

Document History						
Document Name	Version	Status	Date	Viewable	Editable	Response
Promotion Provider_SDD_0.1	Promotion Provider_SDD_0.1 Added <ul style="list-style-type: none">- Chapter 1 Introduction- Chapter 2 System Architecture- Chapter 3 Detail Design	Draft	08-07-2015	TS, NC, PS	TS, NC	NC
Promotion Provider_SDD_0.2	Promotion Provider_SDD_0.2 Added <ul style="list-style-type: none">- Chapter 4 User Interface	Draft	12-07-2015	TS, NC, PS	TS, NC	TS
Promotion Provider_SDD_0.3	Promotion Provider_SDD_0.3 Updated <ul style="list-style-type: none">- Class Diagram	Draft	23-07-2015	TS, NC, PS	TS, NC	TS
Promotion Provider_SDD_1.0	Promotion Provider_SDD_1.0 Updated <ul style="list-style-type: none">- User Interface	Approved	25-07-2015	TS, NC, PS	TS, NC	TS

Document Designed by

Tanawat Sitthitan
Nattakit Chaiwongsri
July 27, 2015

Document Approved by

Mr. Phudinan Singkhamfu

July 29, 2015

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	1 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

CONTENT

List of Figure.....	4
List of Table	6
Chapter 1 Introduction.....	7
1.1 Purpose	7
1.2 Project Scope	7
1.3 Definition, Acronyms, and Abbreviation.....	7
1.3.1 Key definition	7
1.3.2 Keys Acronyms and Abbreviations.....	8
1.4 User Characteristic.....	8
Chapter 2 System Architecture	10
Chapter 3 Detailed Design.....	11
3.1 Class diagram	11
3.1.1 Promotion provider class diagram.....	11
3.1.2 Promotion provider class diagram description.....	16
3.2 ER-Diagram.....	50
3.2.1 Accounts Table.....	51
3.2.2 ShopInformations Table.....	51
3.2.3 Logs Table.....	51
3.2.4 Promotions Table.....	51
3.2.5 ShopImage Table.....	52
3.2.6 PromotionImage Table.....	52
3.2.7 MobileUsers Table	52
3.2.8 RequestingSignup Table.....	52
3.2.9 Codes Table.....	53
3.3 Sequence Diagram	54
3.3.1 URS-01: Admin can login to web server.....	54
3.3.2 URS-02: Admin can logout from web server.....	55
3.3.3 URS-03: Admin can add shop owner account.....	56
3.3.4 URS-04: Admin can edit shop owner account.....	57
3.3.5 URS-05: Admin can delete shop owner account	58
3.3.6 URS-06: Admin can add promotion to shop owner	59
3.3.7 URS-07: Admin can edit shop owner promotion	60

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	2 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.8 URS-08: Admin can delete shop owner promotion	61
3.3.9 URS-09: Admin can accept register request	62
3.3.10 URS-10: Admin can reject register request.....	63
3.3.11 URS-11: Admin can view account list.....	64
3.3.12 URS-12: Admin can view account information.....	65
3.3.13 URS-13: Admin can view promotion list	66
3.3.14 URS-14: Admin can view promotion information.....	67
3.3.15 URS-15: Admin can view user logs.....	68
3.3.16 URS-16: Admin can view redeem code list	69
3.3.17 URS-17: Admin can view redeem code information.....	70
3.3.18 URS-18: Admin can view mobile user list	71
3.3.19 URS-19: Admin can view mobile user information.....	72
3.3.20 URS-20: Admin can search account by shop name.....	73
3.3.21 URS-21: Admin can search account by email.....	74
3.3.22 URS-22: Admin can search account by id	75
3.3.23 URS-23: Admin can search promotion by name	76
3.3.24 URS-24: Admin can search promotion by id	77
3.3.25 URS-25: Admin can search promotion by shop name	78
3.3.26 URS-26: Admin can search logs by function	79
3.3.27 URS-27: Admin can search logs by shop name	80
3.3.28 URS-28: Admin can search logs by email	81
Chapter 4 User Interface Design	82
1. Index page.....	82
2. Promotion list page	83
3. Account list page.....	84
4. Request list page	85
5. Add promotion page	86
6. Add account page.....	87
7. Promotion information page	88
8. Account information page	89
9. Home page	90

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	3 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

LIST OF FIGURE

Figure 4.1: System Architecture.....	10
Figure 4.2: Overall Promotion provider class diagram (1)	11
Figure 4.3: Overall Promotion provider class diagram (2)	12
Figure 4.4: Dao package class diagram.....	13
Figure 4.5: Controller class diagram.....	14
Figure 4.6: Entity package class diagram.....	15
Figure 4.7: AccountInfo Class.....	16
Figure 4.8: ShopInformation Class.....	18
Figure 4.9: ShopImage Class.....	20
Figure 4.10: Promotion Class.....	21
Figure 4.11: ActivitiesLog Class.....	23
Figure 4.12: RequestSignupInfo Class.....	25
Figure 4.13: PromotionImage Class.....	28
Figure 4.14: AccountDao Class.....	29
Figure 4.15: AccountDaoImpl Class.....	30
Figure 4.16: RequestSignupInfoDao Class.....	31
Figure 4.17: RequestSignupInfoDaoImpl Class.....	32
Figure 4.18: ActivitiesLogDao Class.....	33
Figure 4.19: ActivitiesLogsDaoImpl Class.....	34
Figure 4.20: PromtoionImageDao Class.....	35
Figure 4.21: PromotionImageDaoImpl Class.....	36
Figure 4.22: PromotionDao Class.....	37
Figure 4.23: PromotionDaoImpl Class.....	38
Figure 4.24: ShopImageDao Class.....	39
Figure 4.25: ShopImageDaoImpl Class.....	40
Figure 4.26: ShopInformationDao Class.....	41
Figure 4.27: ShopInformationDaoImpl Class.....	42
Figure 4.28: AccountController Class.....	43
Figure 4.29: ShopImageController Class.....	44
Figure 4.30: PromotionImageController Class.....	45
Figure 4.31: PromotionController Class.....	46
Figure 4.32: ActivitiesLogsController Class.....	47
Figure 4.33: RequestSignupController Class.....	48
Figure 4.34: ShopInformationController Class.....	49
Figure 4.35: ER - Diagram.....	50
Figure 4.36: SD-01 Admin can login to web server sequence diagram.....	54
Figure 4.37: SD-02 Admin can logout from web server sequence diagram.....	55
Figure 4.38: SD-03 Admin can add shop owner account sequence diagram.....	56
Figure 4.39: SD-04 Admin can edit shop owner account sequence diagram.....	57
Figure 4.40: SD-05 Admin can delete shop owner account sequence diagram.....	58
Figure 4.41: SD-06 Admin can add promotion to shop owner sequence diagram.....	59
Figure 4.42: SD-07 Admin can edit shop owner promotion sequence diagram.....	60
Figure 4.43: SD-08 Admin can delete shop owner promotion sequence diagram.....	61
Figure 4.44: SD-09 Admin can accept register request sequence diagram.....	62
Figure 4.45: SD-10 Admin can reject register request sequence diagram.....	63
Figure 4.46: SD-11 Admin can view account list sequence diagram.....	64
Figure 4.47: SD-12 Admin can view account information sequence diagram.....	65
Figure 4.48: SD-13 Admin can view promotion list sequence diagram.....	66

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	4 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

Figure 4.49: SD-14 Admin can view promotion information sequence diagram.....	67
Figure 4.50: SD-15 Admin can view user logs sequence diagram.....	68
Figure 4.51: SD-16 Admin can view redeem code list sequence diagram.....	69
Figure 4.52: SD-17 Admin can view redeem code information sequence diagram.....	70
Figure 4.53: SD-18 Admin can view mobile user list sequence diagram.....	71
Figure 4.54: SD-19 Admin can view mobile user information sequence diagram.....	72
Figure 4.55: SD-20 Admin can search account by shop name sequence diagram.....	73
Figure 4.56: SD-21 Admin can search account by email sequence diagram.....	74
Figure 4.57: SD-22 Admin can search account by id sequence diagram.....	75
Figure 4.58: SD-23 Admin can search promotion by name sequence diagram.....	76
Figure 4.59: SD-24 Admin can search promotion by id sequence diagram.....	77
Figure 4.60: SD-25 Admin can search promotion by shop name sequence diagram.....	78
Figure 4.61: SD-26 Admin can search logs by function sequence diagram.....	79
Figure 4.62: SD-27 Admin can search logs by shop name sequence diagram.....	80
Figure 4.63: SD-28 Admin can search logs by email sequence diagram.....	81
Figure 4.64: Index page.....	82
Figure 4.65: Promotion list page.....	83
Figure 4.66: Account list page.....	84
Figure 4.67: Request list page.....	85
Figure 4.68: Add promotion page.....	86
Figure 4.69: Add account page.....	87
Figure 4.70: Promotion information page.....	88
Figure 4.71: Account information page.....	89
Figure 4.72: Home page.....	90

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	5 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

LIST OF TABLE

Table 4.1: Key Acronyms and Abbreviations.....	8
Table 4.2: AccountInfo Class Description.....	16
Table 4.3: ShopInformation Class Description.....	18
Table 4.4: ShopImage Class Description.....	20
Table 4.5: Promotion Class Diagram.....	21
Table 4.6: ActivitiesLog Class Description.....	23
Table 4.7: RequestSignupInfo Class Description.....	25
Table 4.8: PromotionImage Class Description.....	28
Table 4.9: AccountDao Class Description.....	29
Table 4.10: AccountDaoImpl Class Description.....	30
Table 4.11: RequestSignupInfoDao Class Description.....	31
Table 4.12: RequestSignupInfoDaoImpl Class Description.....	32
Table 4.13: ActivitiesLogDao Class Description.....	33
Table 4.14: ActivitiesLogsDaoImpl Class Description.....	34
Table 4.15: PromotionImageDao Class Description.....	35
Table 4.16: PromotionImageDaoImpl Class Description.....	36
Table 4.17: PromotionDao Class Description.....	37
Table 4.18: PromotionDaoImpl Class Description.....	38
Table 4.19: ShopImageDao Class Description.....	39
Table 4.20: ShopImageDaoImpl Class Description.....	40
Table 4.21: ShopInformationDao Class Description.....	41
Table 4.22: ShopInformationDaoImpl Class Description.....	42
Table 4.23: AccountController Class Description.....	43
Table 4.24: ShopImageController Class Description.....	44
Table 4.25: PromotionImageController Class Description.....	45
Table 4.26: PromotionController Class Description.....	46
Table 4.27: ActivitiesLogsController Class Description.....	47
Table 4.28: RequestSignupController Class Description.....	48
Table 4.29: ShopInformationController Class Description.....	49
Table 4.30: Accounts Table.....	51
Table 4.31: ShopInformations Table.....	51
Table 4.32: Logs Table.....	51
Table 4.33: Promotions Table.....	51
Table 4.34: ShopImage Table.....	52
Table 4.35: PromotionImage Table.....	52
Table 4.36: MobileUsers Table.....	52
Table 4.37: RequestingSignup Table.....	52
Table 4.38: Codes Table.....	53

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	6 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

Design	“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]
Entity Relationship	“data modeling technique that creates a graphical representation of the entities, and the relationships between entities, within an information system.”
Diagram	[techtarget.com]
iOS	“the operating system in the iPhone and iPod touch.”
System Architecture	“a generic discipline to handle objects (existing or to be created) called “systems”,

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	7 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

[Lix.polytechnique.fr]

Client	“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.”
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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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	8 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

- Edit promotion
- Delete promotion
- Update profile
- Change password

Guest should be able to:

- Sent register request

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	9 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

CHAPTER 2 | SYSTEM ARCHITECTURE

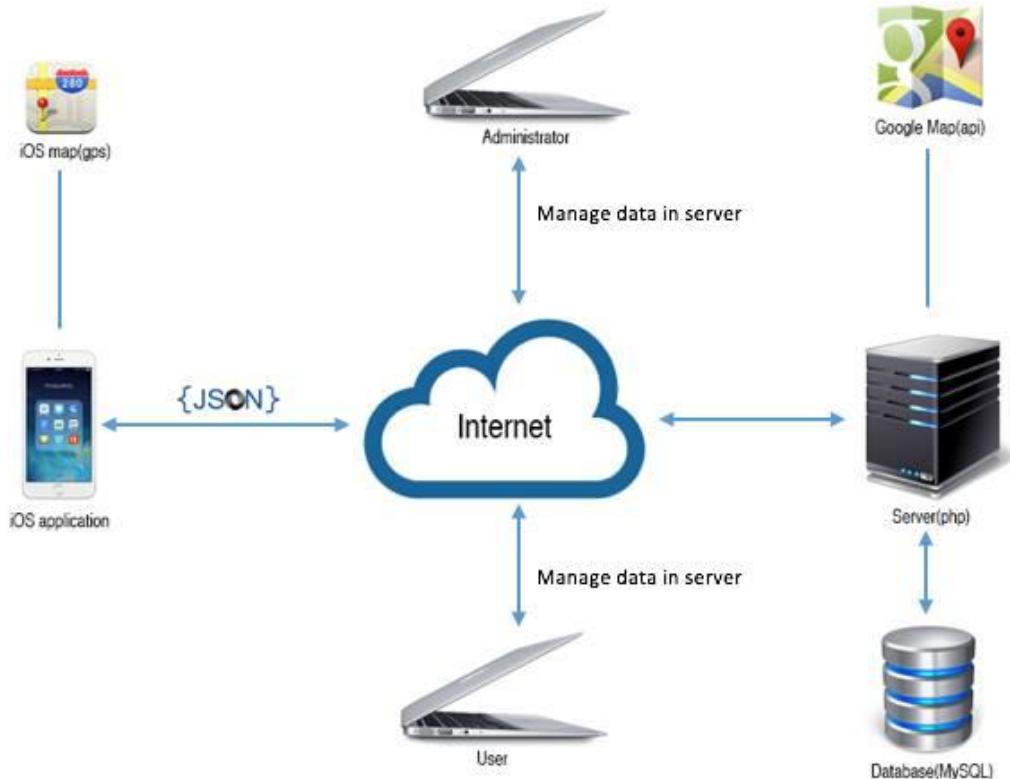


Figure 4.1: System Architecture

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.

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	10 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

CHAPTER 3 | DETAILED DESIGN

3.1 Class diagram

3.1.1 Promotion provider class diagram

3.1.1.1 Overall Promotion provider class diagram

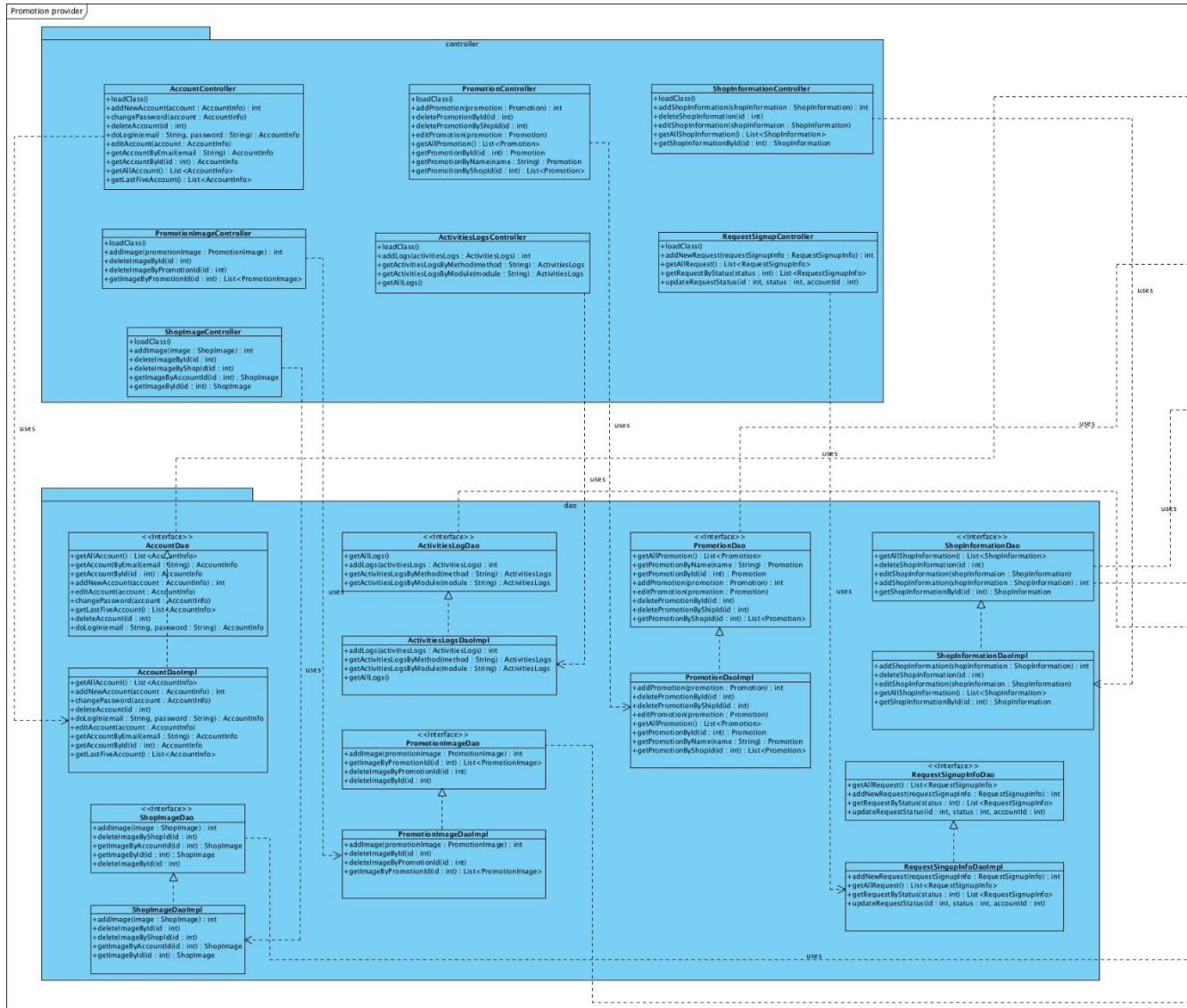


Figure 4.2: Overall Promotion provider class diagram (1)

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	11 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

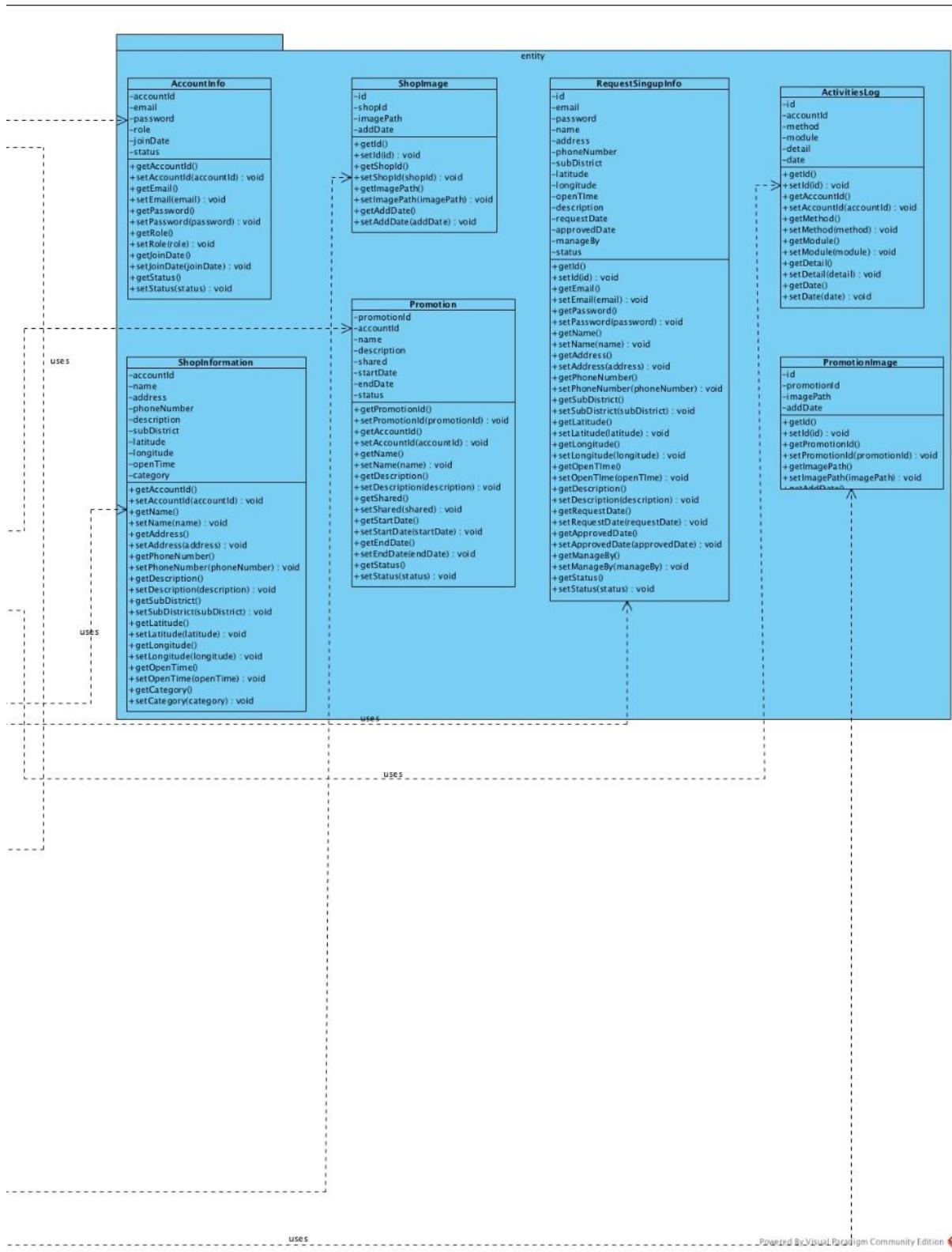


Figure 4.3: Overall Promotion provider class diagram (2)

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	12 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.1.1.2 Dao package class diagram

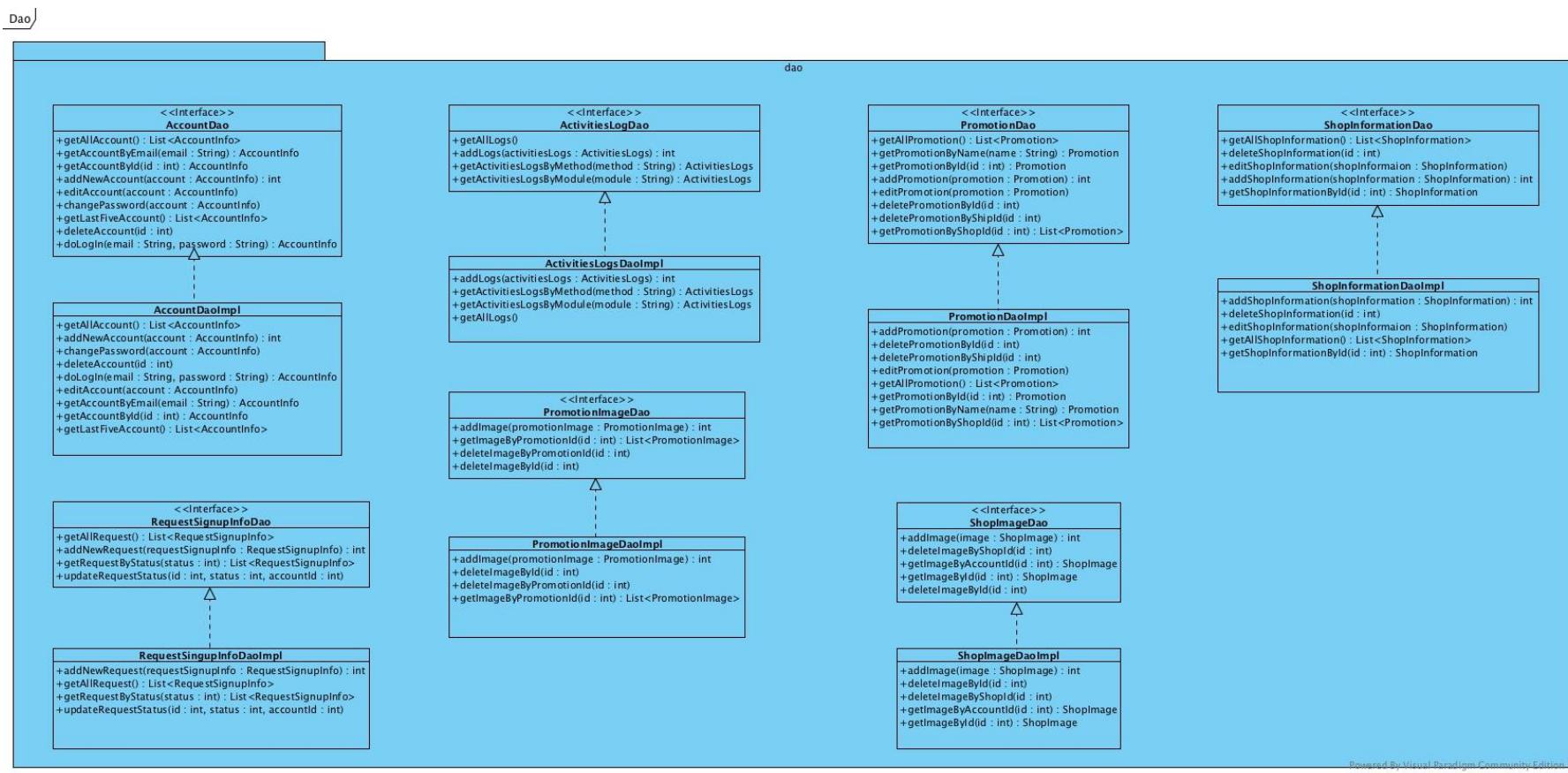


Figure 4.4: Dao package class diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	13 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.1.1.3 Controller package class diagram

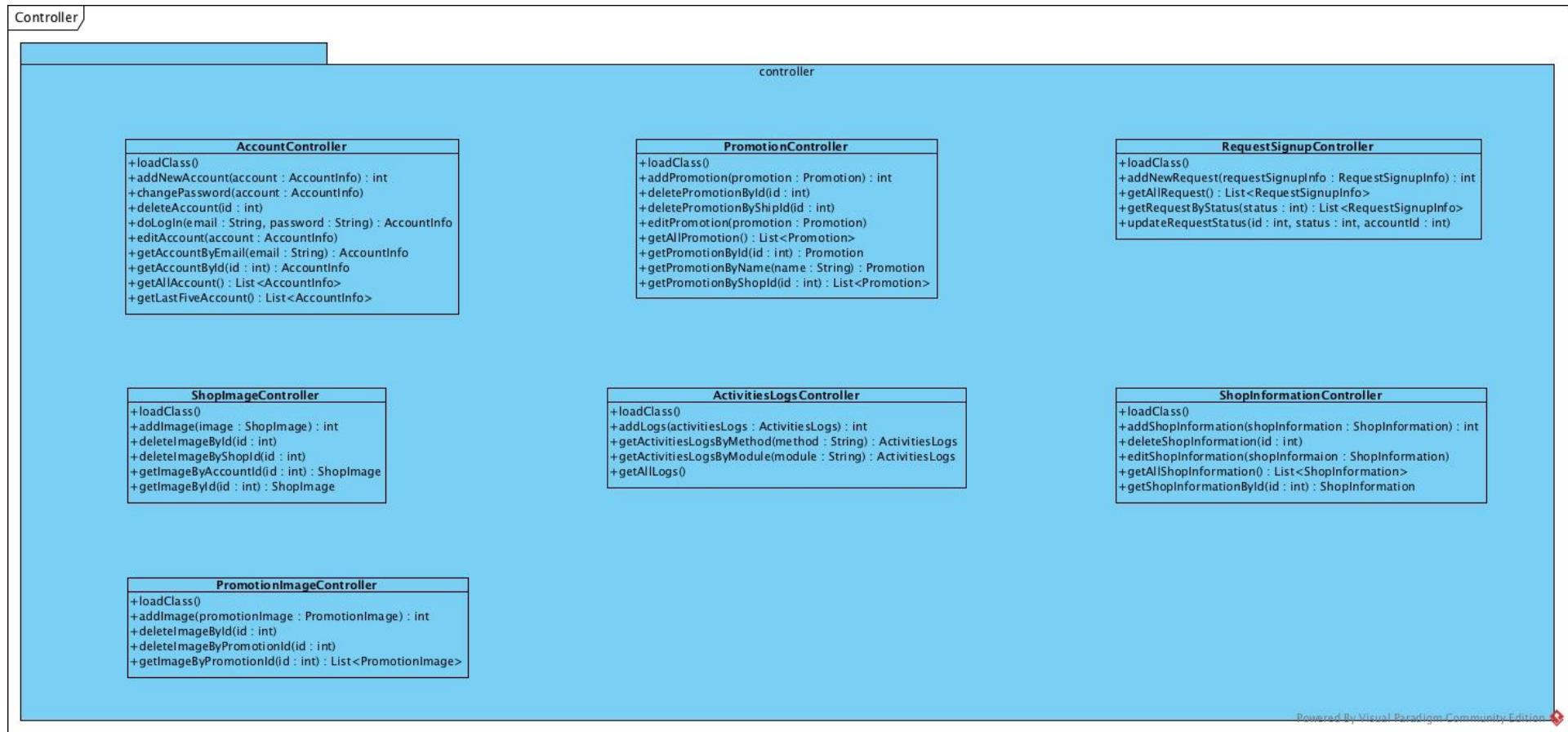


Figure 4.5: Controller class diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	14 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.1.1.4 Entity package class diagram

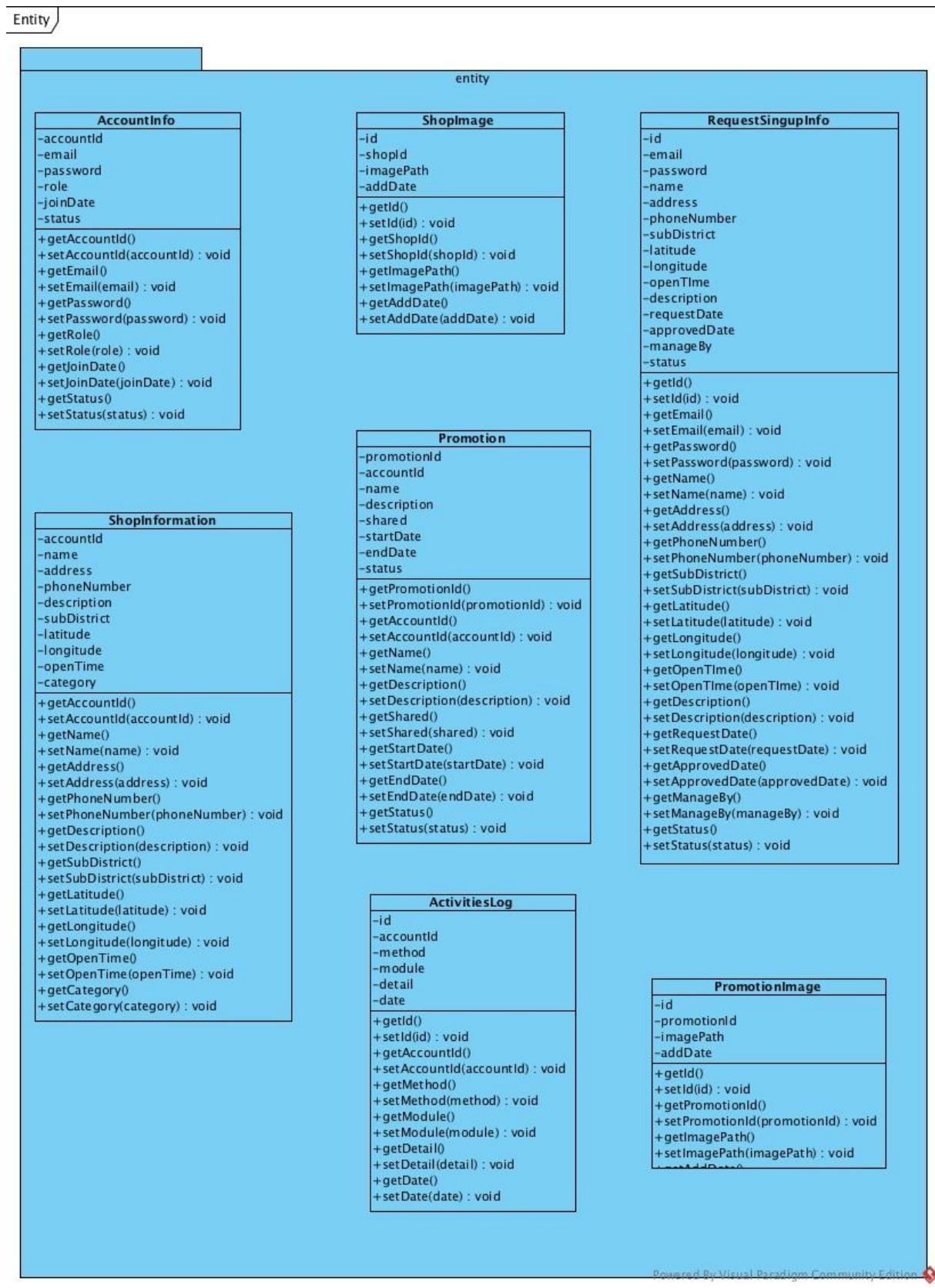


Figure 4.6: Entity package class diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	15 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	16 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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	
setStatus(status)	Method for setting attribute name status	Return Type: void

Table 4.2: AccountInfo Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	17 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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	

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	18 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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 longitude	
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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	19 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	20 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

4. Class name: Promotion

Promotion	
-promotionId	
-accountId	
-name	
-description	
-shared	
-startDate	
-endDate	
-status	
+getPromotionId()	
+setPromotionId(promotionId) : void	
+getAccountId()	
+setAccountId(accountId) : void	
+getName()	
+setName(name) : void	
+getDescription()	
+setDescription(description) : void	
+getShared()	
+setShared(shared) : void	
+getStartDate()	
+setStartDate(startDate) : void	
+getEndDate()	
+setEndDate(endDate) : void	
+getStatus()	
+setStatus(status) : void	

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	21 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

Table 4.5: Promotion Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	22 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

5. Class name: ActivitiesLog

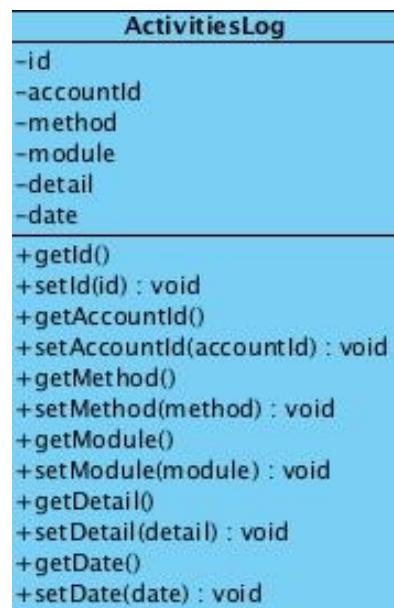


Figure 4.11: ActivitiesLog Class

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	

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	23 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

Table 4.6: ActivitiesLog Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	24 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

6. Class name: RequestSignupInfo

RequestSignupInfo	
-id	
-email	
-password	
-name	
-address	
-phoneNumber	
-subDistrict	
-latitude	
-longitude	
-openTime	
-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	
+getOpenTime()	
+setOpenTime(openTime) : 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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	25 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

phoneNumber	Shop phone number	Type: String
subDistrict	Shop sub district	Type: String
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 logitude	
setLongitude(logitude)	Method for setting attribute name logitude	Return Type: void

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	26 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

getOpenTime()	Method for getting attribute name openTime	
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: RequestSignupInfo Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	27 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

7. Class name: PromotionImage

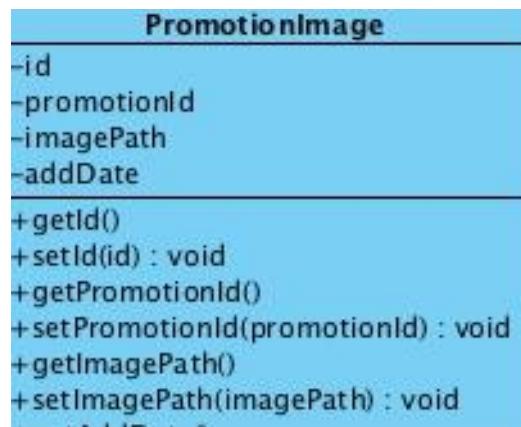


Figure 4.13: PromotionImage Class

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	28 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

8. Class name: AccountDao



Figure 4.14: AccountDao Class

Field Name	Description	Remark
-	-	-

Method Name	Description	Remark
getAllAccount()	Method for getting all account from database	Return Type: List<AccountInfo>
getAccountByEmail(email: String)	Method for getting account information from database by using email	Return Type: AccountInfo
getAccountById(id: int)	Method for getting account information from database by using account id	Return Type: 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: 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: AccountInfo

Table 4.9: AccountDao Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	29 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

9. Class name: AccountDaoImpl



Figure 4.15: AccountDaoImpl Class

Field Name	Description	Remark
-	-	-

Method Name	Description	Remark
getAllAccount()	Method for getting all account from database	Return Type: 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: 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: AccountInfo
getAccountById(id: int)	Method for getting account information from database by using account id	Return Type: AccountInfo
getLastFiveAccount()	Method for getting latest five account in database	Return Type: List<AccountInfo>

Table 4.10: AccountDaoImpl Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	30 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

10. Class name: RequestSignupInfoDao



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: 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: 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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	31 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

11. Class name: RequestSignupInfoDaoImpl



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	32 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

12. Class name: ActivitiesLogDao



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: ActivitiesLogs
getActivitiesLogsByModule(module: String)	Method for getting activities logs by using module	Return Type: ActivitiesLogs

Table 4.13: ActivitiesLogDao Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	33 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

13. Class name: ActivitiesLogsDaoImpl



Figure 4.19: ActivitiesLogsDaoImpl Class

Field Name	Description	Remark
-	-	-

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

Table 4.14: ActivitiesLogsDaoImpl Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	34 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

14. Class name: PromotionImageDao



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	35 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

15. Class name: PromotionImageDaoImpl



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	36 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

16. Class name: PromotionDao



Figure 4.22: PromotionDao Class

Field Name	Description	Remark
-	-	-

Method Name	Description	Remark
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
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: list<Promotion>

Table 4.17: PromotionDao Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	37 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

17. Class name: PromotionDaoImpl

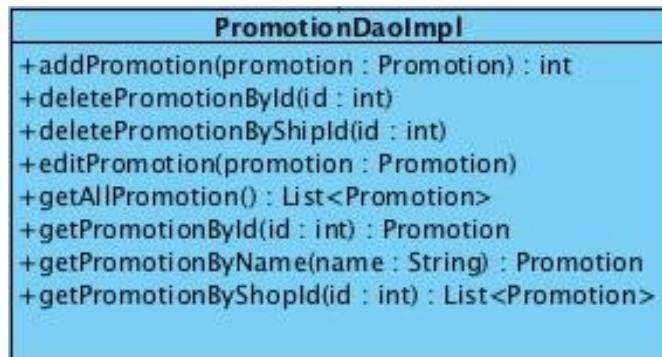


Figure 4.23: PromotionDaoImpl Class

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	38 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

18. Class name: ShopImageDao



Figure 4.24: ShopImageDao Class

Field Name	Description	Remark
-	-	-

Method Name	Description	Remark
addImage(image: ShopImage)	Method for adding new shop image into database	Return Type: int
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
deleteImageById(id: int)	Method for deleting shop image by using image id	

Table 4.19: ShopImageDao Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	39 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

19. Class name: ShopImageDaoImpl



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	40 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

20. Class name: ShopInformationDao



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	41 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

21. Class name: ShopInformationDaoImpl

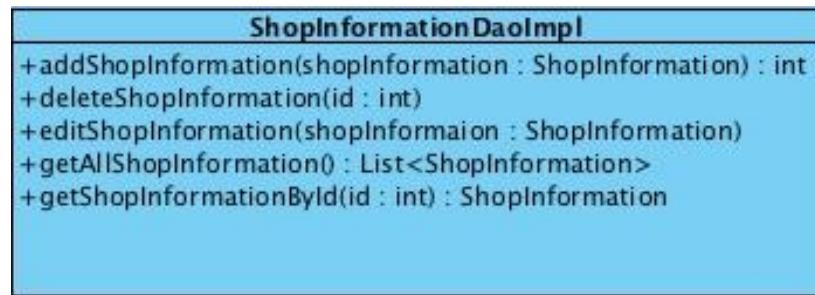


Figure 4.27: ShopInformationDaoImpl Class

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	42 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

22. Class name: AccountController

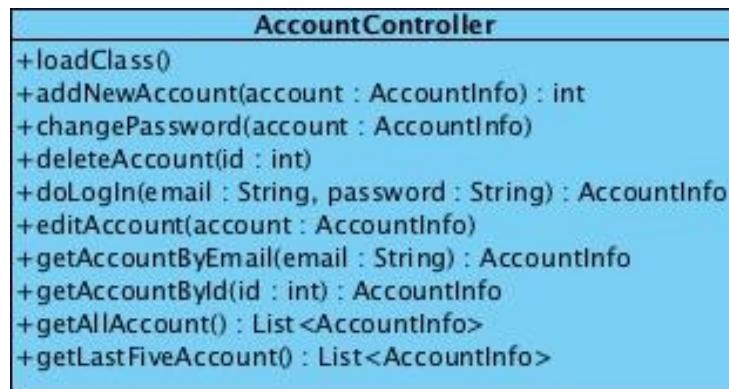


Figure 4.28: AccountController Class

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	43 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

23. Class name: ShopImageController



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	44 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

24. Class name: PromotionImageController



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	45 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

25. Class name: PromotionController



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	46 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

26. Class name: ActivitiesLogsController



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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	47 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

27. Class name: RequestSignupController



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: 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 getting update status of request sign up	

Table 4.28: RequestSignupController Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	48 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

28. Class name: ShopInformationController

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: List<ShopInformation>
getShopInformationById(id: int)	Method for getting shop information from database by using shop id	Return Type: ShopInformation

Table 4.29: ShopInformationController Class Description

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	49 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.2 ER-Diagram

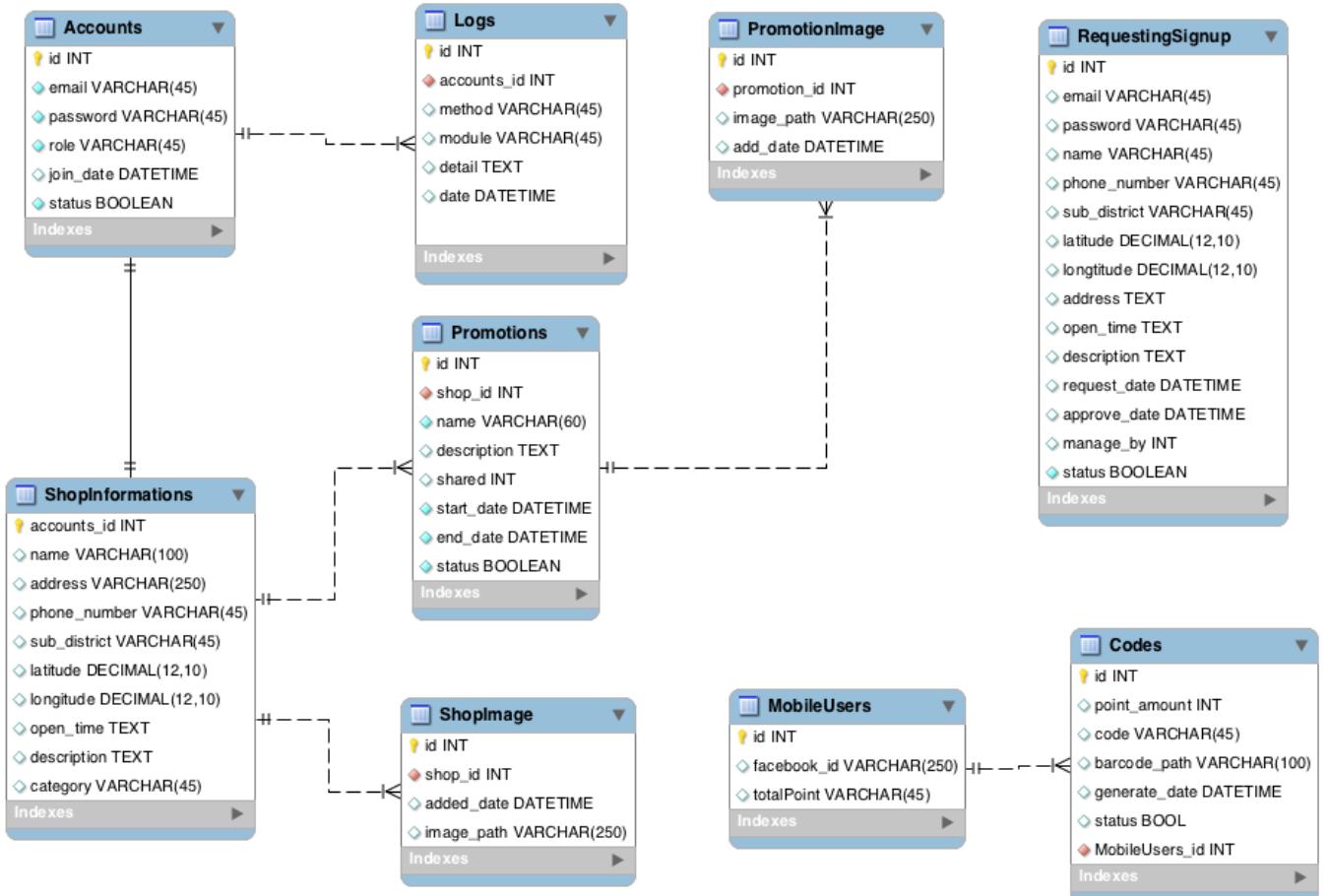


Figure 4.35: ER - Diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	50 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	51 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	52 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.2.9 Codes Table

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

Table 4.38: Codes Table

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	53 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3 Sequence Diagram

3.3.1 URS-01: Admin can login to web server

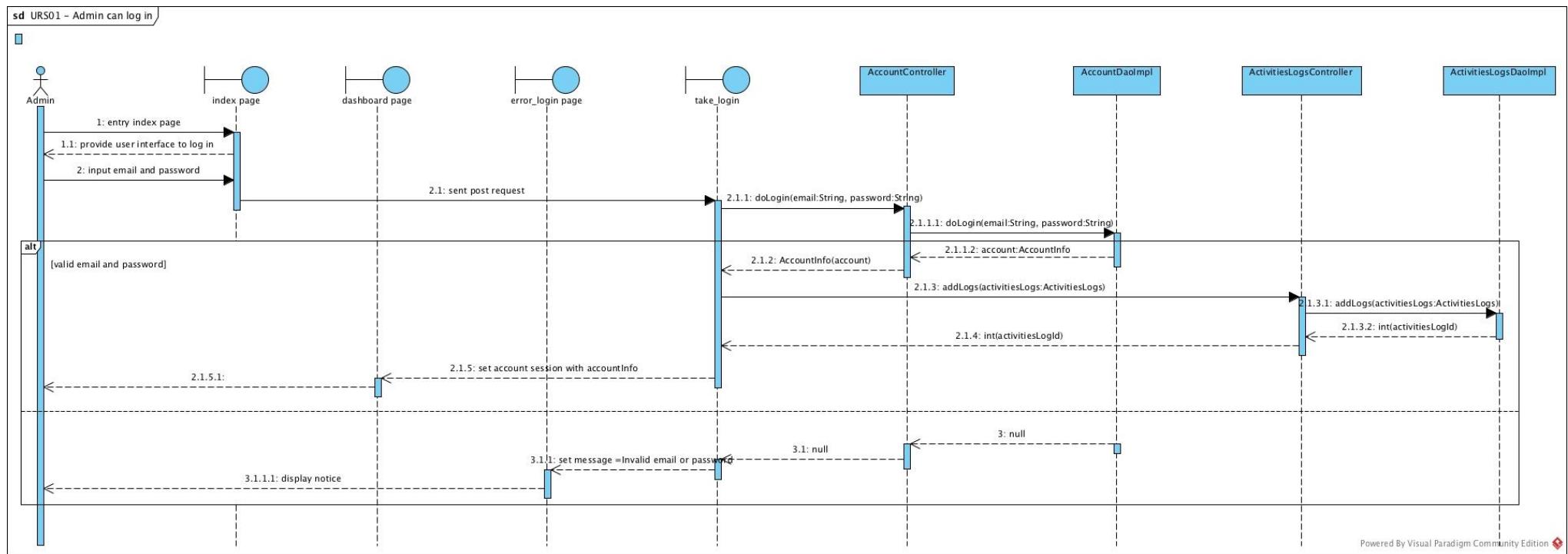


Figure 4.36: SD-01 Admin can login to web server sequence diagram

SD-01 Admin can login to web server sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	54 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.2 URS-02: Admin can logout from web server

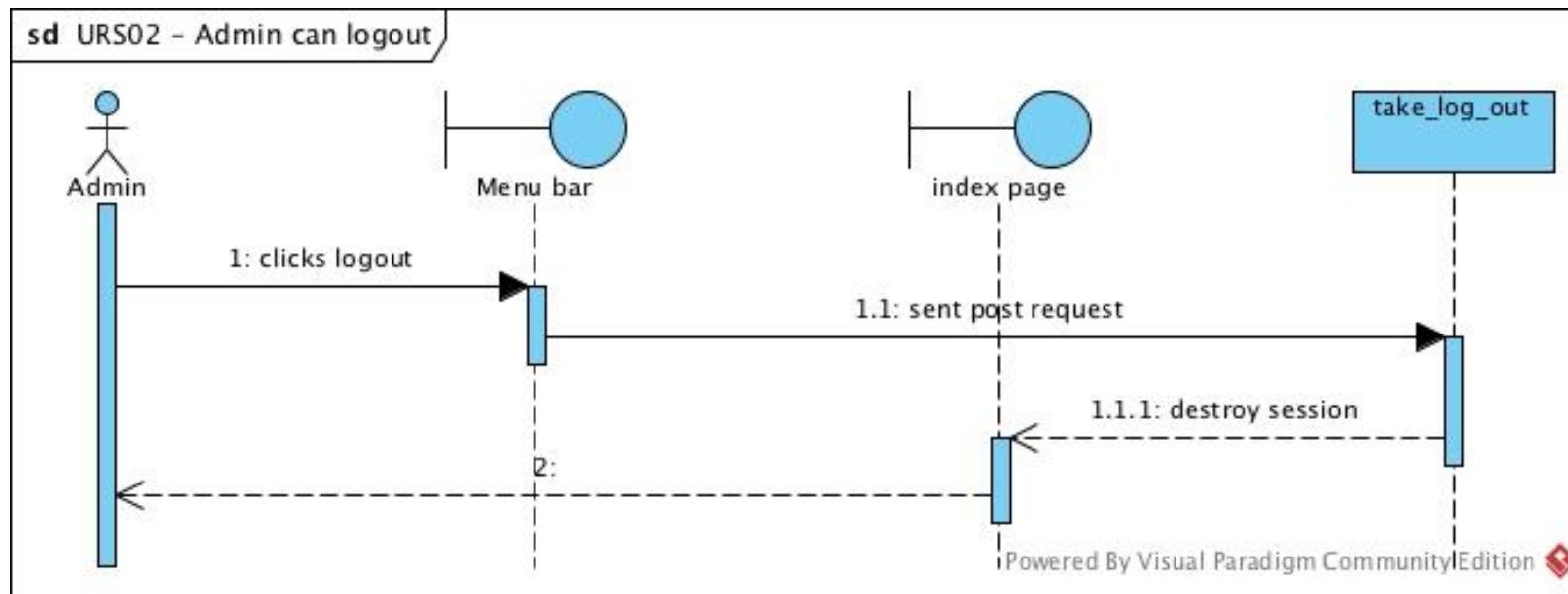


Figure 4.37: SD-02 Admin can logout from web server sequence diagram

SD-02 Admin can logout from web server sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	55 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.3 URS-03: Admin can add shop owner account

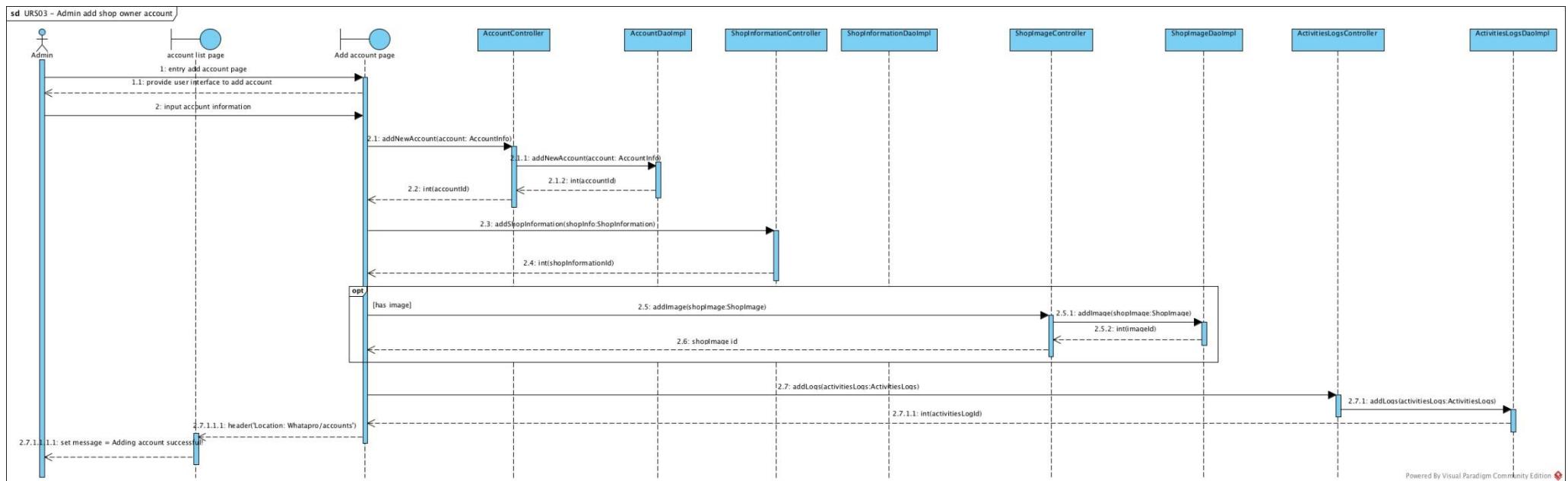


Figure 4.38: SD-03 Admin can add shop owner account sequence diagram

SD-03 Admin can add shop owner account sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	56 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.4 URS-04: Admin can edit shop owner account

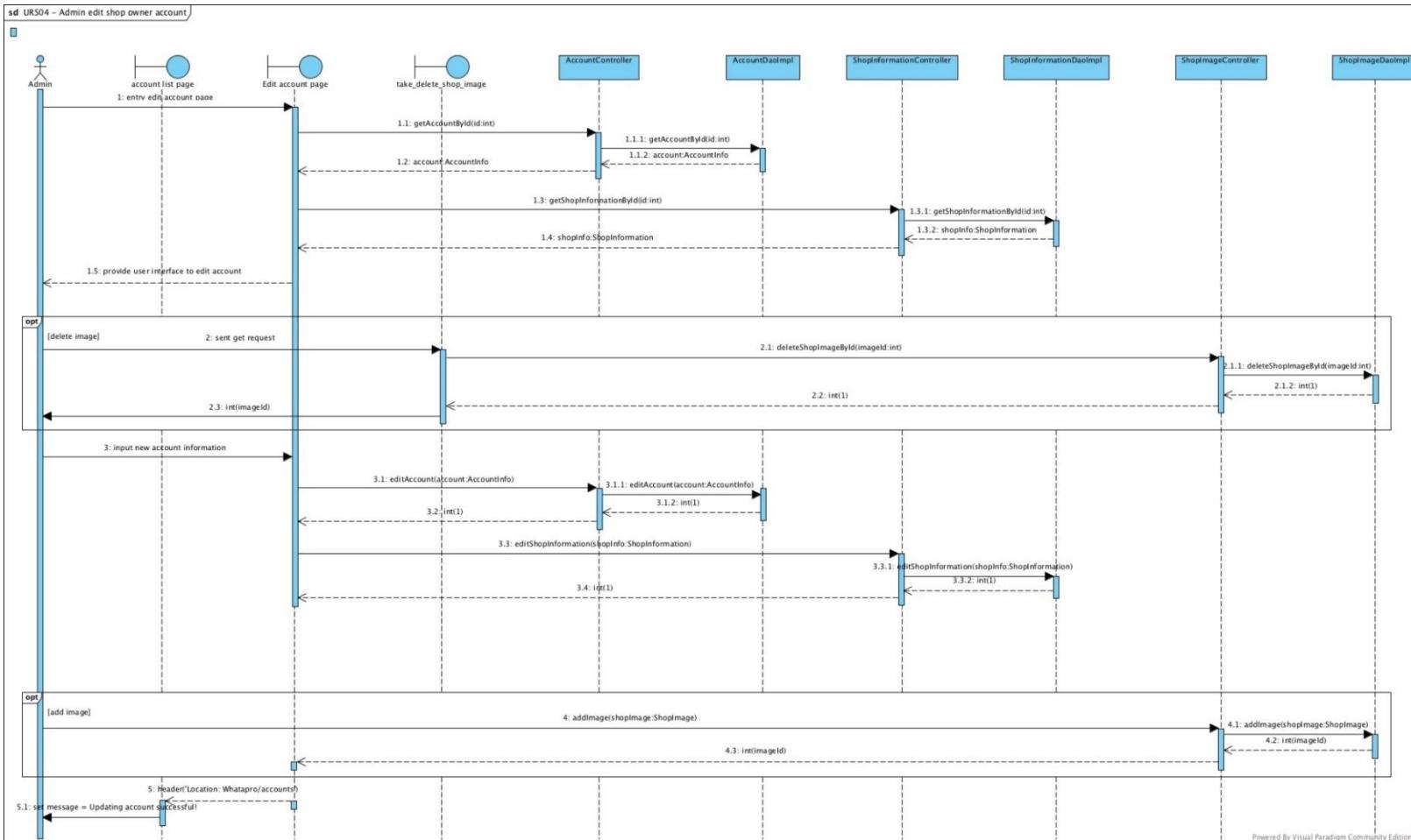


Figure 4.39: SD-04 Admin can edit shop owner account sequence diagram

SD-04 Admin can edit shop owner account sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	57 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.5 URS-05: Admin can delete shop owner account

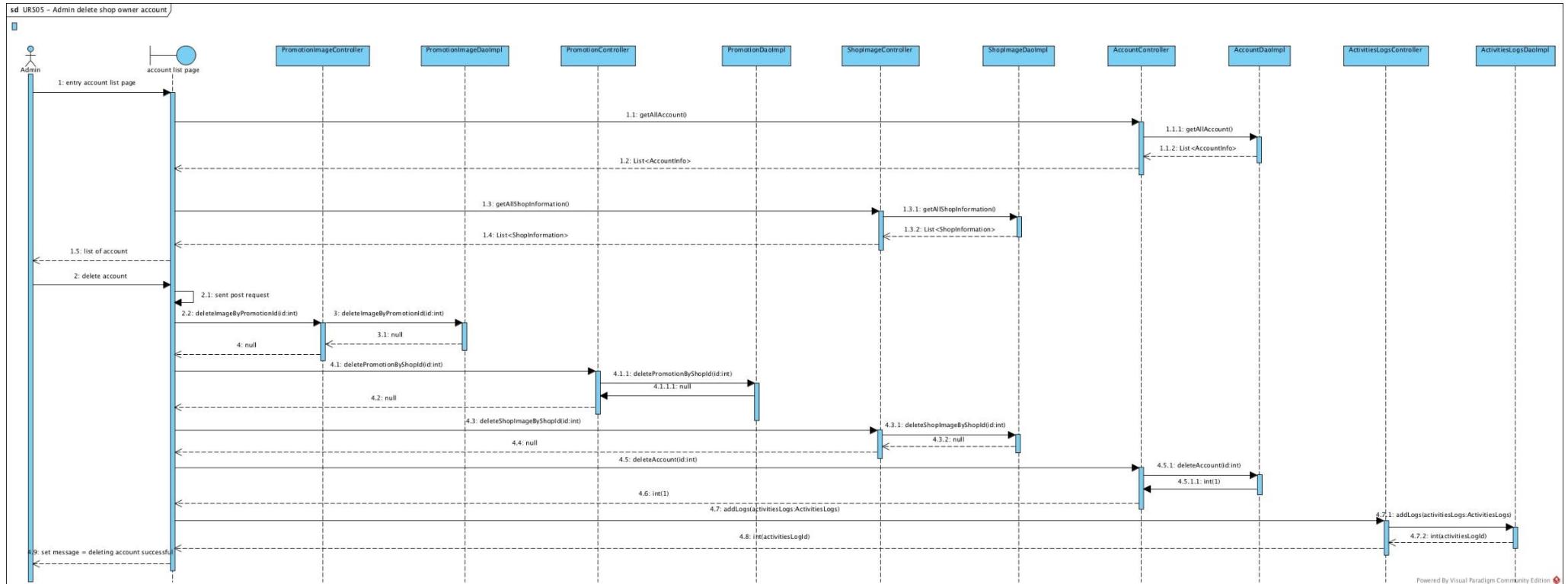


Figure 4.40: SD-05 Admin can delete shop owner account sequence diagram

SD-05 Admin can delete shop owner account sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	58 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

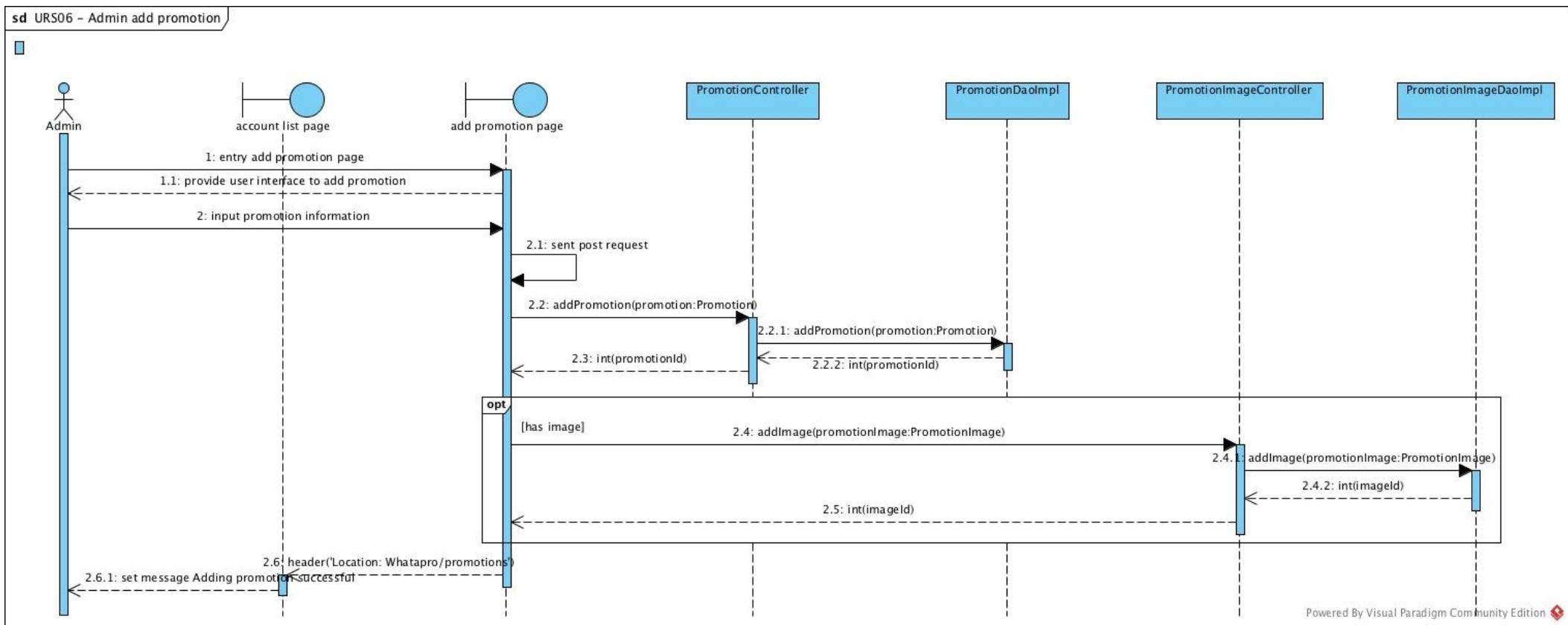


Figure 4.41: SD-06 Admin can add promotion to shop owner sequence diagram

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	59 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.7 URS-07: Admin can edit shop owner promotion

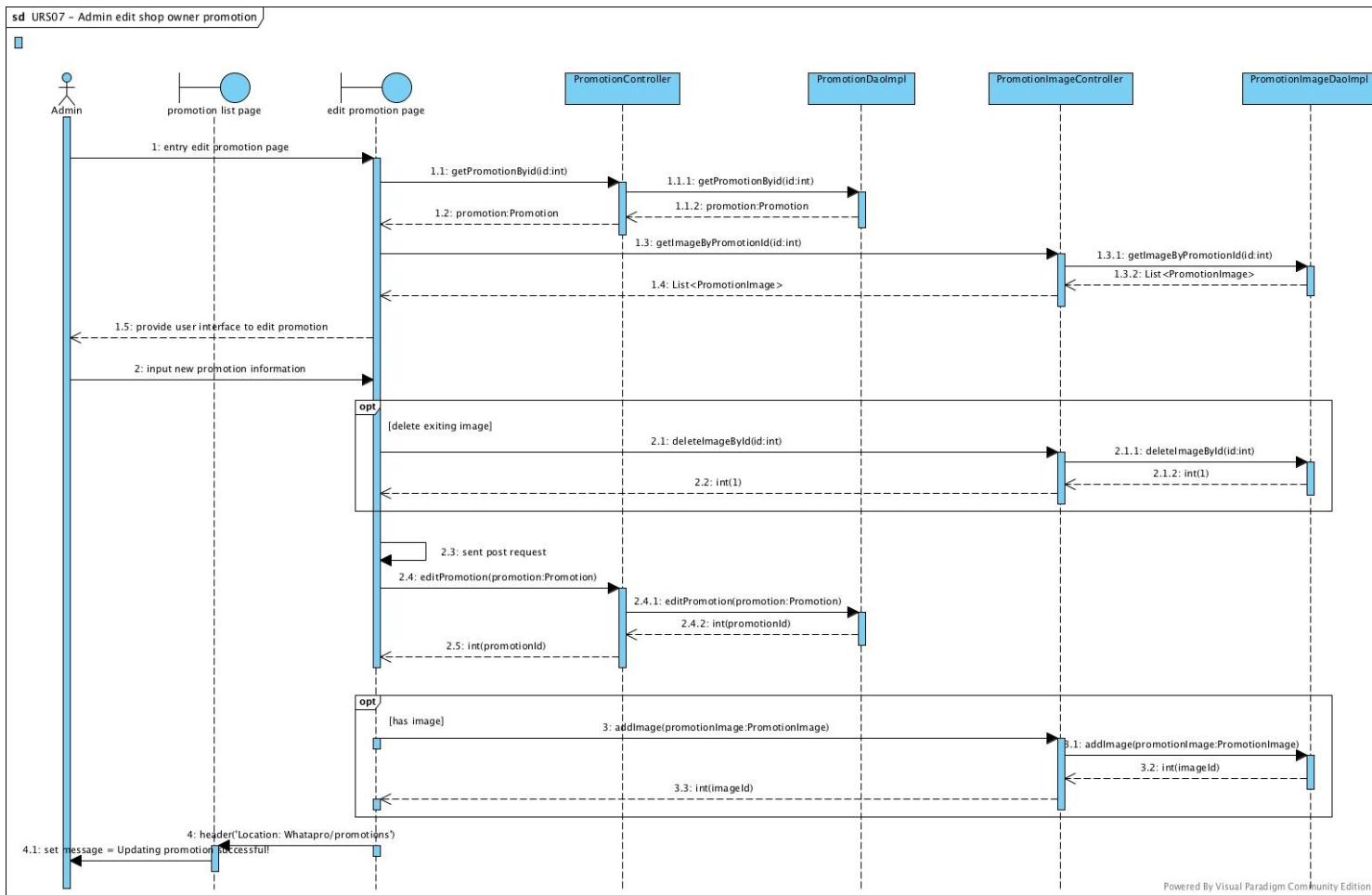


Figure 4. 42: SD-07 Admin can edit shop owner promotion sequence diagram

SD-07 Admin can edit shop owner promotion sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	60 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.8 URS-08: Admin can delete shop owner promotion

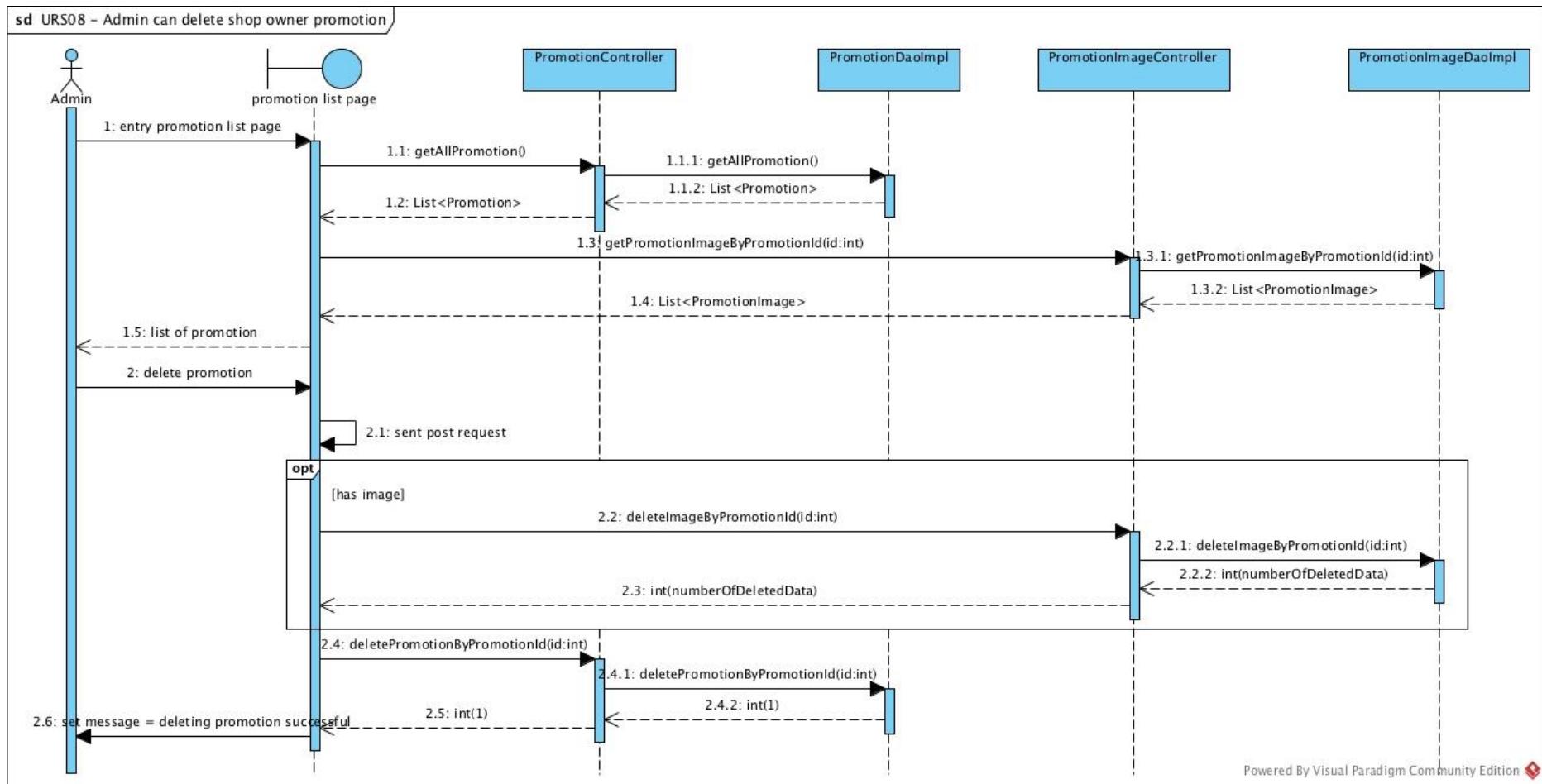


Figure 4.43: SD-08 Admin can delete shop owner promotion sequence diagram

SD-08 Admin can delete shop owner promotion sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	61 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.9 URS-09: Admin can accept register request

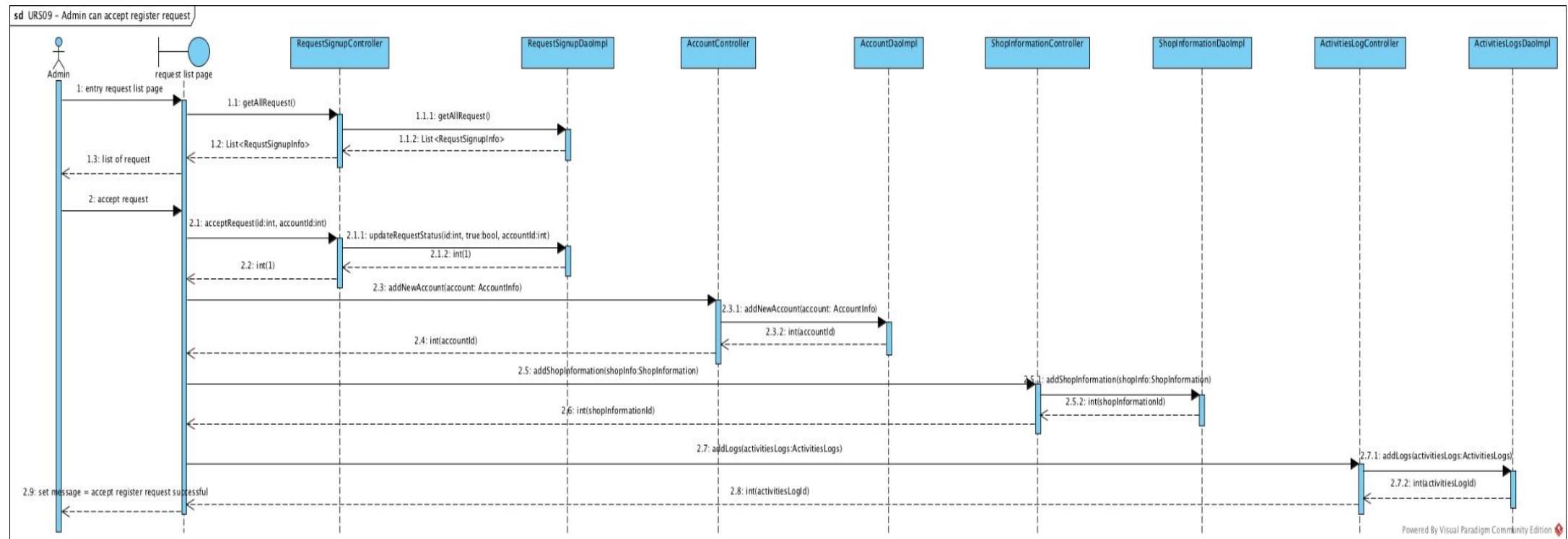


Figure 4.44: SD-09 Admin can accept register request sequence diagram

SD-09 Admin can accept register request sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	62 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.10 URS-10: Admin can reject register request

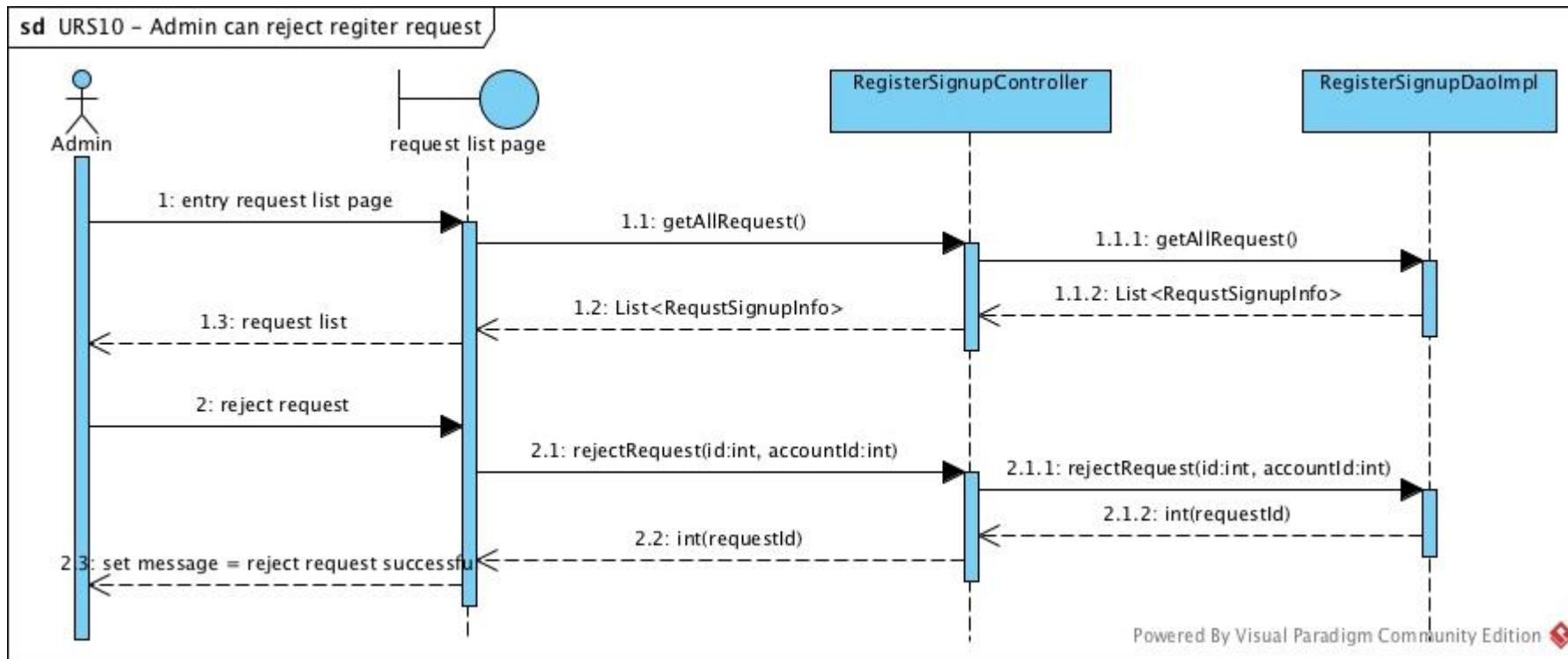


Figure 4.45: SD-10 Admin can reject register request sequence diagram

SD-10 Admin can reject register request sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	63 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.11 URS-11: Admin can view account list

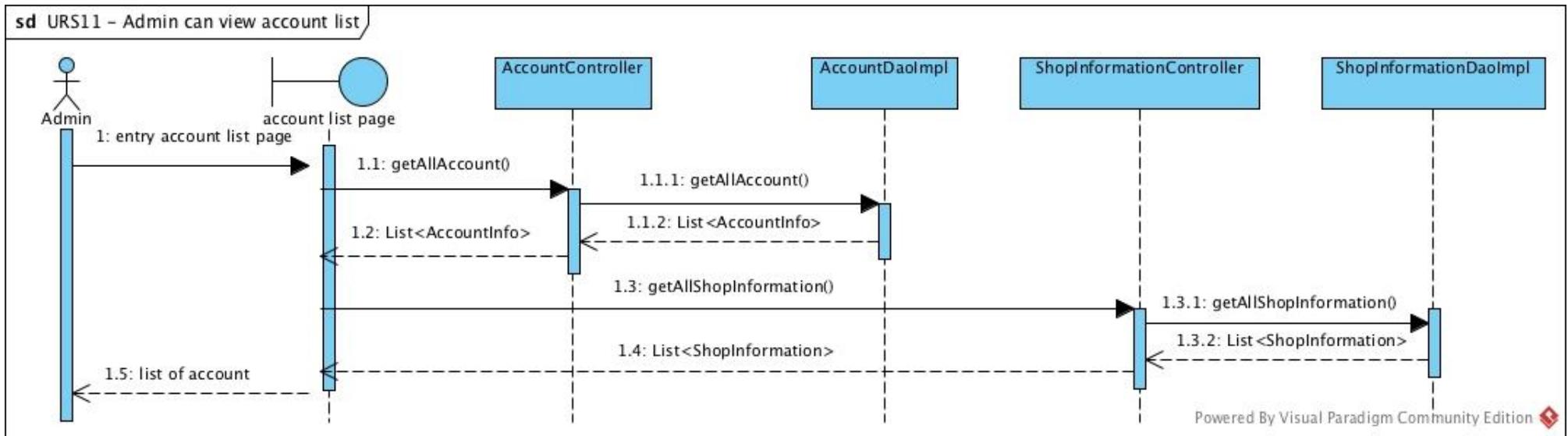


Figure 4.46: SD-11 Admin can view account list sequence diagram

SD-11 Admin can view account list sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	64 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.12 URS-12: Admin can view account information

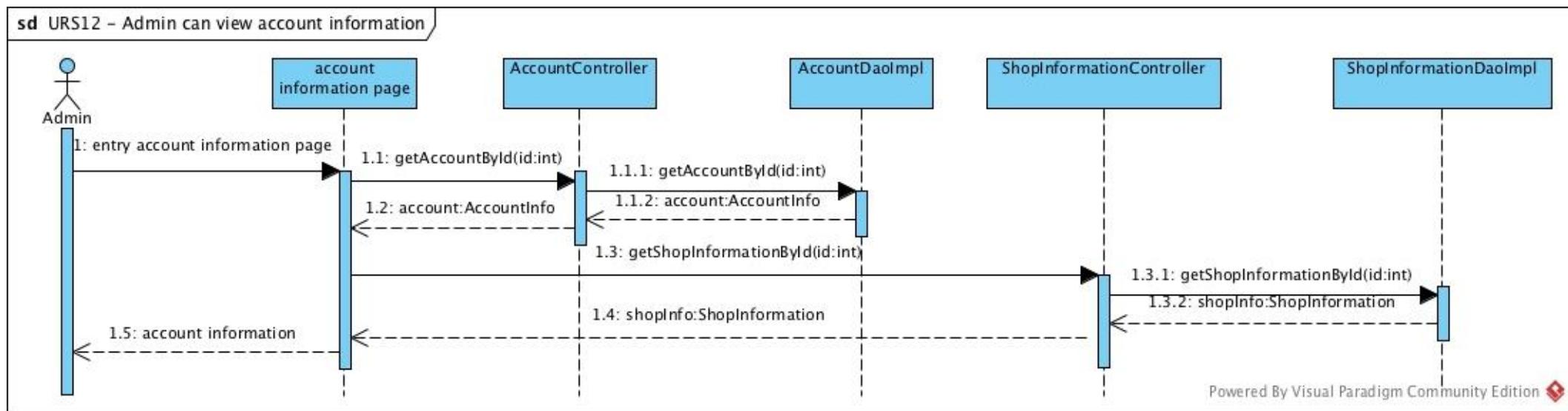


Figure 4.47: SD-12 Admin can view account information sequence diagram

SD-12 Admin can view account information sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	65 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.13 URS-13: Admin can view promotion list

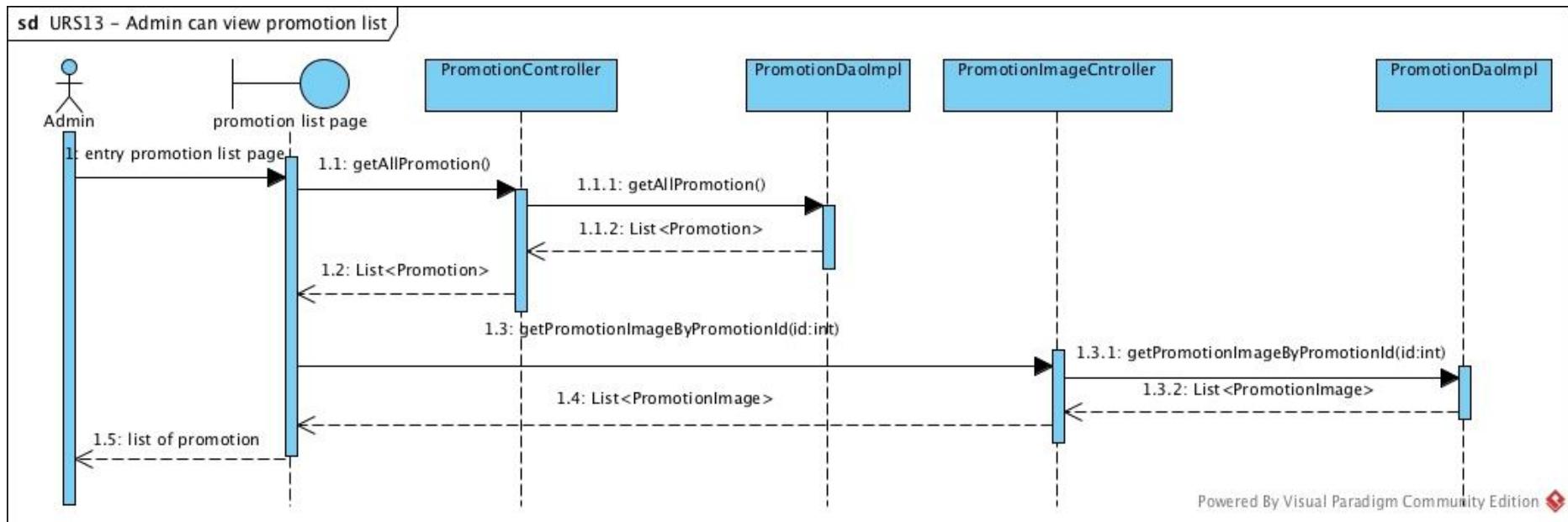


Figure 4.48: SD-13 Admin can view promotion list sequence diagram

SD-13 Admin can view promotion list sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	66 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.14 URS-14: Admin can view promotion information

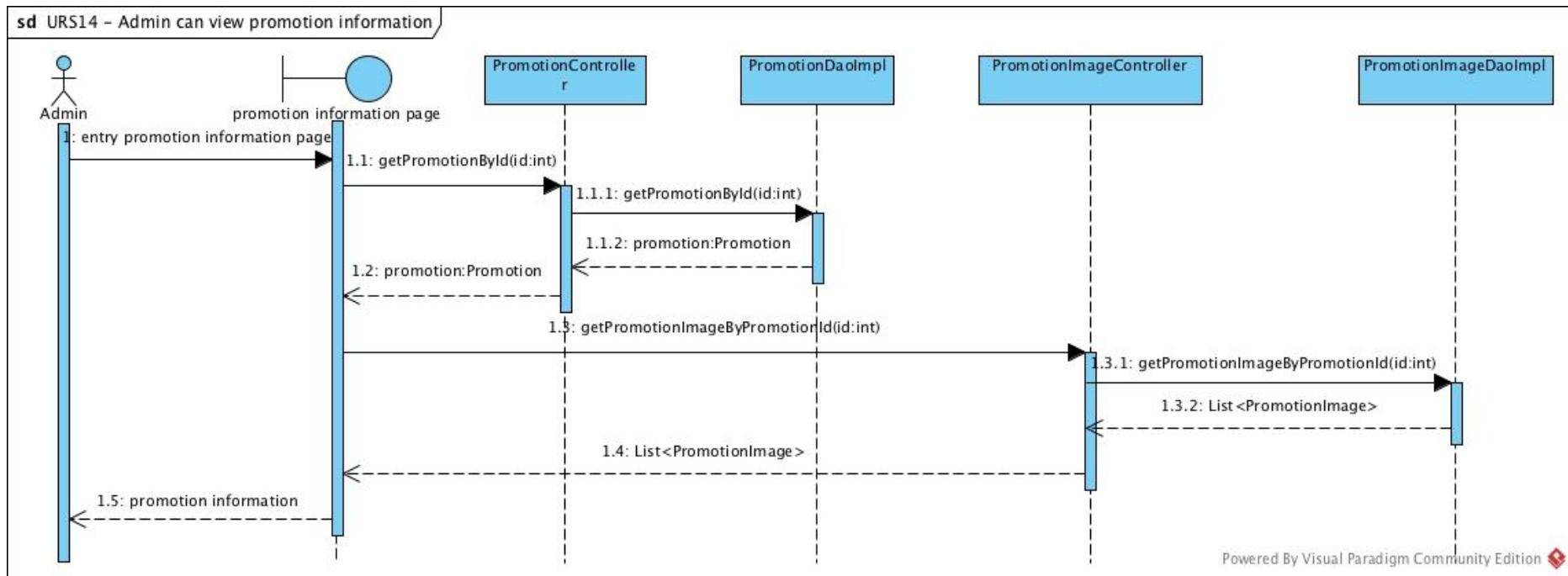


Figure 4.49: SD-14 Admin can view promotion information sequence diagram

SD-14 Admin can view promotion information sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	67 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.15 URS-15: Admin can view user logs

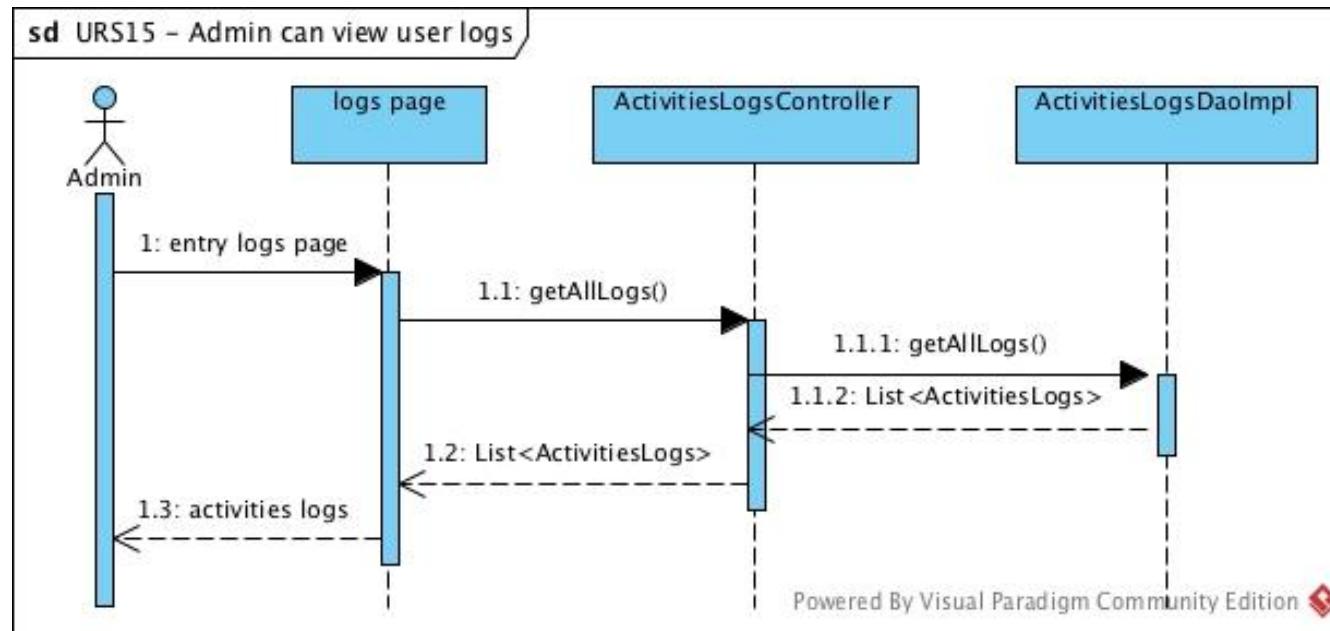


Figure 4.50: SD-15 Admin can view user logs sequence diagram

SD-15 Admin can view user logs sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	68 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.16 URS-16: Admin can view redeem code list

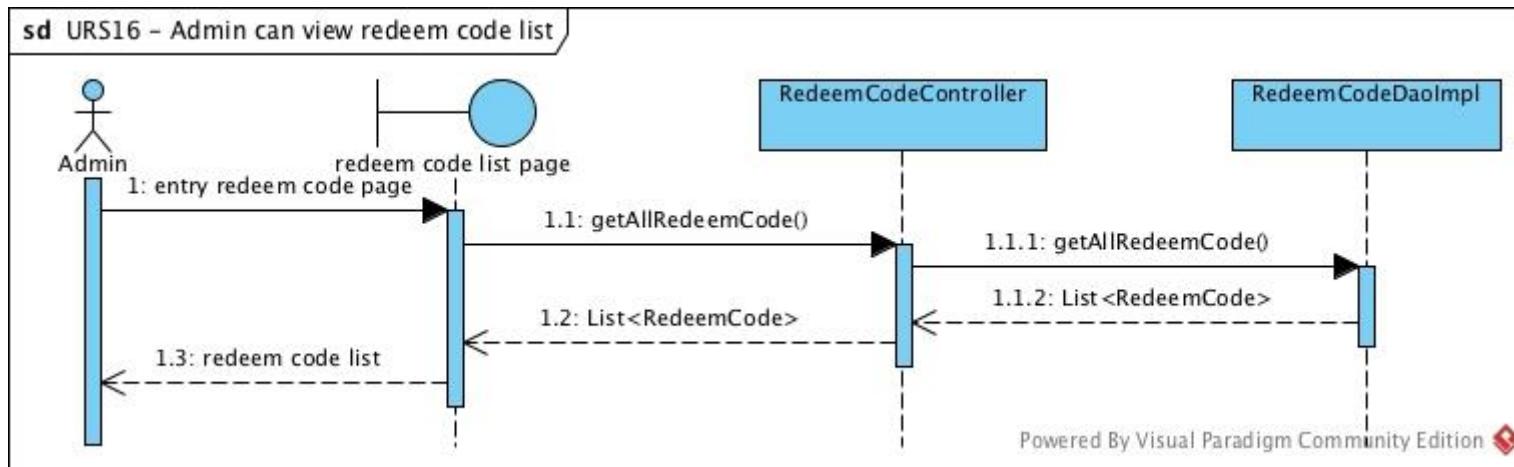


Figure 4.51: SD-16 Admin can view redeem code list sequence diagram

SD-16 Admin can view redeem code list sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	69 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.17 URS-17: Admin can view redeem code information

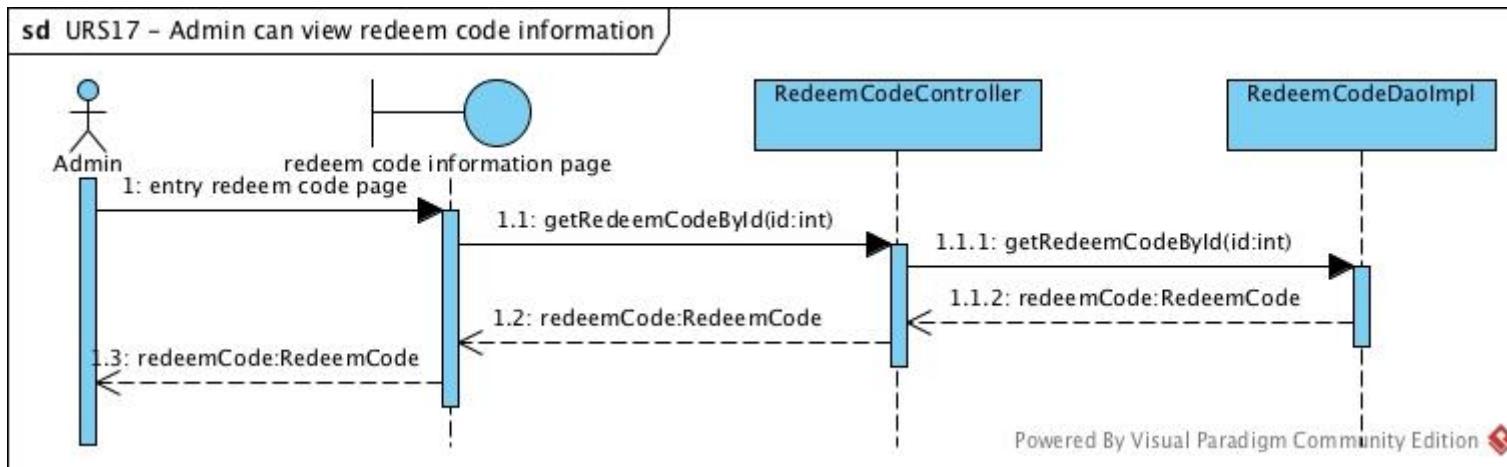


Figure 4.52: SD-17 Admin can view redeem code information sequence diagram

SD-17 Admin can view redeem code information sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	70 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.18 URS-18: Admin can view mobile user list

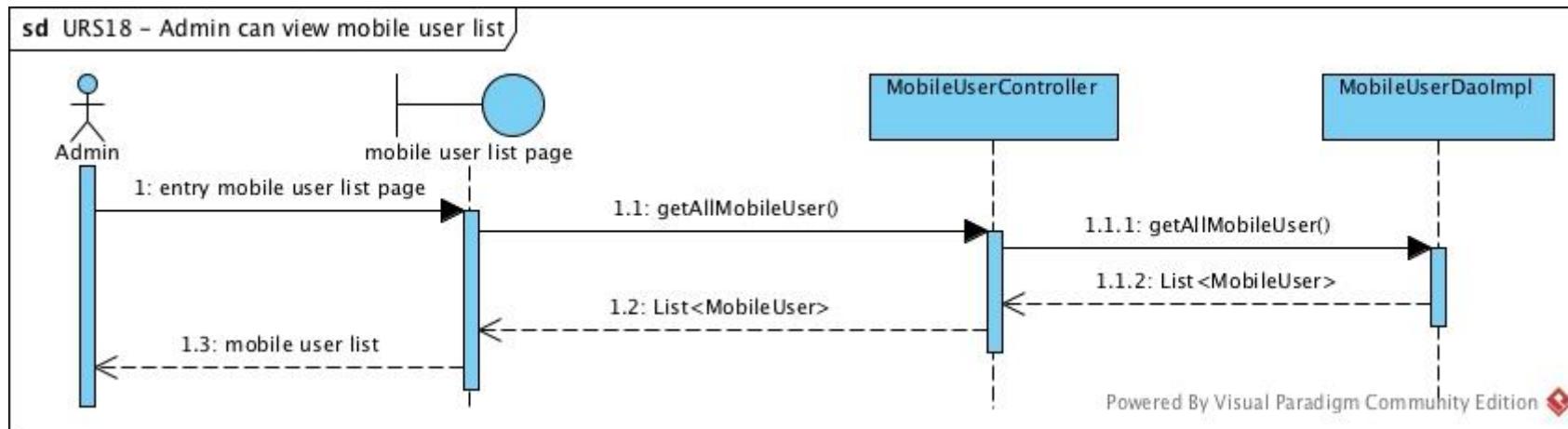


Figure 4.53: SD-18 Admin can view mobile user list sequence diagram

SD-18 Admin can view mobile user list sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	71 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.19 URS-19: Admin can view mobile user information

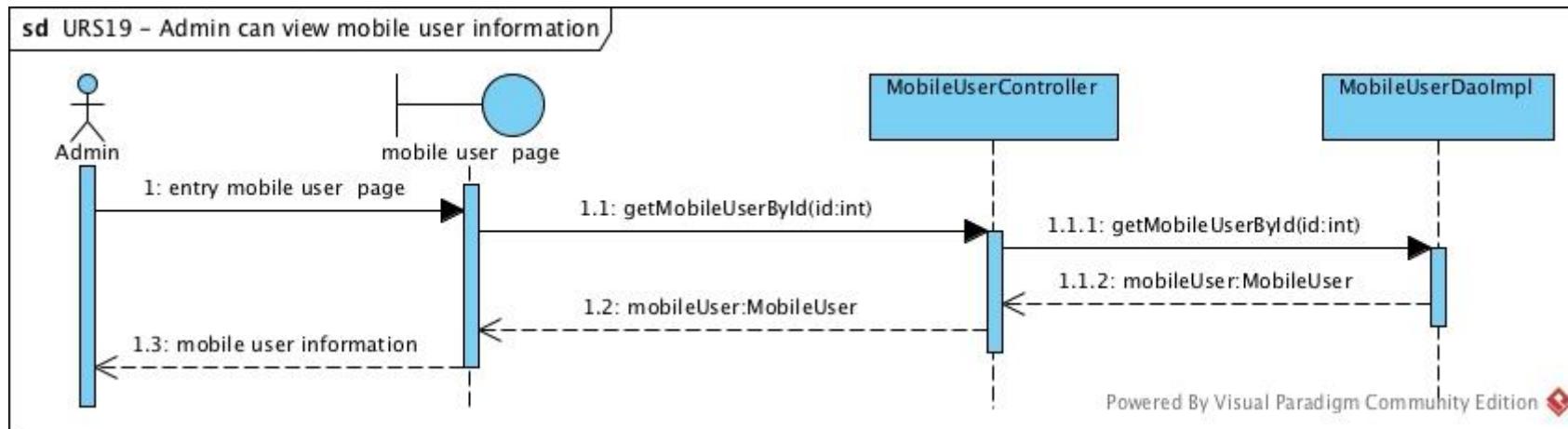


Figure 4.54: SD-19 Admin can view mobile user information sequence diagram

SD-19 Admin can view mobile user information sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	72 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

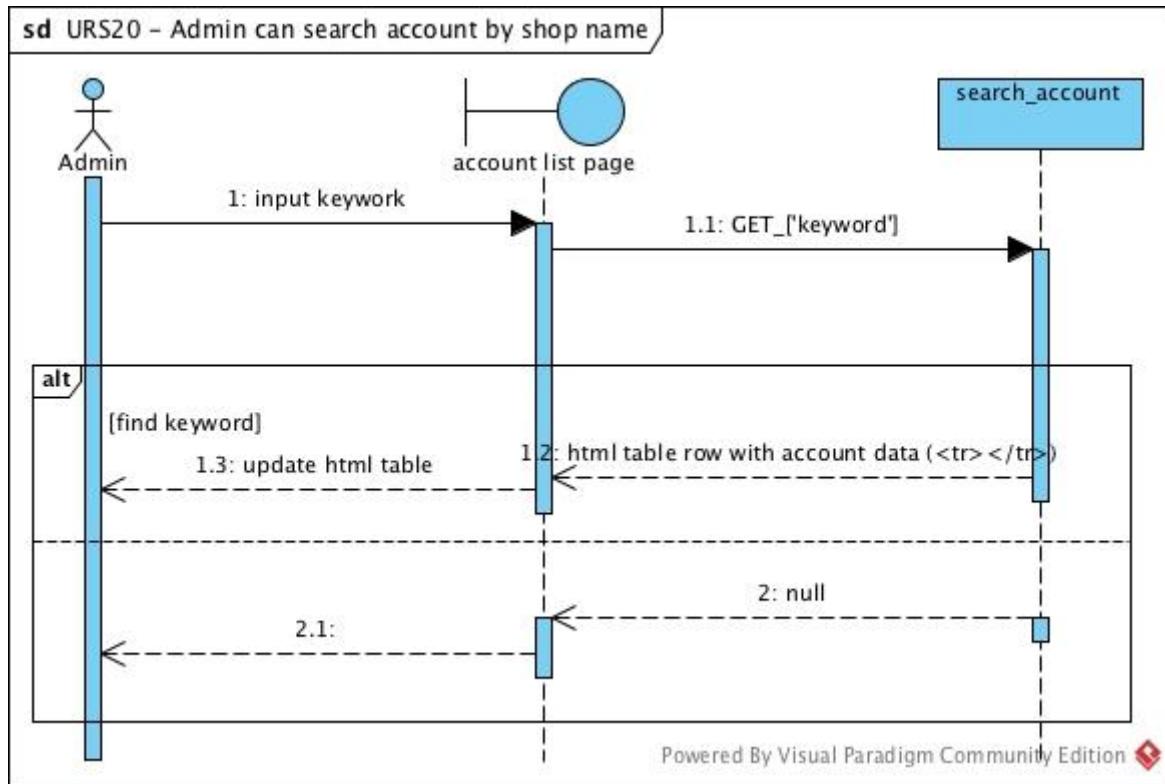


Figure 4.55: SD-20 Admin can search account by shop name sequence diagram

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	73 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.21 URS-21: Admin can search account by email

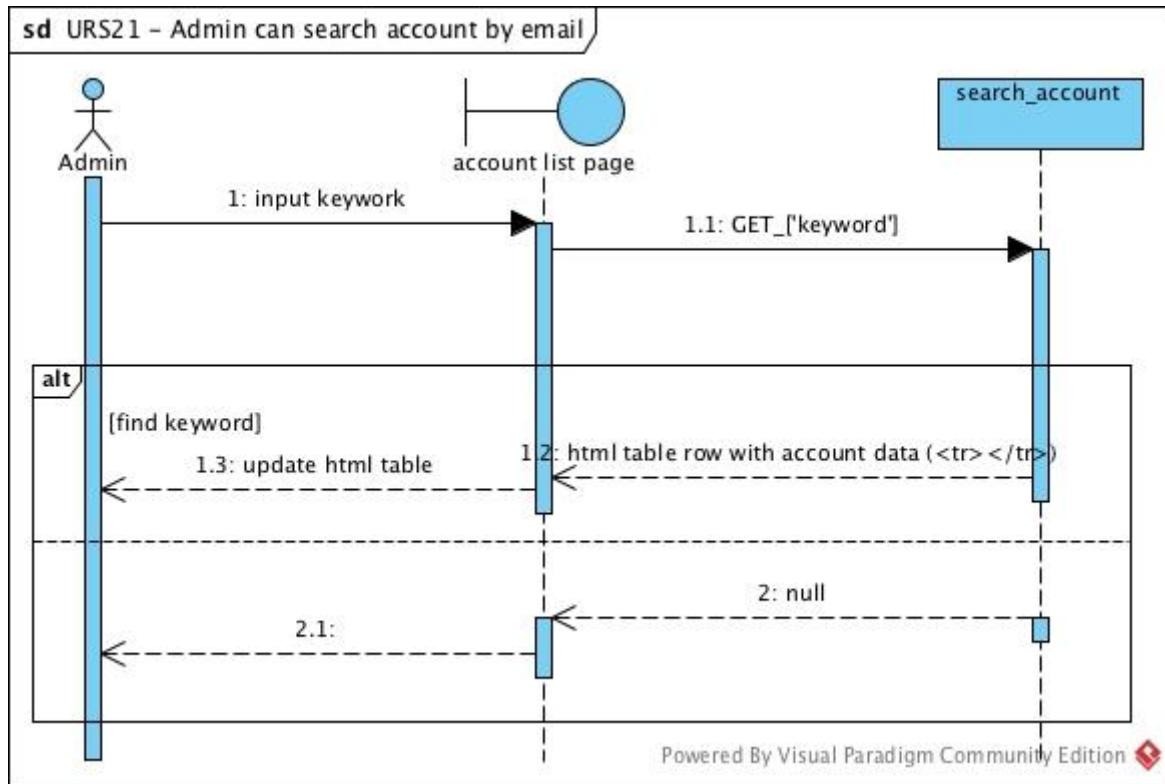


Figure 4.56: SD-21 Admin can search account by email sequence diagram

SD-21 Admin can search account by email sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	74 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.22 URS-22: Admin can search account by id

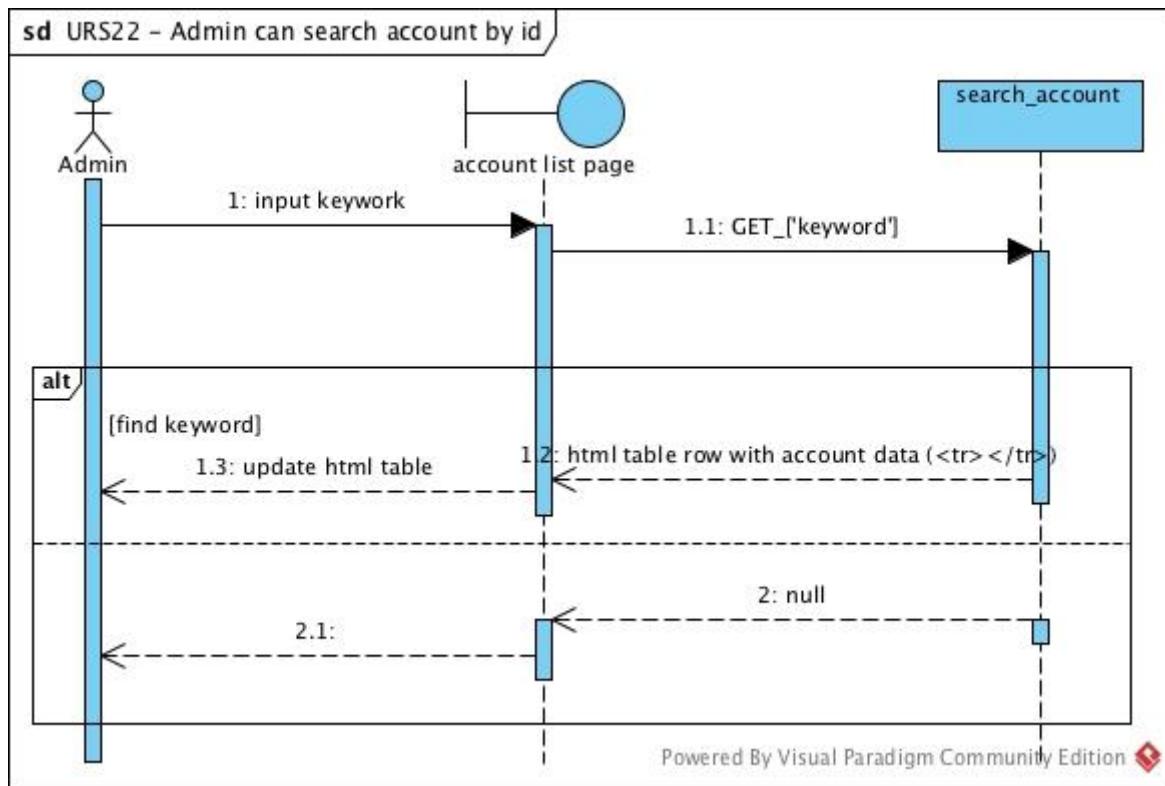


Figure 4.57: SD-22 Admin can search account by id sequence diagram

SD-22 Admin can search account by id sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	75 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.23 URS-23: Admin can search promotion by name

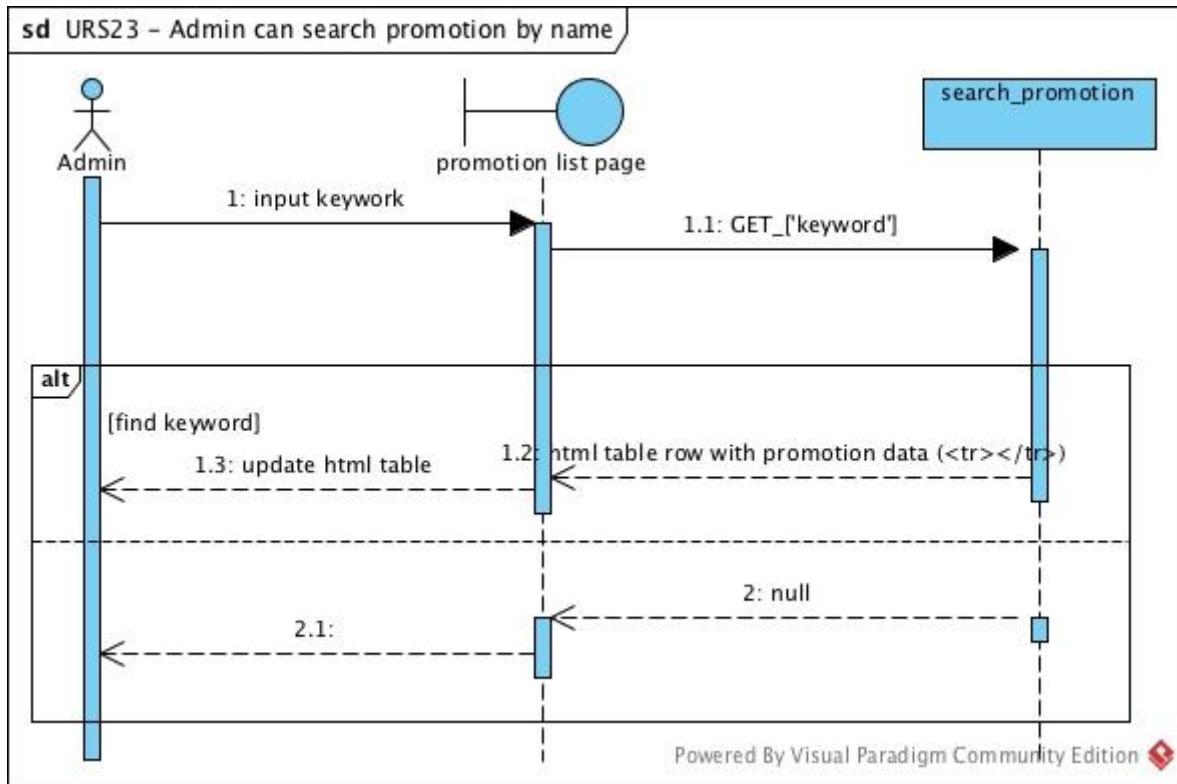


Figure 4.58: SD-23 Admin can search promotion by name sequence diagram

SD-23 Admin can search promotion by name sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	76 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.24 URS-24: Admin can search promotion by id

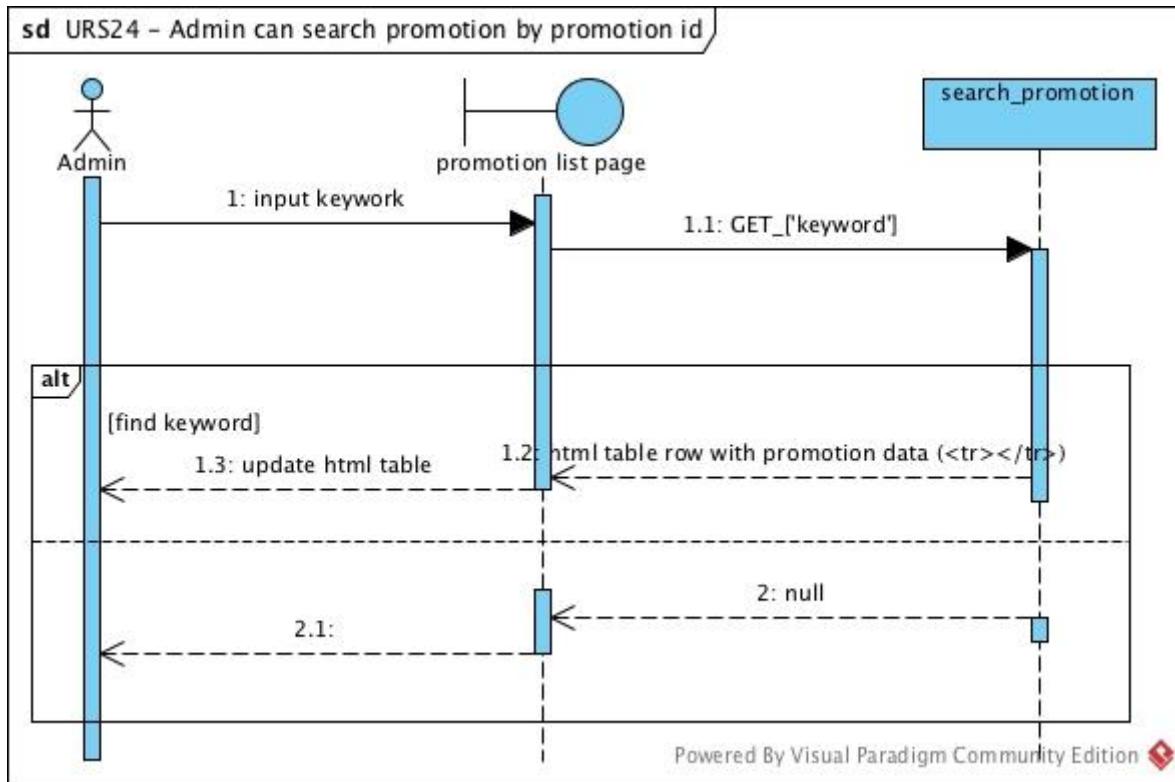


Figure 4.59: SD-24 Admin can search promotion by id sequence diagram

SD-24 Admin can search promotion by id sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	77 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

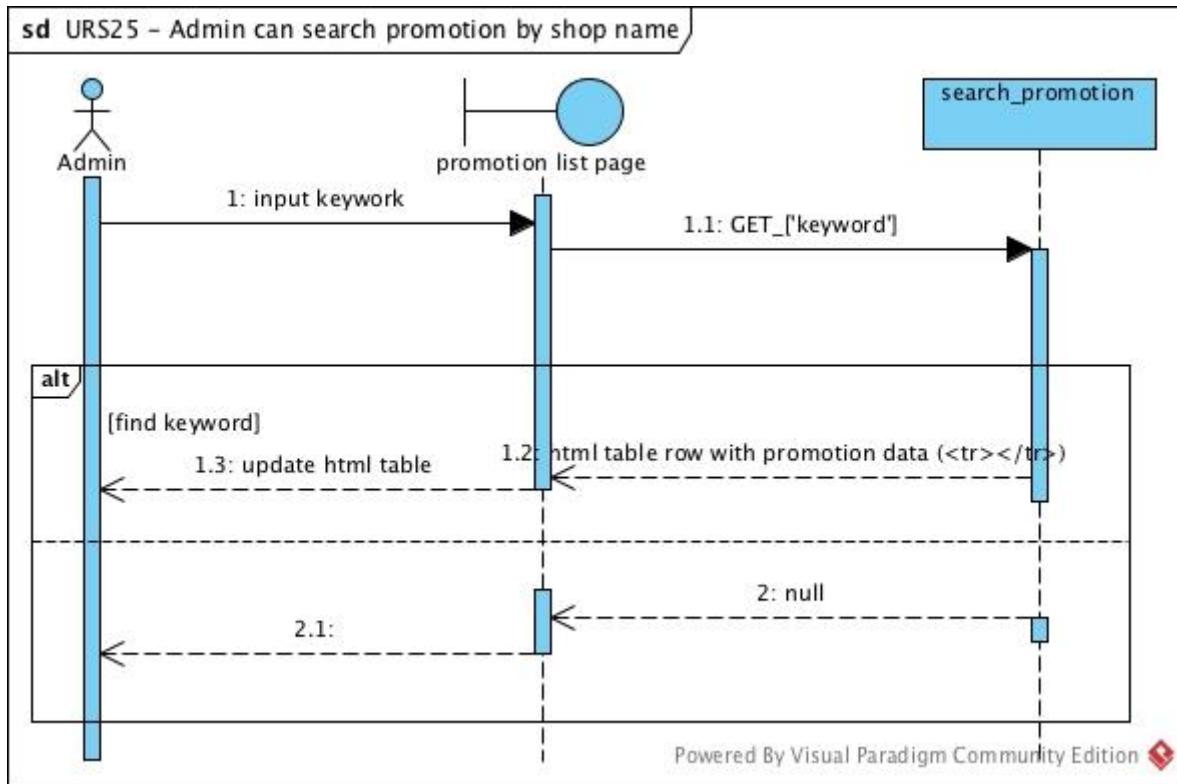


Figure 4.60: SD-25 Admin can search promotion by shop name sequence diagram

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	78 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.26 URS-26: Admin can search logs by function

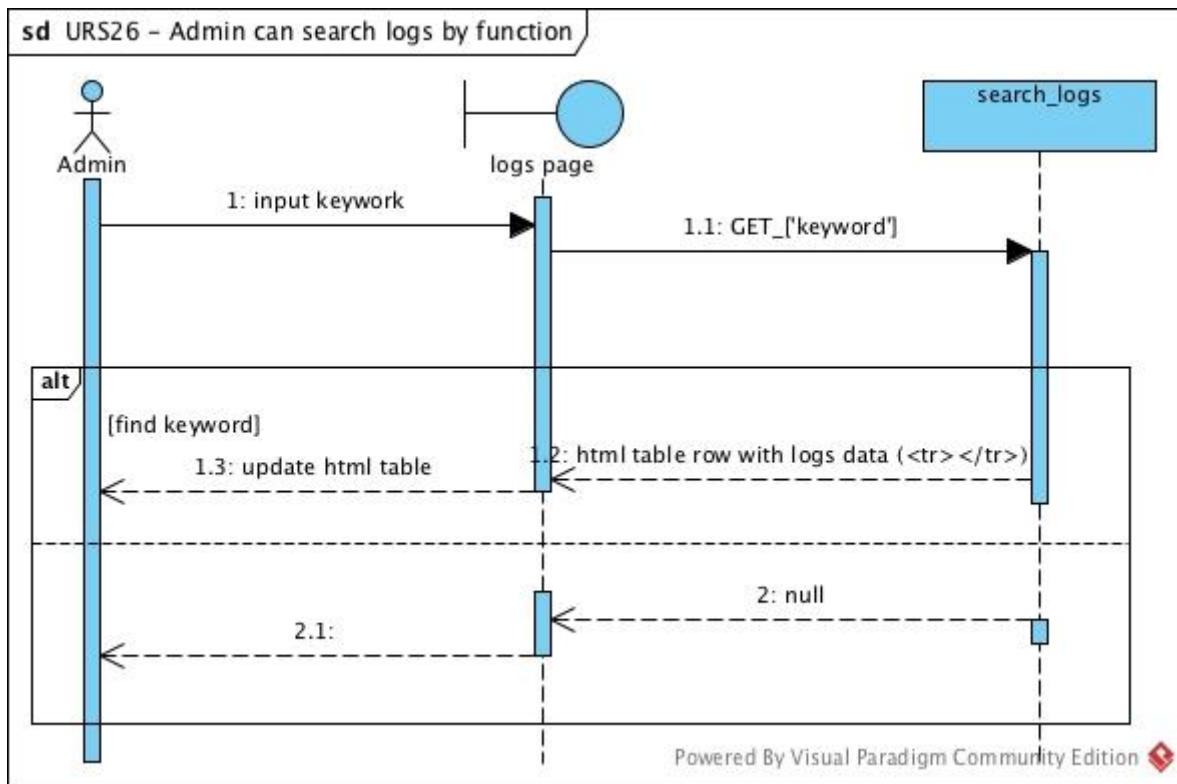


Figure 4.61: SD-26 Admin can search logs by function sequence diagram

SD-26 Admin can search logs by function sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	79 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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

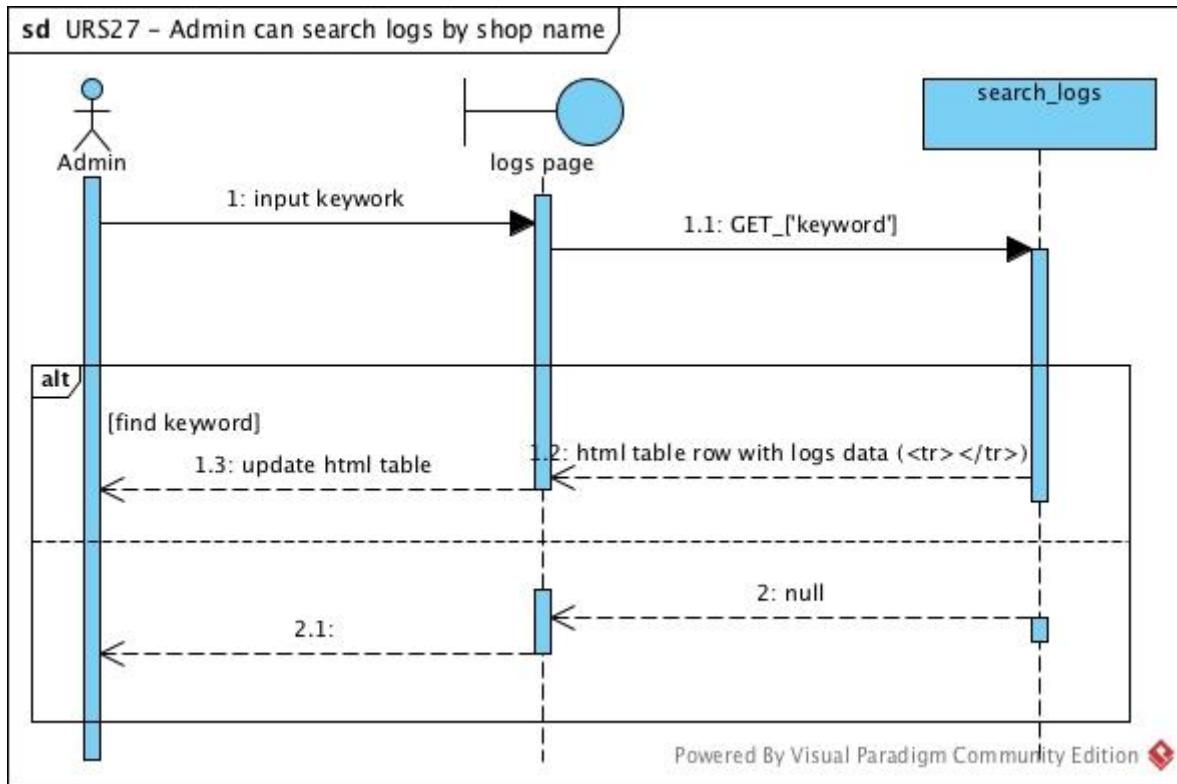


Figure 4.62: SD-27 Admin can search logs by shop name sequence diagram

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	80 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

3.3.28 URS-28: Admin can search logs by email

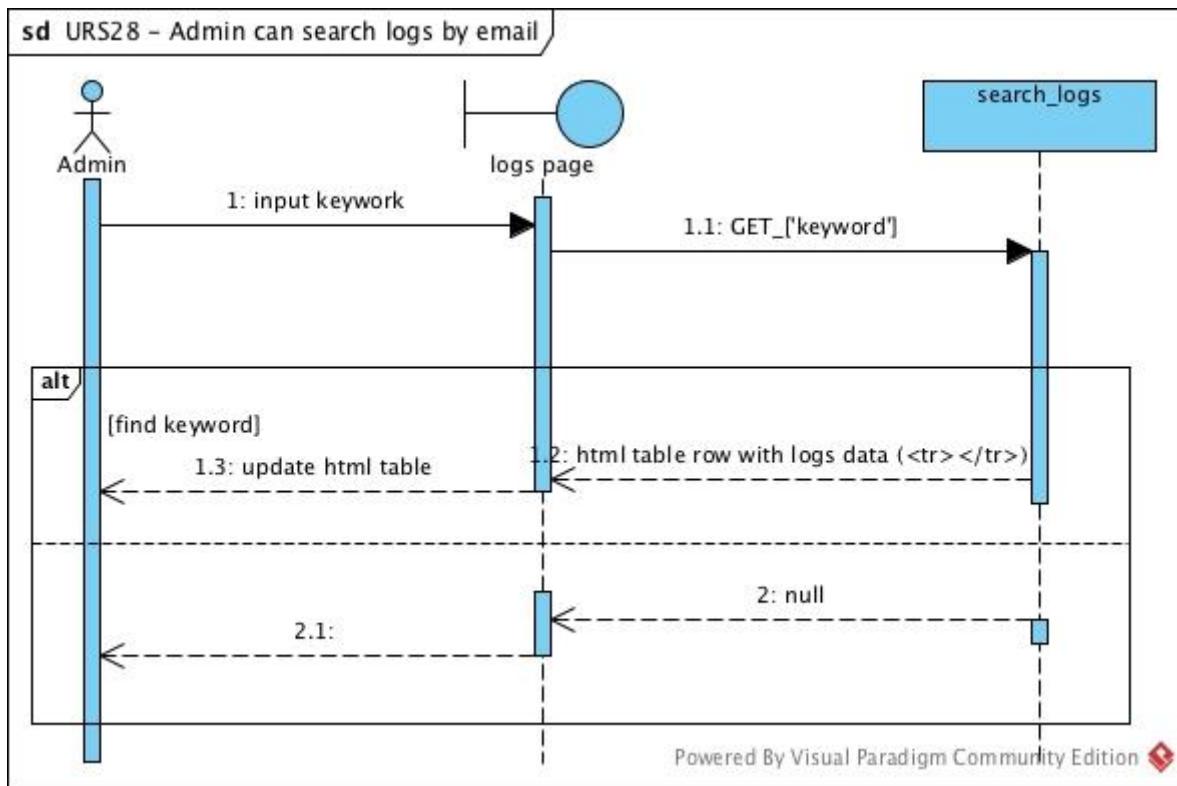


Figure 4.63: SD-28 Admin can search logs by email sequence diagram

SD-28 Admin can search logs by email sequence diagram

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	81 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

CHAPTER 4 | USER INTERFACE DESIGN

1. Index page

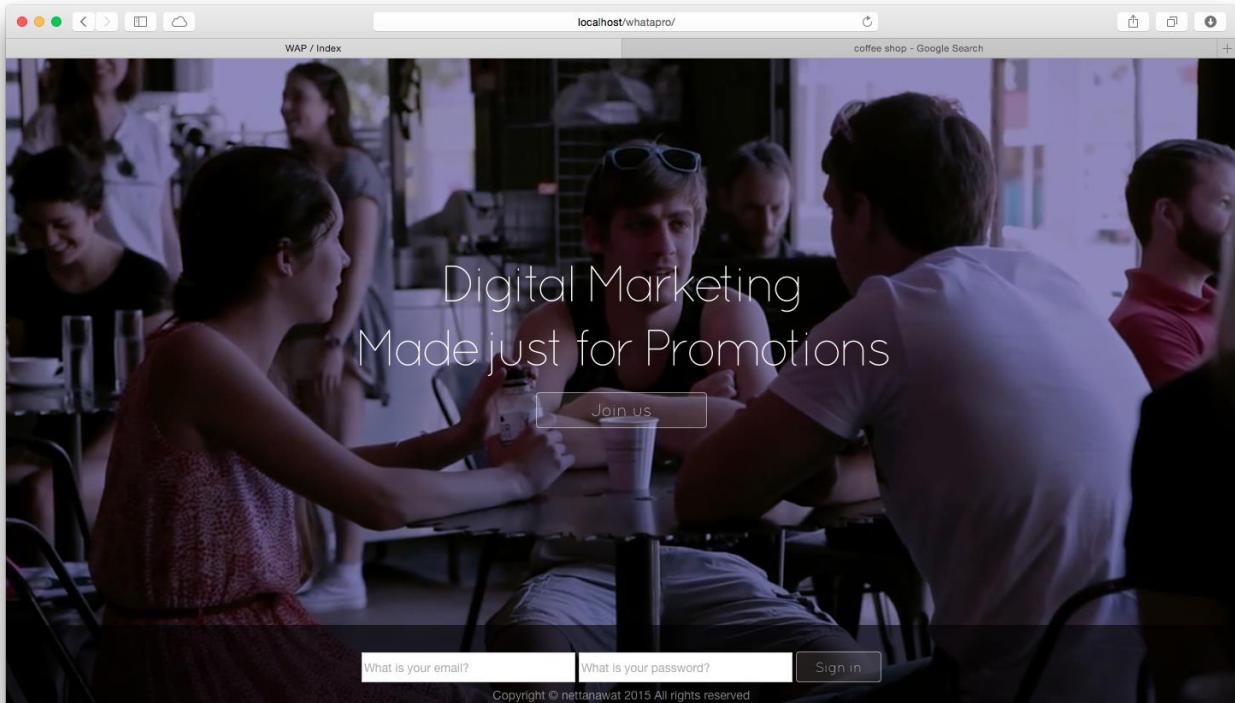


Figure 4.64: Index page

This layout presented the main page of web service.

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	82 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

2. Promotion list page

The screenshot shows a web browser window with the URL 'localhost/whatapro/promotions'. The page title is 'Promotions'. At the top, there is a search bar with placeholder text 'Search promotion by promotion name, shop name or promotion id' and a 'New promotion' button. Below the search bar is a table with the following data:

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 4.65: Promotion list page

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	83 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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) is "Coffee smith" and it includes 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 4.66: Account list page

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	84 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

4. Request list page

The screenshot shows a web browser window titled "localhost/whatapro/requests". The main content area is titled "Request sign up". A table displays a single row of data:

ID	Shop name	Email	Phone number	Address	Request date	Manage by	Approve/reject date	Status	Action
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 4.67: Request list page

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	85 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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 4.68: Add promotion page

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	86 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

6. Add account page

The screenshot shows a web application interface for adding a new account. At the top, there's a navigation bar with links for Dashboard, Account, Promotion, Request, Mobile user, Redeem Code, Activities Log, and a user email (nettawanaw@gmail.com). The main title is "New account". The form consists of 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
- Address: 40 Nimmamhemin Rd., T.Suthep, A.Muang, Chiang Mai, 50200

Below the address field is a section titled "Pin your shop location on the map". It features two maps of Chiang Mai, Thailand. The left map shows the area around Suthep Rd and Nimmamhemin Rd. The right map shows a more detailed view of the city center with streets like Sri Poom Rd, Wat Chang Men, and Wat Chedi Luang. A red marker indicates the shop's location on the left map.

Figure 4.69: Add account page

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	87 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

7. Promotion information page

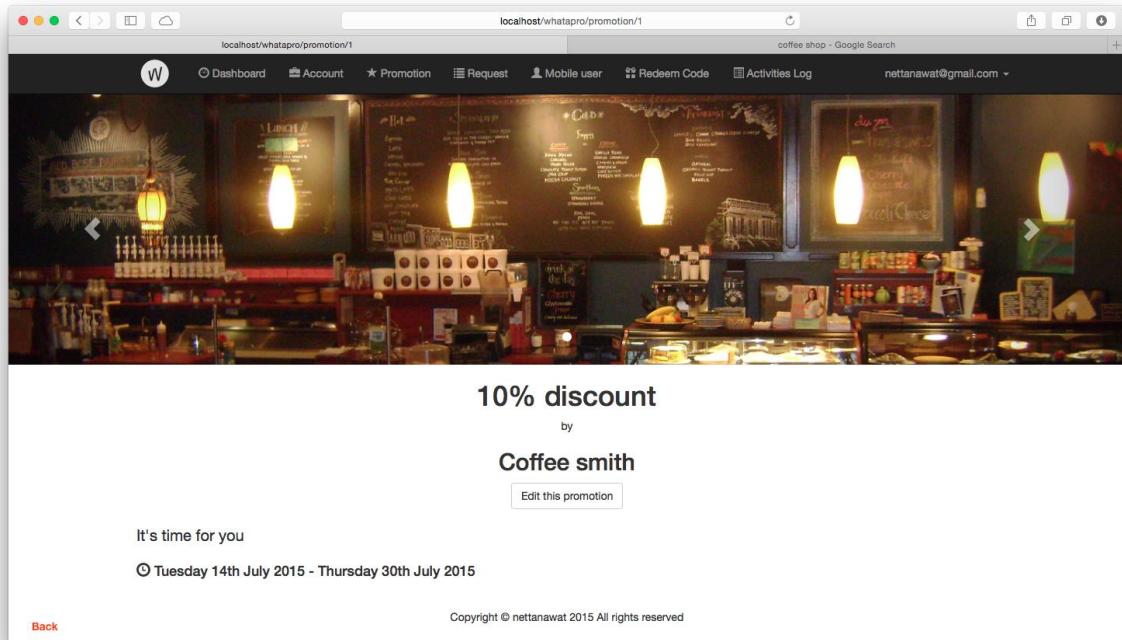


Figure 4.70: Promotion information page

This layout is for view promotion information.

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	88 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

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 dropdown for the email address '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. To the right of the shop name is a 'Edit this shop' button. Below the shop name, 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 Nimmarnhemin Rd., T.Suthep, A.Muang, Chiang Mai, 50200). Under the 'Address' section, there is a note: 'Our coffee shop is one of the best place in Chiang mai'. At the bottom of the page, there are two buttons: 'Back' and 'Back to top'. The page title in the browser is 'localhost/whatapro/account/15'.

Figure 4.71: Account information page

This layout is for view account information.

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	89 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015

9. Home page

The screenshot shows the Admin Home page with a map of Chiang Mai, Thailand, in the background. The map displays various landmarks, roads, and rivers. Three red location markers are placed on the map, indicating specific points of interest.

5 Newest accounts

ID	Name	Email	Join date	Status
70	adadad	adsadassd@adad.com	2015-07-27 21:48:03	active
69	Coffee smith	testadd@gmail.com	2015-07-24 13:58:00	active
68	Test edit	testadd@gmail.com	2015-07-24 13:58:00	active
67	Test	testadd@gmail.com	2015-07-24 13:58:00	active

5 Newest promotions

ID	Name	Shop name	Start date	End date	Status
21	Test edit unit test t	Coffee smith	2015-07-01	2015-07-16	active

Figure 4.72: Home page

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

Document Name	Promotion provider_SDD_1.0	Owner	Project Team	Page	90 / 90
Document Type	Software Design Document	Release Date	29 July 2015	Print Date	28 July 2015