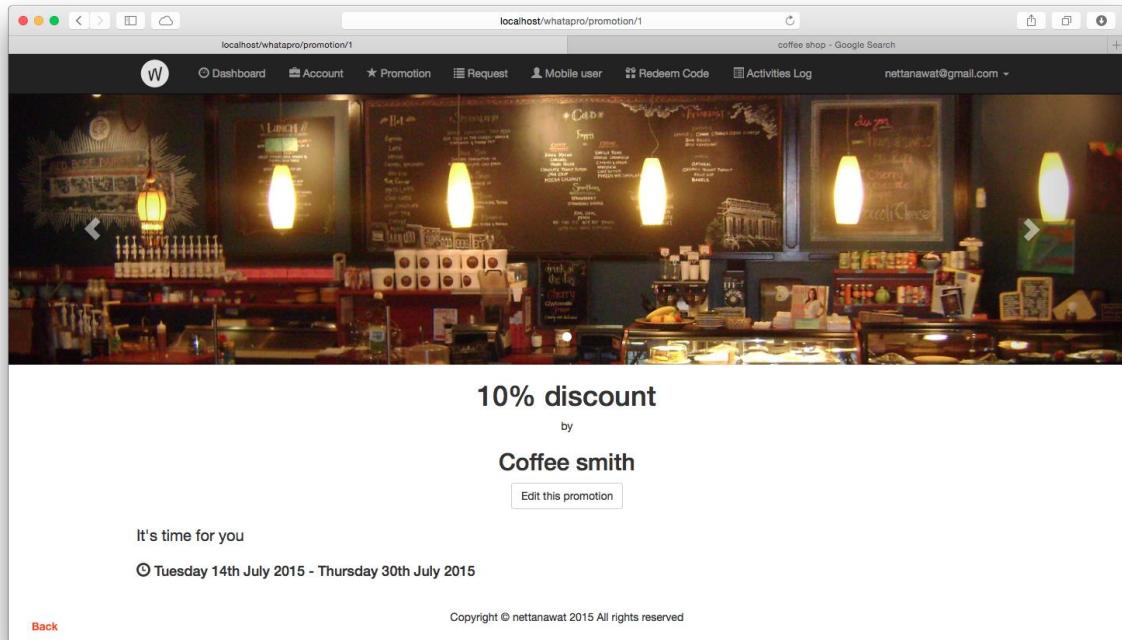


Figure 4.81: Promotion information page

This layout is for view promotion information.

|               |                            |              |              |            |              |
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## 8. Account information page

The screenshot shows a web browser window displaying the account information for a shop named 'Coffee smith'. At the top, there is a navigation bar with links for Dashboard, Account, Promotion, Request, Mobile user, Redeem Code, Activities Log, and a user email (nettawat@gmail.com). Below the navigation bar is a map of Chiang Mai, Thailand, showing the location of 'Coffee smith' marked with a red pin. The shop's name, 'Coffee smith', is displayed prominently below the map. There is a button labeled 'Edit this shop'. Below this, there are four sections: 'Email' (coffeesmith@gmail.com), 'Phone number' (053 400 289), 'Open and close time' (Everyday from 6.00PM - 12.00AM), and 'Address' (40 Nimmamhemin Rd., T.Suthep, A.Muang, Chiang Mai, 50200). A 'Description' section follows, stating 'Our coffee shop is one of the best place in Chiang mai'. At the bottom, there are buttons for 'Back' and 'Back to top', and a section titled 'SHOP IMAGES'.

Figure 4.82: Account information page

This layout is for view account information.

|               |                            |              |              |            |              |
|---------------|----------------------------|--------------|--------------|------------|--------------|
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## 9. Home page

The screenshot shows the Admin Home page with the URL `localhost/whatapro/admin` at the top. The main feature is a map of Chiang Mai, Thailand, with several red location markers indicating specific points of interest. Below the map are two tables:

| 5 Newest accounts |              |                    |                     |        | 5 Newest promotions |                       |              |            |            |                          |
|-------------------|--------------|--------------------|---------------------|--------|---------------------|-----------------------|--------------|------------|------------|--------------------------|
| ID                | Name         | Email              | Join date           | Status | ID                  | Name                  | Shop name    | Start date | End date   | Status                   |
| 70                | adadad       | adsadassd@adad.com | 2015-07-27 21:48:03 | active | 21                  | Test edit unit test t | Coffee smith | 2015-07-01 | 2015-07-16 | active                   |
| 69                | Coffee smith | testadd@gmail.com  | 2015-07-24 13:58:00 | active |                     |                       |              |            |            | <a href="#">see more</a> |
| 68                | Test eddit   | testadd@gmail.com  | 2015-07-24 13:58:00 | active |                     |                       |              |            |            |                          |
| 67                | Test         | testadd@gmail.com  | 2015-07-24 13:58:00 | active |                     |                       |              |            |            |                          |

Figure 4.83: Home page

This layout is home page for admin to view overall of system.

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