

# FPT UNIVERSITY

## Capstone Project Document

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[Platform for buying attraction tickets and booking travel services and experiences online]

<b>&lt;IS1401_8&gt;</b>	
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## Table of Contents

I.	Project Introduction .....	10
1.	Overview .....	10
1.1	Project Information .....	10
1.2	Project Team.....	10
2.	Product Background.....	10
3.	Existing Systems .....	11
3.1	Traveloka .....	11
3.2	Klook .....	12
4.	Business Opportunity .....	12
5.	Software Product Vision.....	12
6.	Project Scope & Limitations .....	13
6.1	Major Features .....	13
6.2	Limitations & Exclusions .....	13
II.	Project Management Plan.....	14
1.	Overview .....	14
1.1	Scope & Estimation.....	14
1.2	Project Objectives.....	14
1.3	Project Risks.....	14
2.	Management Approach .....	14
2.1	Project Process .....	15
2.2	Quality Management.....	15
2.3	Training Plan .....	15
3.	Project Deliverables .....	16
4.	Project Organization.....	17
4.1	Team & Structures.....	17
4.2	Roles & Responsibilities.....	17
5.	Project Communications .....	18
6.	Configuration Management.....	18
6.1	Document Management .....	18
6.2	Source Code Management.....	19
6.3	Tools & Infrastructures.....	20
III.	Software Requirement Specification.....	21

1. Product Overview.....	21
2. User Requirements.....	21
2.1 System Actors .....	21
2.2 Use Cases .....	22
3. Functional Requirements.....	39
3.1 System Functional Overview .....	39
3.2 Homepage.....	42
3.3 Cart.....	45
3.4 Searching.....	46
3.5 Service.....	47
3.6 User Profile .....	50
3.7 Seller Service.....	54
3.8 Moderator Service .....	58
3.9 Admin Service .....	62
4. Non-Functional Requirements .....	64
4.1 External Interfaces .....	64
4.2 Quality Attributes .....	65
5. Requirement Appendix .....	65
5.1 Business Rules.....	65
5.2 Application Messages List.....	66
5.3 Application Error List .....	69
IV. Software Design Document.....	71
1. System Design .....	71
1.1 System Architecture.....	71
1.2 Package Diagram.....	74
2. Database Design.....	75
2.1 Auth Portal Microservice .....	75
2.2 Account Portal Microservice .....	75
2.3 Shop Portal Microservice.....	77
2.4 Payment Portal Microservice .....	77
2.5 Table Descriptions .....	78
3. Detailed Design .....	79
3.1 Sign in/ Sign up .....	79

3.2 Seller register.....	81
3.3 Notification .....	83
3.4 Create Service.....	84
3.5 Create Order.....	86
3.6 Payment.....	88
3.7 Validate request with JWT.....	90
V. Testing Documentation .....	92
1. Scope of Testing .....	92
2. Test Strategy.....	92
2.1 Testing Types .....	92
2.2 Test Levels .....	92
2.3 Supporting Tools.....	92
3. Test Plan .....	93
3.1 Human Resources .....	93
3.2 Test Environment .....	93
3.3 Test Milestones .....	93
4. Test Cases .....	93
5. Test Reports .....	93
VI. Release Package & User Guides .....	94
1. Deliverable Package .....	94
2. Installation Guides.....	94
2.1 System Requirements.....	94
2.2 Installation Instruction .....	94
3. User Manual .....	95
3.1 Overview.....	95
3.2 Order Service Flow .....	95
3.3 Create/Update Service Flow.....	106
3.4 Refund Flow .....	117
3.5 Other screens .....	124
VII. Conclusion .....	140
1. Strength.....	140
2. Weakness and Expansion capacity.....	140
3. Future Plan .....	141

VIII. Appendix.....	142
1. References.....	142

## Table of Figures

Figure 1: Statistic.....	10
Figure 2: Project Process.....	15
Figure 3: Team & Structure.....	17
Figure 4: Project document on Gitlab.....	18
Figure 5: Source code on Gitlab.....	19
Figure 6: Git Flow .....	19
Figure 7: Product Overview .....	21
Figure 8: Use case Diagram.....	22
Figure 9: Screen Flow.....	39
Figure 10: ERD.....	42
Figure 11: View Landing page .....	43
Figure 12: View About Us .....	44
Figure 13: View Notification List.....	44
Figure 14: View Cart Item .....	45
Figure 15: View Search Result List .....	46
Figure 16: View Service Detail .....	47
Figure 17: Purchase Service .....	48
Figure 18: View Shop Detail .....	49
Figure 19: View Profile .....	50
Figure 20: Shop Register .....	51
Figure 21: View Order List.....	52
Figure 22: View Order Detail .....	53
Figure 23: Refund Request Form .....	54
Figure 24: Shop Service List .....	54
Figure 25: New Service .....	55
Figure 26: Update Service .....	56
Figure 27: Order Record List .....	57
Figure 28: View Order Record Detail .....	58
Figure 29: View User List.....	59
Figure 30: View User Detail .....	59
Figure 31: View Shop List.....	60
Figure 32: View Service List .....	60
Figure 33: View Refund Request List .....	61
Figure 34: View Refund Request Detail .....	62
Figure 35: View Moderator List .....	63
Figure 36: Add New Moderator.....	63
Figure 37: Overall Architecture.....	71
Figure 38: Deploy Architecture.....	72
Figure 39: CQRS for one storage.....	73
Figure 40: CQRS for two storages .....	73
Figure 41: Main flow .....	74
Figure 42: Package Diagram.....	74
Figure 43: Auth Portal Microservice Database .....	75

Figure 44: Account Portal Microservice Database .....	76
Figure 45: Shop Portal Microservice Database.....	77
Figure 46: Payment Portal Microservice Database .....	77
Figure 47: Sign in/sign up class diagram.....	79
Figure 48: Sign in/sign up sequence .....	80
Figure 49: Seller class diagram.....	81
Figure 50: Seller register sequence.....	82
Figure 51: Verify seller register sequence .....	82
Figure 52: Notification class diagram .....	83
Figure 53: Notification sequence.....	83
Figure 54: Create service class diagram.....	84
Figure 55: Create service sequence diagram.....	85
Figure 56: Create order class diagram .....	86
Figure 57: Create order sequence diagram .....	87
Figure 58: Payment class diagram .....	88
Figure 59: Payment sequence.....	89
Figure 60: Validate request with JWT .....	90
Figure 61: Validate request with JWT sequence .....	91
Figure 62: Order Service Flow.....	96
Figure 63: Home Page.....	97
Figure 64: Profile Section.....	97
Figure 65: Login with Google .....	98
Figure 66: Home Page.....	98
Figure 67: Profile Section.....	99
Figure 68: Service Card .....	99
Figure 69: Service View .....	100
Figure 70: Sub-Service Section.....	100
Figure 71: Add to cart button .....	101
Figure 72: Success snack bar.....	101
Figure 73: Cart icon .....	101
Figure 74: View cart .....	101
Figure 75: Change cart item's date .....	102
Figure 76: Select date for cart item .....	102
Figure 77: Change the quantity of a cart item .....	102
Figure 78: Delete a cart item .....	103
Figure 79: Confirm deleting an item .....	103
Figure 80: Select many cart items.....	103
Figure 81: Delete button.....	104
Figure 82: Confirm delete items .....	104
Figure 83: Save button.....	104
Figure 84: Purchase button.....	104
Figure 85: Purchase page.....	105
Figure 86: Input information.....	105
Figure 87: Select Payment method.....	105

Figure 88: Book button .....	105
Figure 89: Booking success notification.....	106
Figure 90: Pay button.....	106
Figure 91: Create/Update Service Flow.....	107
Figure 92: View Account Menu.....	108
Figure 93: View Shop Page icon on Account Menu.....	108
Figure 94: New Service link on Seller Sidebar Menu .....	109
Figure 95: New Service screen.....	109
Figure 96: Input new service's information-1.....	110
Figure 97: Input new service's information-2.....	110
Figure 98: Save and Cancel add new service .....	111
Figure 99: Alert Dialog adds new service success.....	111
Figure 100: Alert Dialog add new service fail .....	111
Figure 101: Confirm cancel add new service dialog .....	112
Figure 102: "Edit" option on Shop Service List .....	112
Figure 103: View and Edit service information.....	113
Figure 104: Save and Cancel update service .....	113
Figure 105: Alert dialog update service success .....	113
Figure 106: Alert dialog update service fail .....	114
Figure 107: Confirm cancel update service dialog.....	114
Figure 108: The avatar .....	115
Figure 109: Manager Site in menu.....	115
Figure 110: Service List in sidebar .....	116
Figure 111: Search box and search icon .....	116
Figure 112: Filter button .....	116
Figure 113: Filter box .....	116
Figure 114: Select filters .....	117
Figure 115: Apply button .....	117
Figure 116: Menu icon .....	117
Figure 117: Update success notification.....	117
Figure 118: Refund Flow .....	118
Figure 119: Home Site.....	119
Figure 120: My Profile.....	119
Figure 121: My Profile.....	120
Figure 122: My Order.....	120
Figure 123: My Order.....	120
Figure 124: Order Detail .....	121
Figure 125: Refund Request Form .....	121
Figure 126: Refund Request Form .....	122
Figure 127: Success Snack Bar .....	122
Figure 128: Refund Request List in the sidebar .....	123
Figure 129: Info icon .....	123
Figure 130: Accept button .....	123
Figure 131: Reject reason textbox and Reject button .....	123

Figure 132: User List in the sidebar .....	124
Figure 133: Info icon in the User's row.....	124
Figure 134: User Detail page.....	125
Figure 135: Lock and Unlock a User.....	125
Figure 136: Shop List in side bar .....	126
Figure 137: View Service button.....	126
Figure 138: Info icon in the Shop's row .....	126
Figure 139: Lock and Unlock a Shop .....	126
Figure 140: Moderator List in the sidebar .....	127
Figure 141: Lock and Unlock a Moderator .....	127
Figure 142: User Profile .....	128
Figure 143: Shop Registration.....	128
Figure 144: Shop Registration form.....	129
Figure 145: Success Snack Bar .....	129
Figure 146: Shop Management .....	129
Figure 147: View Shop .....	130
Figure 148: Shop .....	130
Figure 149: Service Rating .....	131
Figure 150: Service View .....	131
Figure 151: Service Rating .....	132
Figure 152: Success Snack Bar .....	132
Figure 153: View Shop .....	133
Figure 154: Shop .....	133
Figure 155: Shop Service List .....	135
Figure 156: View Order Record List .....	135
Figure 157: View order record detail link .....	136
Figure 158: View order record detail screen .....	136
Figure 159: Homepage.....	137
Figure 160: Header when user login.....	137
Figure 161: Header when user not login .....	137
Figure 162: Account Menu .....	137
Figure 163: Notification List.....	138
Figure 164: Search on header bar.....	139
Figure 165: Search on Homepage.....	139
Figure 166: View Service List Result .....	140

## Definition and Acronyms

Acronym	Definition
BA	Business Analysis
BR	Business Rule
ERD	Entity Relationship Diagram
GUI	Graphical User Interface
PM	Project Manager
SDD	Software Design Description
SPMP	Software Project Management Plan
SRS	Software Requirement Specification
UAT	User Acceptance Test
UC	Use Case
API	Application Program Interface
DBS	Database System
WBS	Work Breakdown Structure
URL	Uniform Resource Locator
DB	Database
VPS	Virtual Private Server
OS	Operating System

# I. Project Introduction

## 1. Overview

### 1.1 Project Information

- Project name: Platform for buying attraction tickets and booking travel services and experiences online.
- Project code: iTravel.
- Group name: IS1401\_8.
- Software type: Web Application.

### 1.2 Project Team

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## 2. Product Background



Figure 1: [Statistic](#) [1]

The Covid-19 pandemic in the past 2 years has caused the tourism industry to be affected badly. Travel companies and agencies have to suspend their operations for a long time because no customers or visitors are traveling to Vietnam.

Recently, the disease has been under control, and the government is set to its return to 'new normal' status. The government has gradually eased epidemic prevention regulations as well as encouraging activities and services to resume operations to create a boost for the recovery of the economy. [2]

### 3. Existing Systems

#### 3.1 Traveloka

Traveloka is an Indonesian platform that provides airline ticketing and hotel reservations online. This start-up was founded in 2012 by Ferry Unardi, Derianto Kusuma, Albert Zhang. Recently, they have expanded their operation market to provide lifestyle activities, car rental, and attraction tickets.

Link: <https://www.traveloka.com/en-vn/>

System actors:

- System admin
- Partner (Travel service provider)
- Supporter
- Guest, User

Features:

- Airline ticketing and hotel booking services
- Car rental
- Travel experiences booking

Pros:

- Traveloka is a big start-up company with a lot of money and vast human resources.
- They have a huge ecosystem in the travel industry, and their platform is used by millions of people every day.
- Support many ways for payment methods.

Cons:

- Their primary focus is on airline ticketing and hotel booking, not on travel local services and experiences.
- Travel experiences are not diverse. Not many local services are listed on the Traveloka platform.
- The GUI of the website is not too attractive and beautiful
- Because they are a foreign corporation, they do not understand too much about Vietnam travel destinations and our culture.

### 3.2 Klook

Klook is a travel activities platform (tour and attractions). It is providing users with a lot of features such as booking tours, diving activities, park visits, even train tickets, and more.

Link: <https://www.klook.com/>

System actors:

- System admin
- Partner (Travel service provider)
- Guest, User

Features:

- Popular attractions, local tours booking service
- Transportation booking service
- SIM Card, WIFI Dongle

Pros:

- Many features fulfill almost all fundamental users' needs.
- Support many ways for payment methods.
- The system is available via both app and website platforms.
- There are guides, notes, and tips when traveling.

Cons:

- Customer support is available through email only.
- It mostly targets travel in Asia.

## 4. Business Opportunity

- The contact restriction policies cancelled.
- Provider' marketing needs to attract users.
- Vacancies in the supply chain due to the collapse of many services providers during the covid.
- People want to entertain after a long time of social distancing.
- The popularity of experiential tourism.

## 5. Software Product Vision

- User can provide and manage their services.
- User can check service detail, create and purchase order.
- User can manage system (account, service, shop, request).

## 6. Project Scope & Limitations

### 6.1 Major Features

Index	Feature
1	Create accounts and login
2	Searching, filter for service
3	Add service to cart and update
4	Create order and payment via electronic wallet
5	Rate and discuss about service
6	Create and update service
7	Manage account, service, and system

### 6.2 Limitations & Exclusions

Index	Limitation
1	Only support for web platform
2	Lack of Data Management Tools (statistical, diagram view...)
3	Not support for personalized
4	Lack of fast money transfer from system to seller
5	Payment method only through PayPal

## II. Project Management Plan

### 1. Overview

#### 1.1 Scope & Estimation

Work Breakdown Structure (WBS) contains the project scope carried out by the project team, as well as the amount of effort required to achieve that deliverable. The [Report2\\_WBS.xlsx](#) is attached with the Report2\_Project Management Plan.

#### 1.2 Project Objectives

The Project's Objective revolves around five main goals:

- Pass the Capstone Project.
- Create a utility platform that serves a wide range of users.
- Enhance project development and management as well as communication skills.
- Technical and programming skills developed to build a good background for future job-application.
- Control source code's version with Git, Gitlab.

#### 1.3 Project Risks

	Risk Description	Impact	Possibility	Response Plans
1	Unfamiliar with new technology	High Impact	High Possibility	Self-research and regularly meeting to transfer knowledge
2	Inexperience in running a real project	High Impact	High Possibility	Communicate and learn from experienced people
3	Difficulty in managing project time between members (Khoa and Dat, 2 out of 5 members of the team are working at the business)	High Impact	High Possibility	Regular meetings, Daily Stand-up to evaluate the situation Divide the complicated tasks into different parts (Easier to estimate and handle)
4	Limited resources (Financial, human)	High Impact	High Possibility	Define the project scope and stick to the defined plan

### 2. Management Approach

In this project, we apply Waterfall combine with some Agile' best practises like daily report, weekly meeting.

## 2.1 Project Process

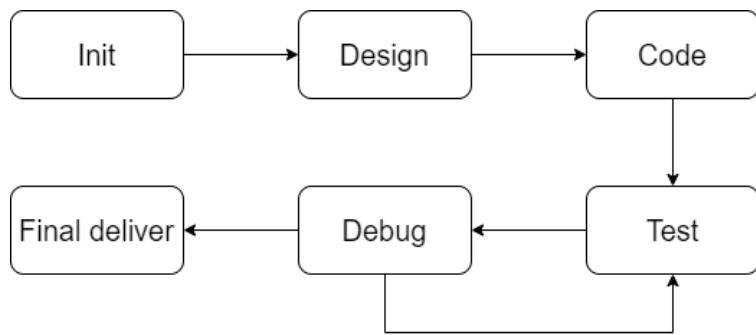


Figure 2: [Project Process](#)

	<b>Process</b>	<b>Description</b>
1	Init	Analysis requirement Create and update the management plan
2	Design	Design architect, diagram, database...
3	Code	Implement design
4	Test	Execute software testing
5	Debug	Fix if existing bug
6	Final deliver	Merger source to master

## 2.2 Quality Management

	<b>Approach</b>	<b>Description</b>
1	Unit testing	Process unit test each function
2	Integration testing	Process testing each feature
3	System testing	Process testing after combine api and interface
4	Reviewing	Cross review and group review

## 2.3 Training Plan

<b>Training Area</b>	<b>Participants</b>	<b>When, Duration</b>	<b>Waiver Criteria</b>
Java Spring Boot	All team member	13/12/2021-19/12/2021	Mandatory
Git, Gitlab	All team member	17/12/2021	Mandatory
Setup code structure	All team member	17/12/2021	Mandatory
React	All team member	13/12/2021-19/12/2021	Mandatory

### 3. Project Deliverables

	<b>Deliverable</b>	<b>Due Date</b>	<b>Deliverables</b>
1	Project Introduction Report	31/12/2021	Report 1 – Project Introduction
2	Project Management Plan	07/01/2022	Report 2 – Project Management Plan, WBS, Project Schedule
3	Software Requirement Specification v1	14/01/2022	User requirements, Functional Requirements, Use case, Wireframe
4	Software Design	29/01/2022	System Design, Database Design, Detailed Design
5	Code package v1	25/02/2022	Code, Test Cases and Test Documentation
6	Software Requirement Specification v2	27/02/2022	User requirements, Functional Requirements, Use case, Wireframe
7	Code package v2	13/03/2022	Code, Test Cases and Test Documentation
8	Software Requirement Specification v3	15/03/2022	User requirements, Functional Requirements, Use case, Wireframe
9	Code package v3	30/03/2022	Code, Test Cases and Test Documentation
10	Software User Guides	10/04/2022	Release Packet & User Guide
11	Final package	15/04/2022	Full code, final reports & documents

## 4. Project Organization

### 4.1 Team & Structures

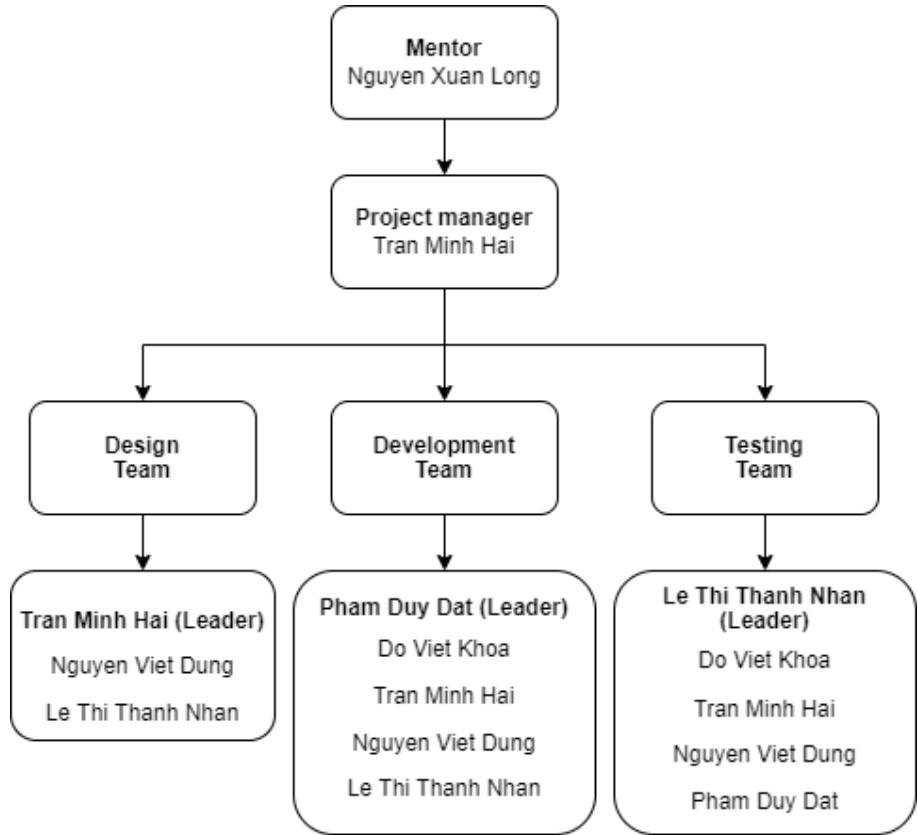


Figure 3: Team & Structure

### 4.2 Roles & Responsibilities

Role	Responsibility
Mentor	Monitoring project
Project Manager	Planning, executing, monitoring, controlling and closing project
Design Leader	Responsibility for the Quality, Creativity and Delivery of the projects
Design Member	Create products for the design team
Development Leader	Responsibility for design system architecture, technology, coding
Development Member	Responsibility to develop a project
Testing Leader	Making test decisions to ensure product quality
Testing Member	Create test cases, test documents and test

## 5. Project Communications

Communication Item	Who/ Target	Purpose	When, Frequency	Type, Tool, Method(s)
Daily stand-up	All members	Report daily work, next tasks, and issues	22:00 every day	Discord
Weekly meeting	All members + mentor	Track team progress, review coding, specifications and discuss existing problems	20:00 every Friday	Google Meet

## 6. Configuration Management

### 6.1 Document Management

Document workplace: use OneDrive to work, sync, auto-merge document.

Source Storage: use GitLab to manage the project all documents of the project.

To manage changes/versions, members will create a pull request (PR) to commit their new changed file to the master branch of the document

Name	Last commit	Last update
CPro_StudentGuide_IS_2021Fall.d...	init version 0.1.snapshot document	1 minute ago
Project Weekly Report_GroupNa...	init version 0.1.snapshot document	1 minute ago
Report1_Project Introduction.docx	init version 0.1.snapshot document	1 minute ago
Report2_Project Management Pl...	init version 0.1.snapshot document	1 minute ago
Report2_Sample Project Schedul...	init version 0.1.snapshot document	1 minute ago
Report2_Sample Project Schedul...	init version 0.1.snapshot document	1 minute ago
Report3_Project Tracking.xlsx	init version 0.1.snapshot document	1 minute ago
Report3_Software Requirement S...	init version 0.1.snapshot document	1 minute ago
Report4_Software Design Docum...	init version 0.1.snapshot document	1 minute ago
Report5_Test Documentation.docx	init version 0.1.snapshot document	1 minute ago
Report5_Test Report.xlsx	init version 0.1.snapshot document	1 minute ago
Report5_Unit Test.xls	init version 0.1.snapshot document	1 minute ago
Report6_Software User Guides.d...	init version 0.1.snapshot document	1 minute ago
Report7_Final Project Report.docx	init version 0.1.snapshot document	1 minute ago
test.txt	test commit	3 minutes ago

Figure 4: Project document on Gitlab

## 6.2 Source Code Management

We use Gitlab to work and manage the project source codes for multiple developers committed during development. Gitlab is a strong tool to help us manage source code, avoid conflict, easy to track.

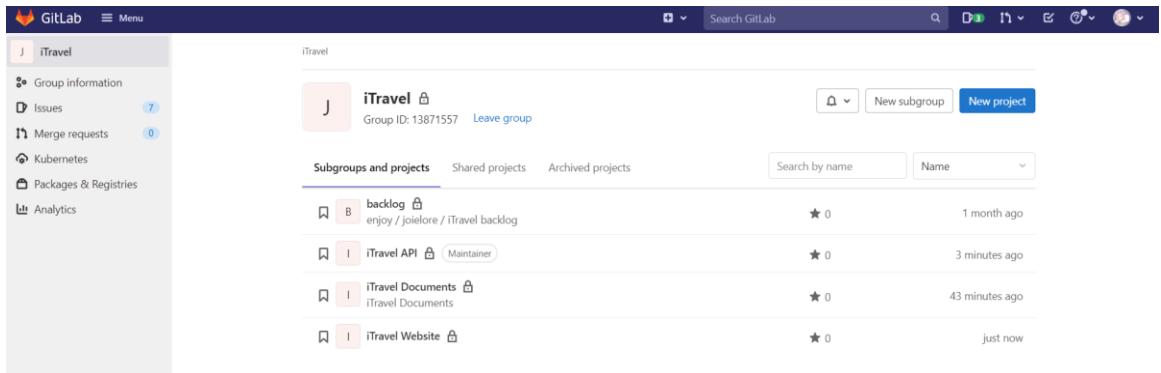


Figure 5: Source code on Gitlab

We design a Git Flow for members to follow when using Git. In case many developers are involved in project development for a long time, but if the operating rules are not agreed upon and decided, it is normal to have a conflict or miss when merging. Therefore, to minimize misses when using Git, it is necessary to consider Git Flow.

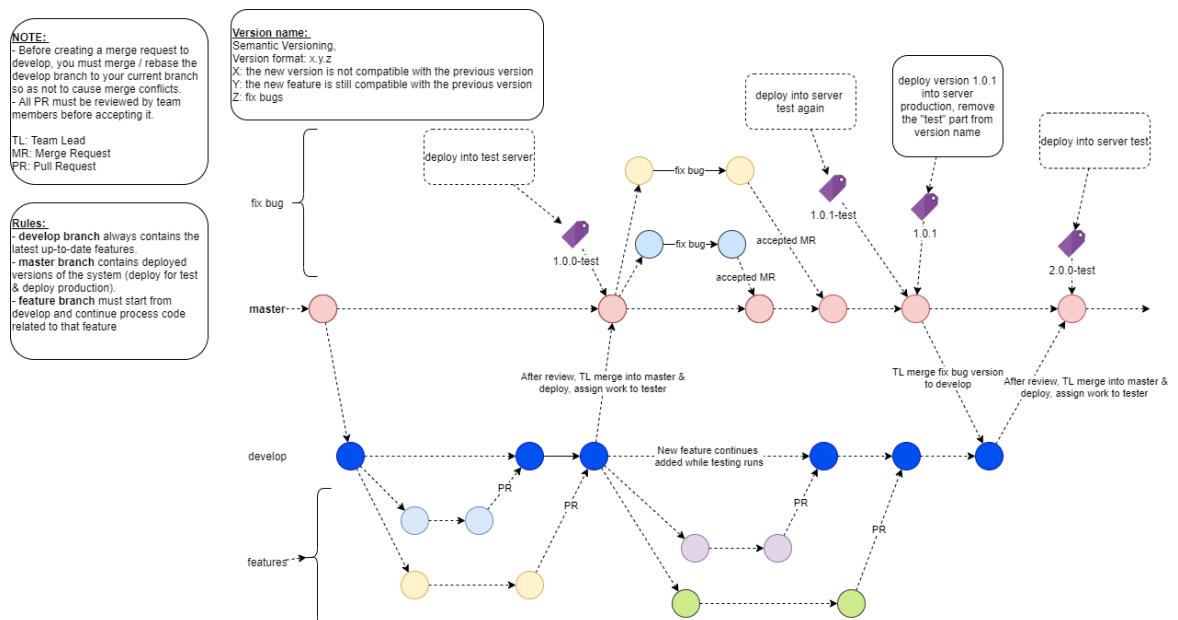


Figure 6: [Git Flow](#)

### 6.3 Tools & Infrastructures

Category	Tools / Infrastructure
<b>Technology</b>	Docker Engine 20.10.0+, Docker Desktop 4.3.0+, React 17 (FrontEnd), Typescript 4.3.5, Java 11, SpringBoot 2.5.5+ (BackEnd), NodeJS v16 (LTS)
<b>Database</b>	MySQL, Liquibase
<b>IDEs/Editors</b>	IntelliJ Community/Ultimate, Vscode
<b>Diagramming</b>	DrawIO, dbDiagram
<b>Documentation</b>	Ms Office, Swagger
<b>Version Control</b>	GitLab (Source Codes), OneDrive (Documents)
<b>Deployment server</b>	Amazon Web Service
<b>Project management</b>	Excel

### III. Software Requirement Specification

#### 1. Product Overview

iTravel is an online platform that allows users to book relaxation and entertainment services. This helps optimize time and ensures the service is always available at the time the user wants to use it. Through the e-wallet link, users can make payments for orders quickly and conveniently.

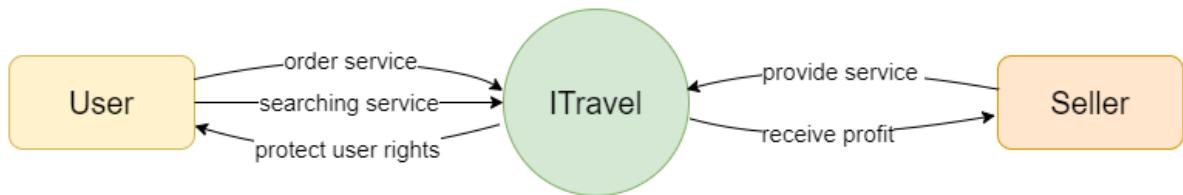


Figure 7: Product Overview

#### 2. User Requirements

##### 2.1 System Actors

	Actor	Description
1	Guest	<i>Guest</i> is someone who uses iTravel without login into the website. A <i>guest</i> has access to some basic functionalities like search, view service information but cannot rate comments, and book the service.
2	User	<i>User</i> is the user who is logged into the iTravel account. <i>User</i> can use all features of order service and receive protection of customer interests from iTravel.
3	Seller	<i>Seller</i> can manage shop's services and things related. <i>Seller</i> has full permission to create, update and delete the services they own.
4	Moderator	<i>Moderator</i> is the person responsible for operating, monitoring and handling arising situations. <i>Moderator</i> is responsible for verifying the quality of the services provided by the <i>seller</i> before making them public on iTravel. If necessary, the <i>moderator</i> can lock services or accounts with abnormal signs that may harm the interests of other users or harm iTravel.
5	Admin	<i>Admin</i> is the highest role level in iTravel and has full access to the functionalities in the system. <i>Admin</i> can manage other moderator accounts.
6	System	<i>System</i> is not an actual human role. <i>System</i> provides additional functions for the operation of iTravel.

## 2.2 Use Cases

### 2.2.1 Use Case Diagrams

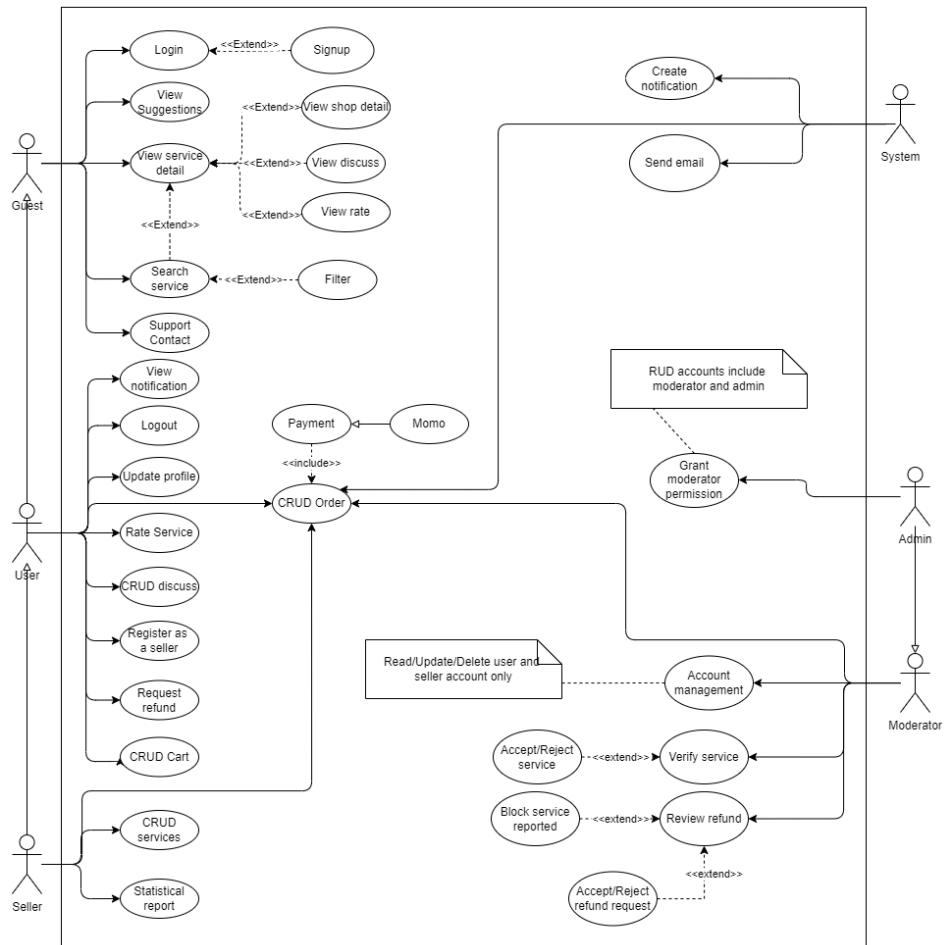


Figure 8: [Use case Diagram](#)

### 2.2.2 Summary

ID	Use case	Actors
1	UC-01 Login	<i>Guest</i>
2	UC-02 Sign up	<i>Guest</i>
3	UC-03 Log out	<i>User</i>
4	UC-04 Update account info	<i>User</i>
5	UC-06 View service detail	<i>Guest</i>
6	UC-07 View discussion	<i>User</i>
7	UC-08 Search service	<i>User</i>
8	UC-09 Support contact	<i>Guest</i>

	<b>ID</b>	<b>Use case</b>	<b>Actors</b>
9	UC-10	Filter service	<i>User</i>
10	UC-11	Create order	<i>User</i>
11	UC-12	Rate service	<i>User</i>
12	UC-13	Payment	<i>User</i>
13	UC-14	Create discussion	<i>User</i>
14	UC-15	View order	<i>User</i>
15	UC-16	Request refund	<i>User</i>
16	UC-19	Create service	<i>Seller</i>
17	UC-20	Update service	<i>Seller</i>
18	UC-21	Delete service	<i>Seller</i>
19	UC-23	Verify service	<i>Moderator</i>
20	UC-25	Account management	<i>Moderator</i>
21	UC-27	Lock moderator account	<i>Admin</i>
22	UC-34	Create notification	<i>System</i>
23	UC-35	View shop detail	<i>Guest, User</i>
24	UC-36	View rate	<i>Guest, User</i>
25	UC-38	View notification	<i>User</i>
26	UC-39	Grant moderator permission	<i>Admin</i>
27	UC-40	Add to cart	<i>User</i>
28	UC-41	View all cart item	<i>User</i>
29	UC-42	Update cart	<i>User</i>
30	UC-43	CRUD shop	<i>Seller</i>
31	UC-44	Review, manage refund requests	<i>Moderator</i>
32	UC-45	Service management	<i>Moderator</i>

### 2.2.3 Descriptions

#### 2.2.3.1 Service for Guest

*These services do not require any permission to use. Actor can use its without login first.*

<b>ID and Name</b>	UC-01 Sign up	<b>Actors</b>	Guest
<b>Created By</b>	Pham Duy Dat	<b>Created At</b>	15/01/2022

<b>Description</b>	The actor can sign up iTravel account to use all the features of the system.
<b>Trigger</b>	The actor clicks on the button login using Google Account.
<b>Pre-Condition</b>	<ol style="list-style-type: none"> <li>Actor has a Google account.</li> <li>Actor's Google account has never been used for another iTravel account.</li> </ol>
<b>Post-Condition</b>	<ol style="list-style-type: none"> <li>An iTravel account was created based on the Guest's google account.</li> <li>Actor logged into iTravel system.</li> </ol>
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>The actor clicks on the button login.</li> <li>Actor is redirected to the Google authentication login page.</li> <li>Actor choice which accounts to sign up for.</li> <li>Google authentication server will verify whether the account is correct.</li> <li>The system will create an account based on current use Google account information.</li> <li>Auto-login.</li> </ol>
<b>Exception Flow</b>	<ol style="list-style-type: none"> <li>The google account is already used for other iTravel accounts -&gt; login.</li> <li>Google authentication server does not respond -&gt; create account fail.</li> </ol>
<b>Priority</b>	High
<b>Non-Function Requirement</b>	<ol style="list-style-type: none"> <li>Low process time, below 3 seconds.</li> <li>The error message must be displayed clearly and easy to understand.</li> </ol>
<b>Business Rules</b>	

<b>ID and Name</b>	UC-02 Login	<b>Actors</b>	Guest
<b>Created By</b>	Pham Duy Dat	<b>Created At</b>	15/01/2022
<b>Description</b>	The actor can log in to iTravel to access the full user's feature.		
<b>Trigger</b>	The actor clicks on button login using Google Account.		
<b>Pre-Condition</b>	The actor has a Google account.		
<b>Post-Condition</b>	The actor logged into iTravel.		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>The actor clicks on the login button.</li> <li>The actor is redirected to the Google authentication login page.</li> <li>Actor choice of which accounts to login into.</li> <li>Google authentication server will verify the account.</li> <li>The user will be redirected to the home page.</li> </ol>		
<b>Exception Flow</b>	iTravel account does not exist -> auto-create a new one and logs in		
<b>Priority</b>	High		

<b>Non-Function Requirement</b>	1. Low process time, below 3 seconds. 2. The error message must be displayed clearly and easy to understand.
<b>Business Rules</b>	

<b>ID and Name</b>	UC-06 View service detail	<b>Actors</b>	Guest
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	15/01/2022
<b>Description</b>	Service detail contains service information, rate, and comment about service quality. The actor can view for having a look about this service.		
<b>Trigger</b>	The actor has access to any service on iTravel.		
<b>Pre-Condition</b>			
<b>Post-Condition</b>	Service detail will be displayed.		
<b>Normal Flow</b>	1. The actor clicks on service or access by URL. 2. Service detail will be displayed.		
<b>Exception Flow</b>	Service not exist -> pop up notification		
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 2 second		
<b>Business Rules</b>			

<b>ID and Name</b>	UC-07 View discussion	<b>Actors</b>	Guest
<b>Created By</b>	Pham Duy Dat	<b>Created At</b>	15/01/2022
<b>Description</b>	Discussion is posted by another account. The actor can look at the discussion about service to get a more specific view of service quality.		
<b>Trigger</b>	Actor access to a service's detail.		
<b>Pre-Condition</b>			
<b>Post-Condition</b>	Display service discussion.		
<b>Normal Flow</b>	3 Actor access to a service's detail. 4 The system got service discussion and display.		
<b>Exception Flow</b>			
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>	Low process time, below 2 seconds.		

<b>Business Rules</b>	The actor can leave a discussion but they must log in first.
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<b>ID and Name</b>	UC-08 Search service	<b>Actors</b>	Guest
<b>Created By</b>	Pham Duy Dat	<b>Created At</b>	17/01/2022
<b>Description</b>	iTravel support for searching services by a similar name. The actor can use the search bar to find services.		
<b>Trigger</b>	The actor input text into the search bar and click the search button.		
<b>Pre-Condition</b>			
<b>Post-Condition</b>	Result will be displayed as a list		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>Actor input text to search bar and click the search button.</li> <li>The system gets data from the database and displays it to the actor.</li> </ol>		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 2 seconds.		
<b>Business Rules</b>			

<b>ID and Name</b>	UC-09 Support contact	<b>Actors</b>	Guest
<b>Created By</b>	Pham Duy Dat	<b>Created At</b>	17/01/2022
<b>Description</b>	iTravel's moderator is willing to support any problem. Actors can contact will moderator via messenger to report their issues.		
<b>Trigger</b>	The actor clicks on the contact support button		
<b>Pre-Condition</b>			
<b>Post-Condition</b>	Actor can chat with supporter		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>The actor clicks on the chat button</li> <li>Login to messenger</li> <li>Report their issue</li> </ol>		
<b>Exception Flow</b>	The actor rejects to login to a messenger		
<b>Priority</b>	Low		
<b>Non-Function Requirement</b>	Low process time, below 2 seconds.		
<b>Business Rules</b>	Actor also contact to the moderator via iTravel support email		

<b>ID and Name</b>	UC-10 Filter Service	<b>Actors</b>	Guest
<b>Created By</b>	Pham Duy Dat	<b>Created At</b>	17/01/2022
<b>Description</b>	The actor can use a filter form to search services by attributes: name, price, rate...		
<b>Trigger</b>	The actor keyword, select attribute to filter and submit a request		
<b>Pre-Condition</b>			
<b>Post-Condition</b>	Actor will see a search result page with a list of services		
<b>Normal Flow</b>			
<b>Exception Flow</b>	None		
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 2 seconds.		
<b>Business Rules</b>	None		

<b>ID and Name</b>	UC-35 View shop detail	<b>Actors</b>	Guest
<b>Created By</b>	Tran Minh Hai	<b>Created At</b>	15/01/2022
<b>Description</b>	Actors can view information and services of a shop to refer shop's reputation or find their other services		
<b>Trigger</b>	The actor clicks the shortcut, link to access the shop detail page		
<b>Pre-Condition</b>			
<b>Post-Condition</b>	Actor view information on the shop detail page		
<b>Normal Flow</b>	1. Actor clicks the shortcut, link that route to the "Shop detail screen" 2. Actor views the "Shop detail screen", which contains the shop's information and services list.		
<b>Exception Flow</b>			
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>			
<b>Business Rules</b>			

<b>ID and Name</b>	UC-36 View rate	<b>Actors</b>	Guest
<b>Created By</b>	Tran Minh Hai	<b>Created At</b>	15/01/2022
<b>Description</b>	The actor can view service rating scores and comments from other users for a service they are viewing		
<b>Trigger</b>	The actor accesses the service detail screen and scroll to or opens the rating section		
<b>Pre-Condition</b>			

<b>Post-Condition</b>	The actor sees all ratings about a service
<b>Normal Flow</b>	1. Actor views service information in the service detail screen 2. Actor scrolls to the rating section and clicks on "See More Ratings." 3. Actor can view a list of service ratings.
<b>Exception Flow</b>	
<b>Priority</b>	Medium
<b>Non-Function Requirement</b>	
<b>Business Rules</b>	

### 2.2.3.2 Service for User

These services require user role/permission to use. Actor must sign up for an iTravel account and sign in first.

<b>ID and Name</b>	UC-03 Log out	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	15/01/2022
<b>Description</b>	The actor can log out iTravel account. They must log in again to use the full iTravel feature.		
<b>Trigger</b>	The actor clicks on the logout button.		
<b>Pre-Condition</b>	The actor logged out successfully.		
<b>Post-Condition</b>	1. The actor logged out from iTravel. 2. Redirect actor to home page with guest permission.		
<b>Normal Flow</b>	1. The actor clicks on log out button. 2. The User's login information will be removed. 3. Redirect actor to home page with guest permission.		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>			

<b>ID and Name</b>	UC-04 Update account info	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	15/01/2022
<b>Description</b>	The actor can edit their profile information.		
<b>Trigger</b>	The actor clicks on the edit information button.		
<b>Pre-Condition</b>	The actor logged in		
<b>Post-Condition</b>	Profile information edited.		

<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>1. The actor clicks on the edit information button.</li> <li>2. The actor edits information.</li> <li>3. The actor clicks on the save button.</li> <li>4. The actor confirms to save their change.</li> <li>5. System update profile information.</li> <li>6. Notify action success.</li> </ol>
<b>Exception Flow</b>	The actor does not confirm to continue -> request cancelled.
<b>Priority</b>	Medium
<b>Non-Function Requirement</b>	<ol style="list-style-type: none"> <li>1. Low process time, below 2 seconds.</li> <li>2. The error message must be displayed clearly and easy to understand.</li> </ol>
<b>Business Rules</b>	

<b>ID and Name</b>	UC-11 Create Order	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	Actor can create a service order via the iTravel system. All transactions made on the iTravel platform will receive protection and guarantee for the interests of users.		
<b>Trigger</b>	The actor request to create an order for service(s)		
<b>Pre-Condition</b>	<ol style="list-style-type: none"> <li>1. Actor is logged in</li> <li>2. Service provider/shop/seller is available</li> </ol>		
<b>Post-Condition</b>	The new order created and ready for purchase		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>1. Actor requests to booking service(s) on iTravel</li> <li>2. System gets service information from the database</li> <li>3. System create an order with status NEW</li> <li>4. Notify actors their order created</li> </ol>		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	<ol style="list-style-type: none"> <li>1. Low process time, below 2 seconds.</li> <li>2. The error message must be displayed clearly and easy to understand.</li> </ol>		
<b>Business Rules</b>	The actor must perform purchase to complete the order action		

<b>ID and Name</b>	UC-13 Payment	<b>Actors</b>	User
<b>Created By</b>	Pham Duy Dat	<b>Created At</b>	18/01/2022
<b>Description</b>	The actor wants to make a purchase for their booking record/order.		

<b>Trigger</b>	Actor select bill will be purchased, select electronic wallet type, click on accept purchase button.
<b>Pre-Condition</b>	1. Actor is logged in. 2. Bill had created. 3. Actor has an electronic wallet.
<b>Post-Condition</b>	Purchase success
<b>Normal Flow</b>	1. The actor clicks on the purchase button. 2. Redirect actor to purchase page. 3. The actor selects the electronic wallet and log in. 4. The actor reviews purchase information and confirm 5. Process purchase and display notification
<b>Exception Flow</b>	The actor does not confirm to purchase -> order cancel and display notification
<b>Priority</b>	High
<b>Non-Function Requirement</b>	1. Low process time, below 2 seconds. 2. The error message must be displayed clearly and easy to understand.
<b>Business Rules</b>	

<b>ID and Name</b>	UC-12 Rate service	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	The actor can rate service quality if had used before		
<b>Trigger</b>	The actor selects the rating score and clicks the rating button.		
<b>Pre-Condition</b>	1. Actor is logged in 2. Actor had used service		
<b>Post-Condition</b>	Create a new rate record for service		
<b>Normal Flow</b>	1. System check if the user had used the service before 2. Save rate record for service 3. Notify rate success		
<b>Exception Flow</b>	The actor had not used service -> not save rate record.		
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>	The only actor had used the service can rate		

<b>ID and Name</b>	UC-14 Create discussion	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	Actors can create, edit, and delete a discussion about a service in iTravel.		
<b>Trigger</b>	The actor clicks on creating/edit/delete discussion button.		

<b>Pre-Condition</b>	The actor is logged in
<b>Post-Condition</b>	Actor's action success
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>1. The actor clicks on create/edit/delete discussion button.</li> <li>2. The actor confirms to save.</li> <li>3. Discussion created/updated.</li> </ol>
<b>Exception Flow</b>	
<b>Priority</b>	Medium
<b>Non-Function Requirement</b>	Low process time, below 1 second.
<b>Business Rules</b>	The actor can create discussion without using service conditions.

<b>ID and Name</b>	UC-15 View Order	<b>Actors</b>	User
<b>Created By</b>	Nguyen Viet Dung	<b>Created At</b>	15/01/2022
<b>Description</b>	Actor can view their order		
<b>Trigger</b>	The actor has access to view the order page		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	The actor views all their order		
<b>Normal Flow</b>			
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 2 seconds.		
<b>Business Rules</b>			

<b>ID and Name</b>	UC-16 Request refund	<b>Actors</b>	User
<b>Created By</b>	Le Thi Thanh Nhan	<b>Created At</b>	06/01/2022
<b>Description</b>	Actor can request to refund for service if its quality is not guaranteed		
<b>Trigger</b>	Actor select order had purchased, select service they want a refund, fill reason, select refund button		
<b>Pre-Condition</b>	Actor is logged in The service's start date must be over (the actor had used the service)		
<b>Post-Condition</b>	The request will be sent to the moderator. Depending on regulation and exchange for direct verification, the moderator will make a decision about refund or not		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>1. System save refund request and notify a moderator</li> <li>2. Moderator check request, make contact with the user to verify</li> </ol>		

	<p>3. If accepted, the moderator request to create a transfer record to use and update the refund request's status to ACCEPT</p> <p>4. If rejected, the moderator updates the refund request's status to REJECT</p>
<b>Exception Flow</b>	
<b>Priority</b>	Medium
<b>Non-Function Requirement</b>	Low process time, below 1 second.
<b>Business Rules</b>	Actor can request a refund only 24 hours after using the service

<b>ID and Name</b>	UC-38 View notification	<b>Actors</b>	User
<b>Created By</b>	Tran Minh Hai	<b>Created At</b>	15/01/2022
<b>Description</b>	Actor views notifications		
<b>Trigger</b>	Actor clicks on the notification icon on the header bar		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	The actor can see all of the notifications that the system has issued to him.		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>Actor selects the notification icon in the header bar.</li> <li>Actor views list of notifications related to the actor's account</li> </ol>		
<b>Exception Flow</b>			
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>			
<b>Business Rules</b>			

<b>ID and Name</b>	UC-40 Add to cart	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	17/01/2022
<b>Description</b>	Actor can add services to their cart		
<b>Trigger</b>	Actor clicks on add to cart button		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	New cart item added to actor's cart		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>Actor clicks on add to cart button</li> <li>System check service information</li> <li>Add new cart item(s)</li> </ol>		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		

<b>Business Rules</b>	Actor must create their cart before purchase		
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<b>ID and Name</b>	UC-41 View all cart item	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	17/01/2022
<b>Description</b>	They can check the cart item list to make decision on what service will be ordered		
<b>Trigger</b>	Actor access cart		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	Actor got all cart item list		
<b>Normal Flow</b>	The system got all actor's cart items and return it		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>			

<b>ID and Name</b>	UC-42 Update cart	<b>Actors</b>	User
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	17/01/2022
<b>Description</b>	Actor can update their cart item list before purchase		
<b>Trigger</b>	1. Actor add service from service detail page 2. Actor updates start date and quantity, remove cart item in cart page		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	Cart item list updated		
<b>Normal Flow</b>	Case 1: 1. Actor click add to cart on the service detail page 2. System adds the item to the cart Case 2: 1. Actor click to update start date and quantity, remove cart item from the cart item list 2. System update start date and quantity, remove an item in cart		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>			

### 2.2.3.3 Service for Seller

<b>ID and Name</b>	UC-43: CRUD shop	<b>Actors</b>	Seller
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	Actor can manage their shop		
<b>Trigger</b>	The actor submits a request		

<b>Pre-Condition</b>	Actor is logged in
<b>Post-Condition</b>	Action successfully
<b>Normal Flow</b>	Depending on the request type, the shop will be created/updated/delete
<b>Exception Flow</b>	
<b>Priority</b>	High
<b>Non-Function Requirement</b>	Low process time, below 1 second.
<b>Business Rules</b>	<ul style="list-style-type: none"> <li>1. The actor will be granted seller permission when creating a shop.</li> <li>2. Only shop owners can update/delete shop information.</li> <li>3. Deleted shop will be updated status to DELETED instead of deleting it from the database</li> </ul>

<b>ID and Name</b>	UC-19 Create service	<b>Actors</b>	Seller
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	17/01/2022
<b>Description</b>	Actor can create new services. New service will need to wait until it accepted by a moderator		
<b>Trigger</b>	Actor fill required information and select the button to submit		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	New service created		
<b>Normal Flow</b>	1. The actor submits a request 2. System create service with status WAIT		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>	Service must be verified and accepted by the moderator before the public on iTravel		

<b>ID and Name</b>	UC-20 Update service	<b>Actors</b>	Seller
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	17/01/2022
<b>Description</b>	Actor can update their service information and its working status.		
<b>Trigger</b>	The actor changes service information and selects the button to submit		
<b>Pre-Condition</b>	1. Actor is logged in 2. Actor is service owner		
<b>Post-Condition</b>	Service updated		
<b>Normal Flow</b>	1. The actor submits a request 2. Update shop information and working status. If service info changes, it will be added to wait to accept queue		
<b>Exception Flow</b>			
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>	1. Service must be verified and accepted by the moderator before the public on iTravel 2. Only the service owner can update/delete service information		

<b>ID and Name</b>	UC-21: Delete service	<b>Actors</b>	Seller
<b>Created By</b>	Le Thi Thanh Nhan	<b>Created At</b>	15/01/2022
<b>Description</b>	Actor can delete their service		
<b>Trigger</b>	Actor access to service, select delete button		
<b>Pre-Condition</b>	1. Actor is logged in 2. Actor is the service owner		
<b>Post-Condition</b>	The chosen service is deleted		
<b>Normal Flow</b>	1. The actor submits a request		

	2. Popup show to ask to confirm 3. System got service info and update its status
<b>Exception Flow</b>	
<b>Priority</b>	Medium
<b>Non-Function Requirement</b>	Low process time, below 1 second.
<b>Business Rules</b>	1. Only the service owner can update/delete service information 2. Deleted service will be updated status to DELETED instead of deleting it from the database

#### 2.2.3.4 Service for Moderator

<b>ID and Name</b>	UC-23 Verify service	<b>Actors</b>	Moderator
<b>Created By</b>	Nguyen Viet Dung	<b>Created At</b>	15/01/2022
<b>Description</b>	Service must be accepted by the moderator before the public on iTravel. After verifying service information, the moderator can accept or reject the service.		
<b>Trigger</b>	Service created/updated		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	The service register request is approved or rejected		
<b>Normal Flow</b>	1. Moderator receives to verify the request 2. Moderator checks service information 3. Moderator process verify (this action process is outside the iTravel system) 4. The moderator accepts/rejects the request		
<b>Exception Flow</b>			
<b>Priority</b>	High		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>	1. Moderator must leave a reason for each reject action 2. Verify action process outside iTravel system		

<b>ID and Name</b>	UC-25 Account management	<b>Actors</b>	Moderator
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	Moderator can manage iTravel account. They can lock user accounts if necessary.		
<b>Trigger</b>	Actor access to account manage page		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	Action success		
<b>Normal Flow</b>	1. Actor access account overview list at first. 2. Actor search account. 3. The actor selects an account to view detail. 4. Select action 5. Update data		
<b>Exception Flow</b>			

<b>Priority</b>	Medium
<b>Non-Function Requirement</b>	Low process time, below 1 second.
<b>Business Rules</b>	<ol style="list-style-type: none"> <li>1. Moderator only manage user and seller role account.</li> <li>2. Only the admin can manage the moderator account.</li> </ol>

<b>ID and Name</b>	UC-44 Review, manage refund request	<b>Actors</b>	Moderator
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	Moderator can review all refund requests, verify them, and accept or reject this request.		
<b>Trigger</b>	The actor has access to the refund management page		
<b>Pre-Condition</b>	The actor is logged in		
<b>Post-Condition</b>	Action success		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>1. The actor selects a refund request for more detail.</li> <li>2. The actor process verify request (this action happen outside the iTravel system)</li> <li>3. The actor accepts or rejects a refund request</li> </ol>		
<b>Exception Flow</b>			
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>	<ol style="list-style-type: none"> <li>1. Action verifies process outside iTravel system</li> <li>2. The actor must add a reason for each acceptance/reject</li> </ol>		

<b>ID and Name</b>	UC-45 Service management	<b>Actors</b>	Moderator
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	Moderator can view and manage all services in the iTravel system.		
<b>Trigger</b>	The actor has access to the service manage page		
<b>Pre-Condition</b>	The actor is logged in		
<b>Post-Condition</b>	Action success		
<b>Normal Flow</b>	<ol style="list-style-type: none"> <li>1. The actor view list all service.</li> <li>2. The actor selects a service for more detail.</li> <li>3. The actor selects an action to manage service.</li> </ol>		
<b>Exception Flow</b>			
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>			

### 2.2.3.5 Service for Admin

<b>ID and Name</b>	UC-27: Lock moderator account	<b>Actors</b>	Admin
<b>Created By</b>	Le Thi Thanh Nhan	<b>Created At</b>	17/01/2022
<b>Description</b>	Actor can lock moderator account		
<b>Trigger</b>	Actor clicks on the Block button in the selected moderator account		

<b>Pre-Condition</b>	Actor is logged in
<b>Post-Condition</b>	The selected moderator account is locked
<b>Normal Flow</b>	1. The actor submits a request 2. System got account info and update its status
<b>Exception Flow</b>	
<b>Priority</b>	Low
<b>Non-Function Requirement</b>	Low process time, below 1 second.
<b>Business Rules</b>	

<b>ID and Name</b>	UC-39 Grand moderator permission	<b>Actors</b>	Admin
<b>Created By</b>	Tran Minh Hai	<b>Created At</b>	15/01/2022
<b>Description</b>	Actor can grant moderator permission for specified account		
<b>Trigger</b>	The actor enters an email for a new moderator account and selects the button to submit		
<b>Pre-Condition</b>	Actor is logged in		
<b>Post-Condition</b>	A new moderator account was created.		
<b>Normal Flow</b>	1. The actor submits a request. 2. System grant moderator permission for an account.		
<b>Exception Flow</b>			
<b>Priority</b>	Low		
<b>Non-Function Requirement</b>	Low process time, below 1 second.		
<b>Business Rules</b>	Only exist iTravel account can be granted		

#### 2.2.3.6 Service for System

<b>ID and Name</b>	UC-34 Create notification	<b>Actors</b>	System
<b>Created By</b>	Do Viet Khoa	<b>Created At</b>	18/01/2022
<b>Description</b>	The system can create and send notifications to the user		
<b>Trigger</b>	Another service triggers it		
<b>Pre-Condition</b>			
<b>Post-Condition</b>	Action success		
<b>Normal Flow</b>	1. Create notification 2. Save to database 3. Send to target account		
<b>Exception Flow</b>			
<b>Priority</b>	Medium		
<b>Non-Function Requirement</b>			
<b>Business Rules</b>			

### 3. Functional Requirements

#### 3.1 System Functional Overview

##### 3.1.1 Screens Flow

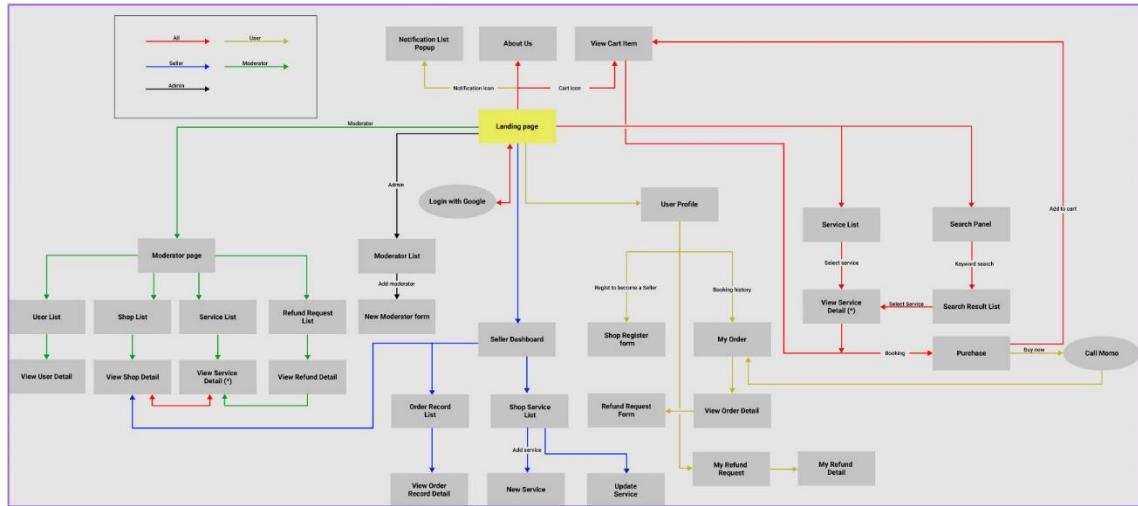


Figure 9: [Screen Flow](#)

##### 3.1.2 Screen Descriptions

	Feature	Screen	Description
1	Homepage	Landing Page	Homepage of iTravel App
2	Homepage	About Us	A page introduces the website and the project
3	Homepage	Search Panel	A panel in the header bar help user search services
4	Homepage	Notification List Popup	A popup contains the newest notification for a user
5	Cart	View Cart Item	A screen contains a list of services that user adds to their cart
6	Searching	Search Result List	Provide a list of results when a user filters or searches by keywords
7	Service	View Service Detail	A screen has all information (images, description, location) about a service
8	Service	Purchase Screen	A screen for a user to enter his purchase information and review his order
9	Service	View Shop Detail	An information screen about a shop and its services
10	User Profile	User Profile	A screen for a user to view and edit their personal information

	<b>Feature</b>	<b>Screen</b>	<b>Description</b>
11	User Profile	Shop Register Form	A form for a user to register their account to become a seller
12	User Profile	My Order	A screen contains all the order history of a user
13	User Profile	View Order Detail	User views all services, sub-services information of an order
14	User Profile	Refund Request Form	A form for a user to request a refund
15	Seller service	View Shop Detail	A screen for a seller to view information about their shop
16	Seller service	Shop Service List	List of all services in that seller's shop
17	Seller service	New Service	A screen that allows a seller to enter service details and add them to their shop
18	Seller service	Update Service	A screen that allows a seller to modify service information
19	Seller service	Order Record List	A screen contains a list of all orders that have occurred in that shop.
20	Seller service	View Order Record Detail	A detail screen of an order record
21	Moderator service	User List	List of all users in the iTravel system
22	Moderator service	View User Detail	Detail information about a user of the website
23	Moderator service	Shop List	A list of shops for moderators to manage
24	Moderator service	Service List	A list of all services for moderators to manage
25	Moderator service	Refund Request List	A list of user requests for money back due to poor service
26	Moderator service	View Refund Detail Form	A refund request detail form for a moderator to review
27	Admin service	Moderator List	All moderators in the system are listed here
28	Admin service	New Moderator form	A form for admin to add a new moderator

### 3.1.3 Screen Authorization

Screen	Admin	Moderator	Seller	User	Guest
Landing Page	X	X	X	X	X
About Us	X	X	X	X	X
Search Panel	X	X	X	X	X
Notification List Popup	X	X	X	X	
View Cart Item	X	X	X	X	X
Search Result List	X	X	X	X	X
View Service Detail	X	X	X	X	X
Purchase Screen	X	X	X	X	
View Shop Detail	X	X	X	X	X
User Profile	X	X	X	X	
Shop Register Form	X	X	X	X	
My Order	X	X	X	X	
View Order Detail	X	X	X	X	
Refund Request Form	X	X	X	X	
Seller Dashboard			X		
Shop Service List			X		
New Service			X		
Update Service			X		
Order Record List			X		
View Order Record Detail			X		
User List	X	X			
View User Detail	X	X			
Shop List	X	X			
Service Appraisal List	X	X			
Refund Request List	X	X			
View Refund Detail Form	X	X			
Moderator List	X				

Screen	Admin	Moderator	Seller	User	Guest
New moderator form	X				

### 3.1.4 Non-Screen Functions

In this application, we do not have any non-screen functions.

### 3.1.5 Entity Relationship Diagram

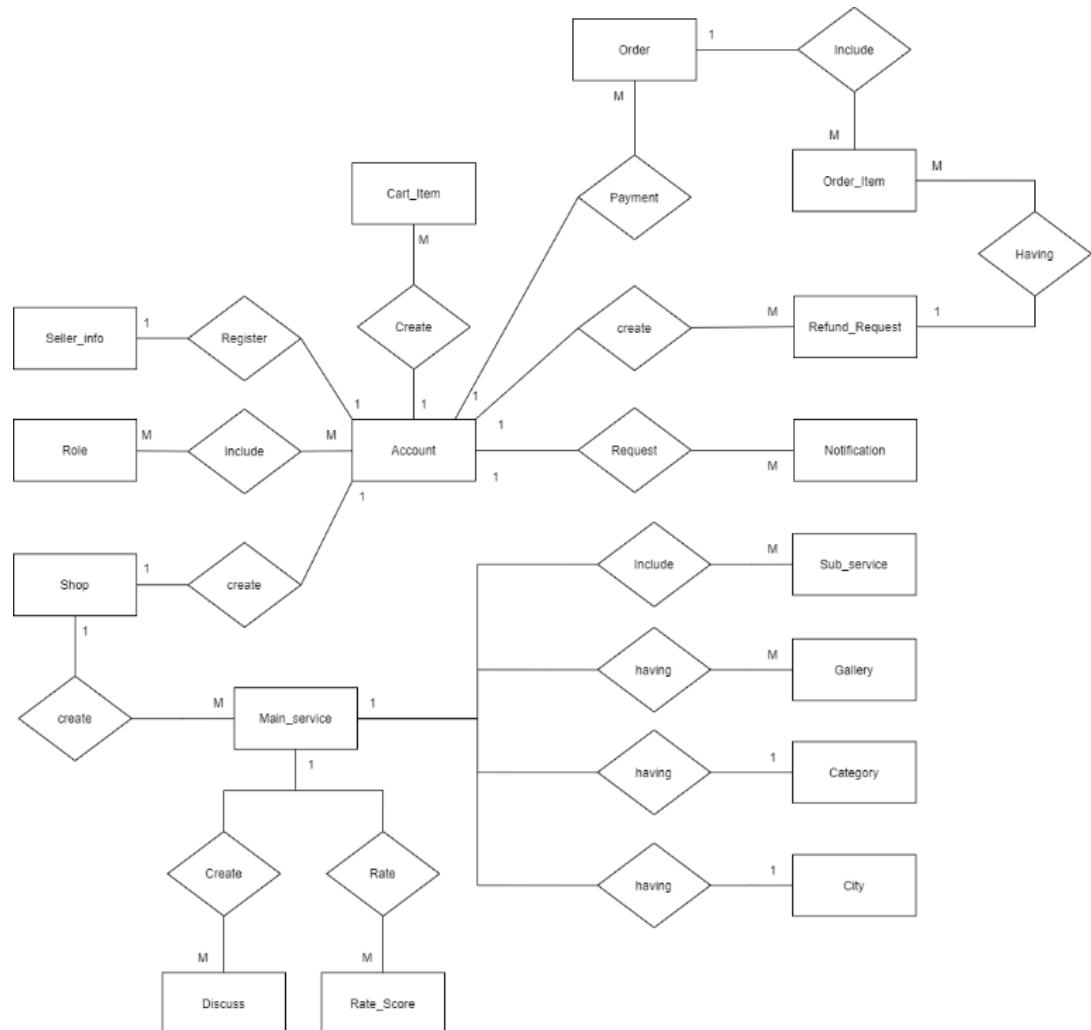


Figure 10: ERD

## 3.2 Homepage

### 3.2.1 View Landing Page

- Screen layout:

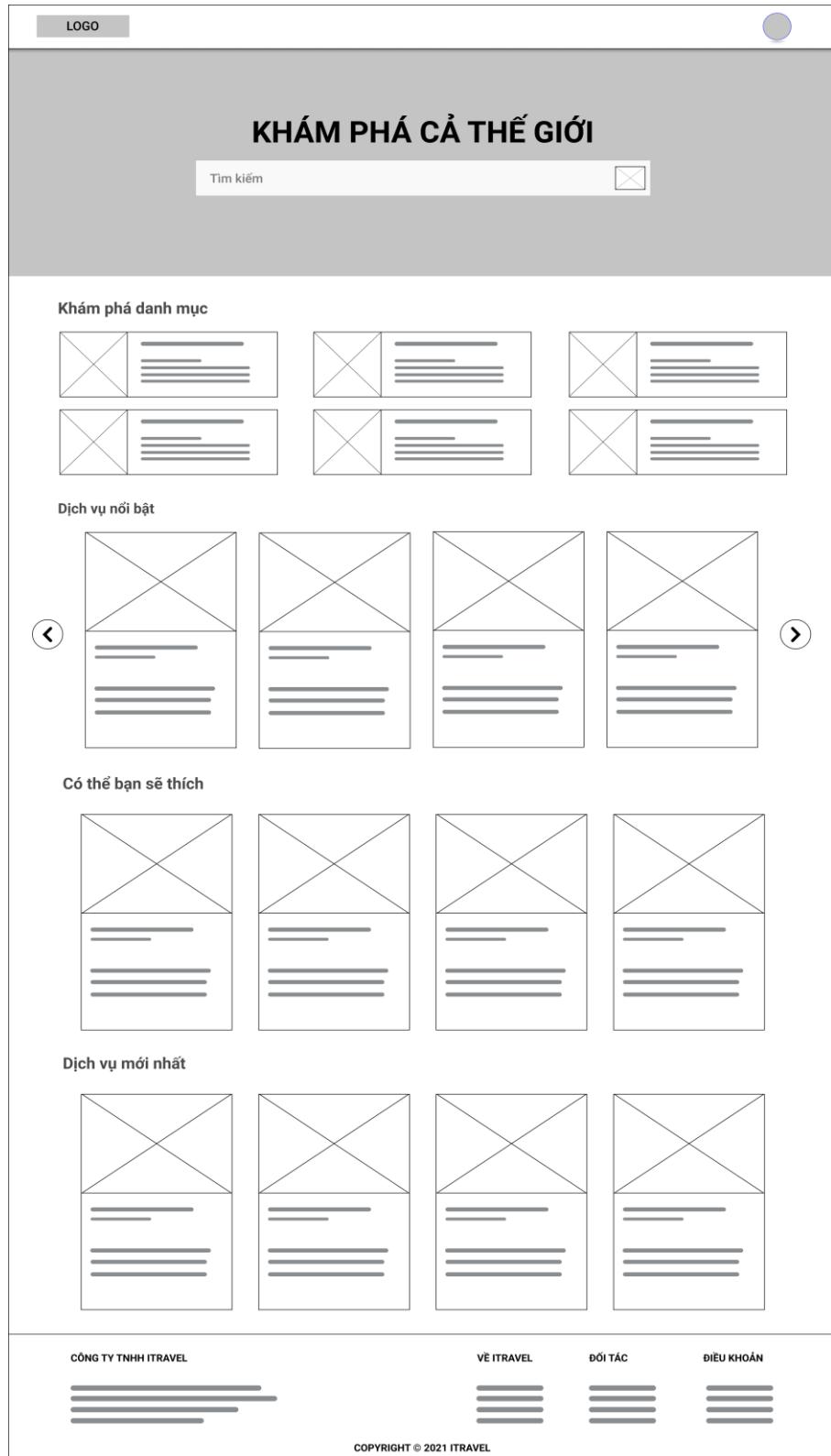


Figure 11: View Landing page

- Function details:
  - View list of categories, list of services.
  - Login.
  - Logout.

- Search service in the search panel.

### 3.2.2 View About Us

- Screen layout:

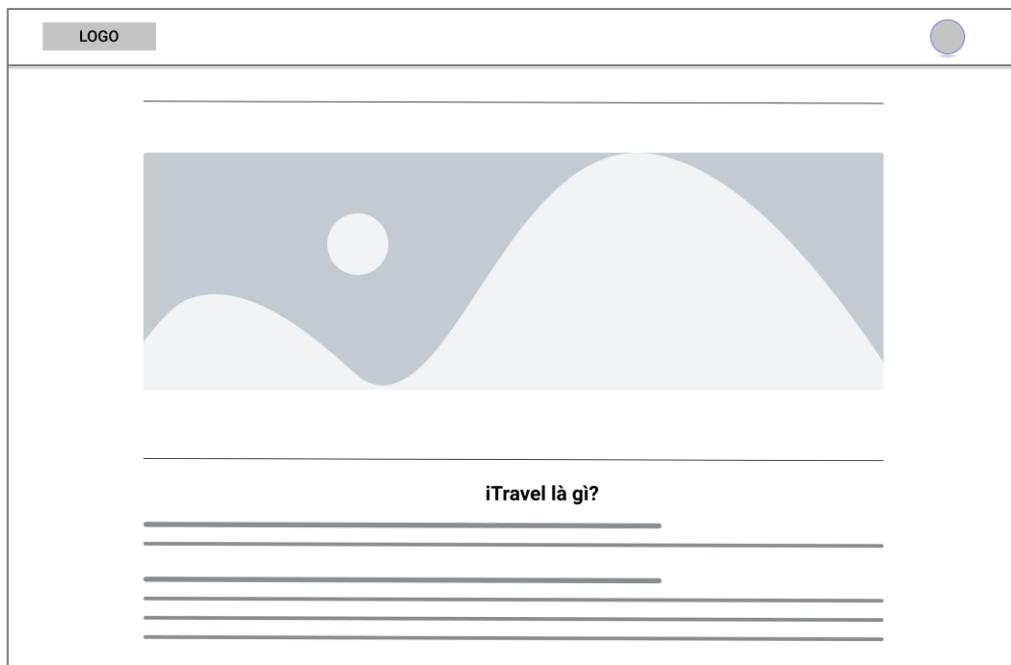


Figure 12: View About Us

- Function details:
  - View information about the iTavel system.

### 3.2.3 View Notification List

- Screen layout:

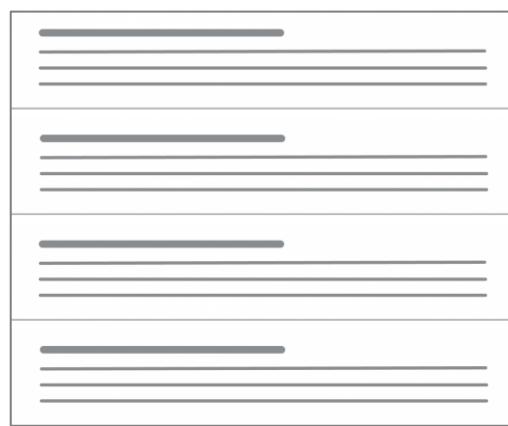


Figure 13: View Notification List

- Function details:
  - View the list of users' notifications.

### 3.3 Cart

#### 3.3.1 View Cart Item

- Screen layout:

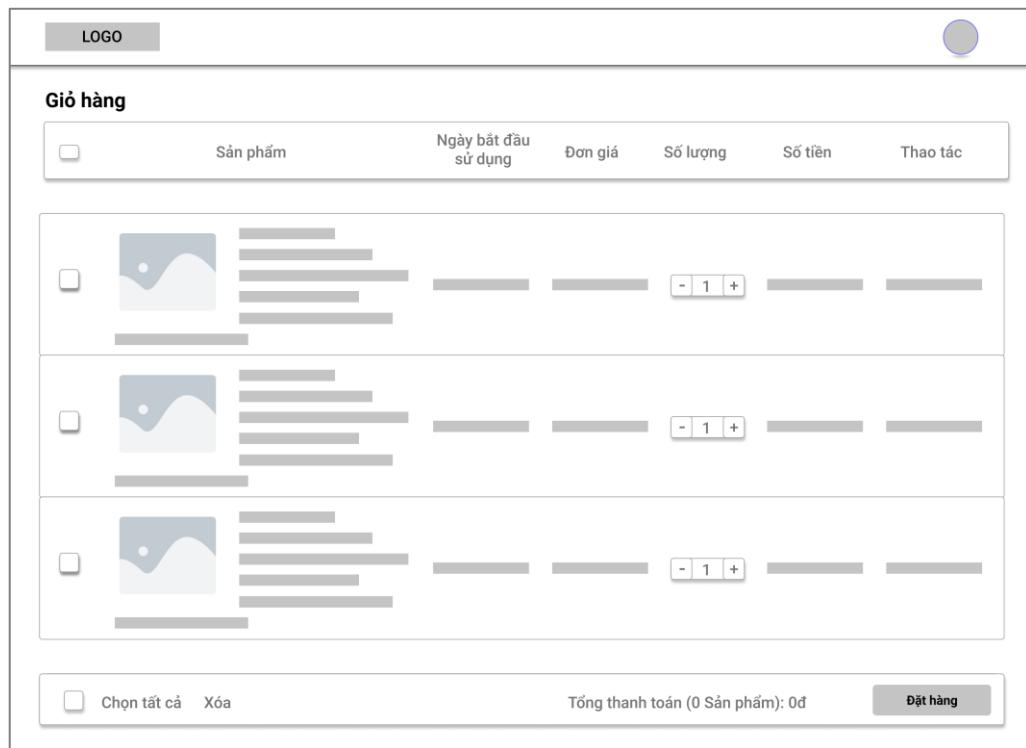


Figure 14: View Cart Item

- Function details:
  - View, update, and delete items in the user's cart.

## 3.4 Searching

### 3.4.1 View Search Result List

- Screen layout:



Figure 15: View Search Result List

- Function details:
  - Search service.
  - View list of result services.
  - Filter services by price and categories.

## 3.5 Service

### 3.5.1 View Service Detail

- Screen layout:

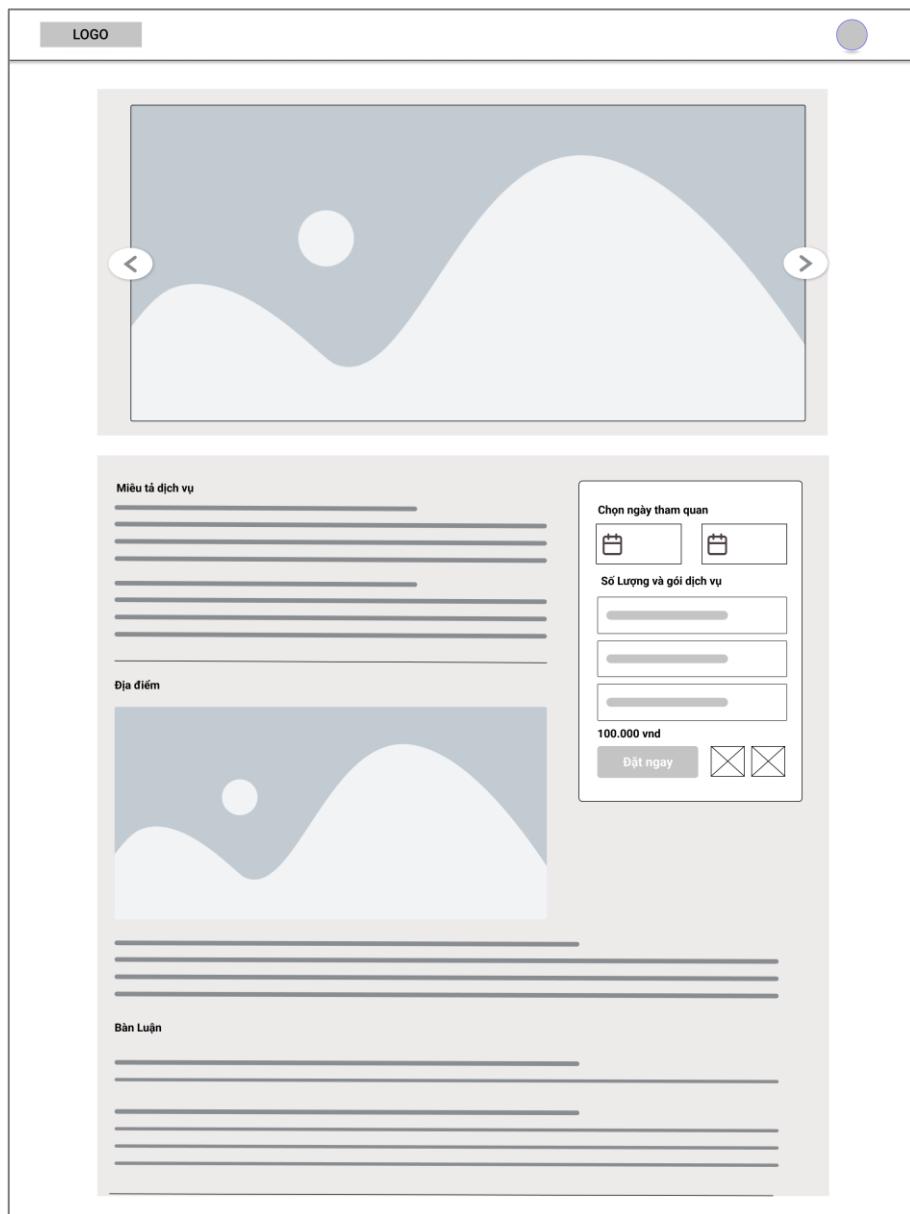


Figure 16: View Service Detail

- Function details:
  - View a service's information.
  - Add the service to the cart.
  - Book the service.
  - Rate the service.
  - Discuss the service.

### 3.5.2 Purchase Service

- Screen layout:

The screenshot shows a user interface for a purchase service. At the top left is a logo placeholder, and at the top right is a circular profile picture placeholder. Below these are sections for entering information.

**Điền thông tin**

**Thông tin liên lạc**

Họ và tên*	Số điện thoại*
<input type="text" value="Nhập vào"/>	<input type="text" value="Nhập vào"/>

**Thông tin đơn hàng**

Sản phẩm	Ngày bắt đầu sử dụng	Đơn giá	Số lượng	Số tiền	Thao tác
	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]

**Cách thức thanh toán**

<input checked="" type="radio"/>	<input type="radio"/>
----------------------------------	-----------------------

Tổng thanh toán (0 Sản phẩm): ₫0

**Thanh toán**

Figure 17: Purchase Service

- Function details:
  - Input information for order and create order.

### 3.5.3 View Shop Detail

- Screen layout:

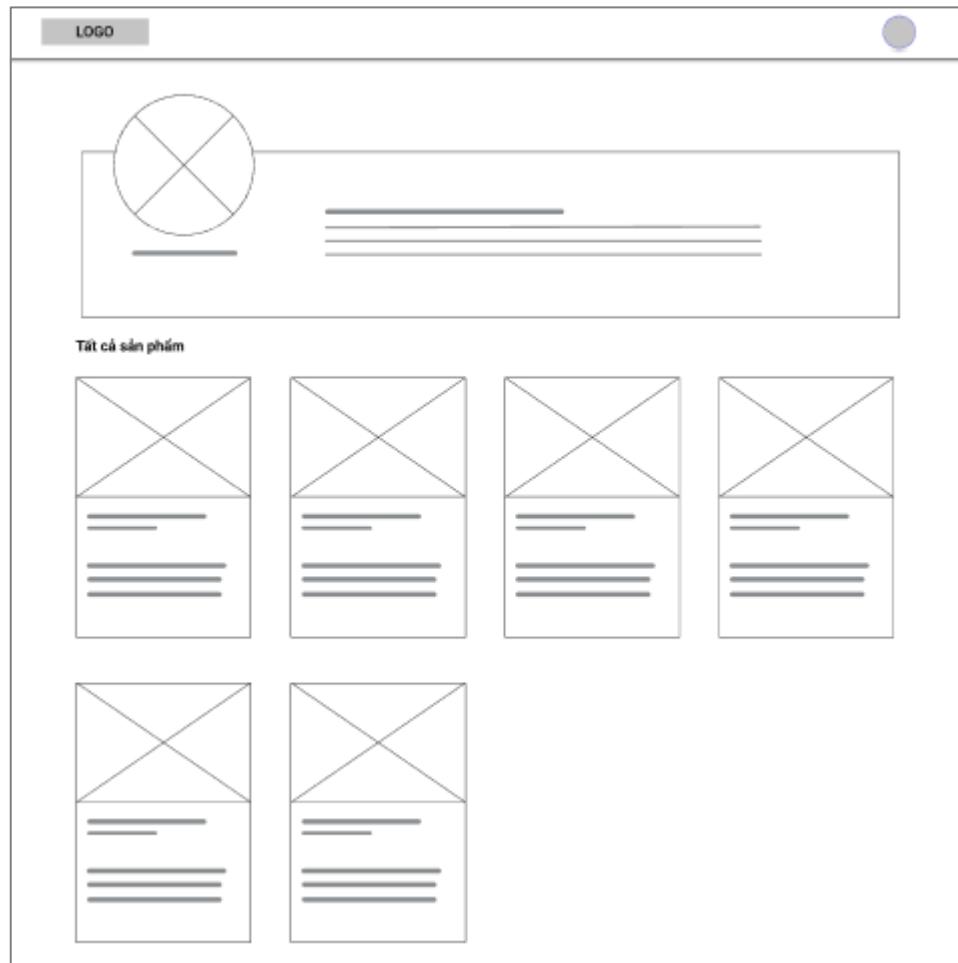


Figure 18: View Shop Detail

- Function details:
  - View a shop's information.
  - View a list of the shop's services.

## 3.6 User Profile

### 3.6.1 View Profile

- Screen layout:

The screenshot shows a mobile application interface for viewing a user profile. At the top, there is a placeholder logo 'log ipsum'. On the right side of the header, there are buttons for 'Trở thành đối tác' (Become a partner), a flag icon for 'VND', and a language selection dropdown. Below the header, on the left, there is a placeholder profile picture and the placeholder name 'Người dùng Test'. Below the placeholder name, there are three checkboxes: 'Lịch sử đơn hàng', 'Đăng ký bán hàng', and 'Đăng xuất'. On the right, under the heading 'Thông tin cá nhân', there are four input fields: 'Họ và Tên' (Last Name and First Name), 'Ngày sinh' (Birth Date) with a calendar icon, 'Email', and 'Số điện thoại' (Phone Number). Below these fields is a 'Địa chỉ' (Address) input field. At the bottom, there is a 'Giới tính' (Gender) section with three radio buttons: 'Nam', 'Nữ', and 'Khác'. A 'Cập nhật' (Update) button is located at the bottom right.

Figure 19: View Profile

- Function details:
  - View user's information.
  - Update user's information.
  - Logout.

### 3.6.2 Register shop

- Screen layout:

**Tạo cửa hàng**

Tên cửa hàng

Thành phố  v

Địa chỉ cụ thể

Mô tả

Figure 20: Shop Register

- Function details:
  - Register to become a shop in the iTravel system.

### 3.6.3 View Order List

- Screen layout:

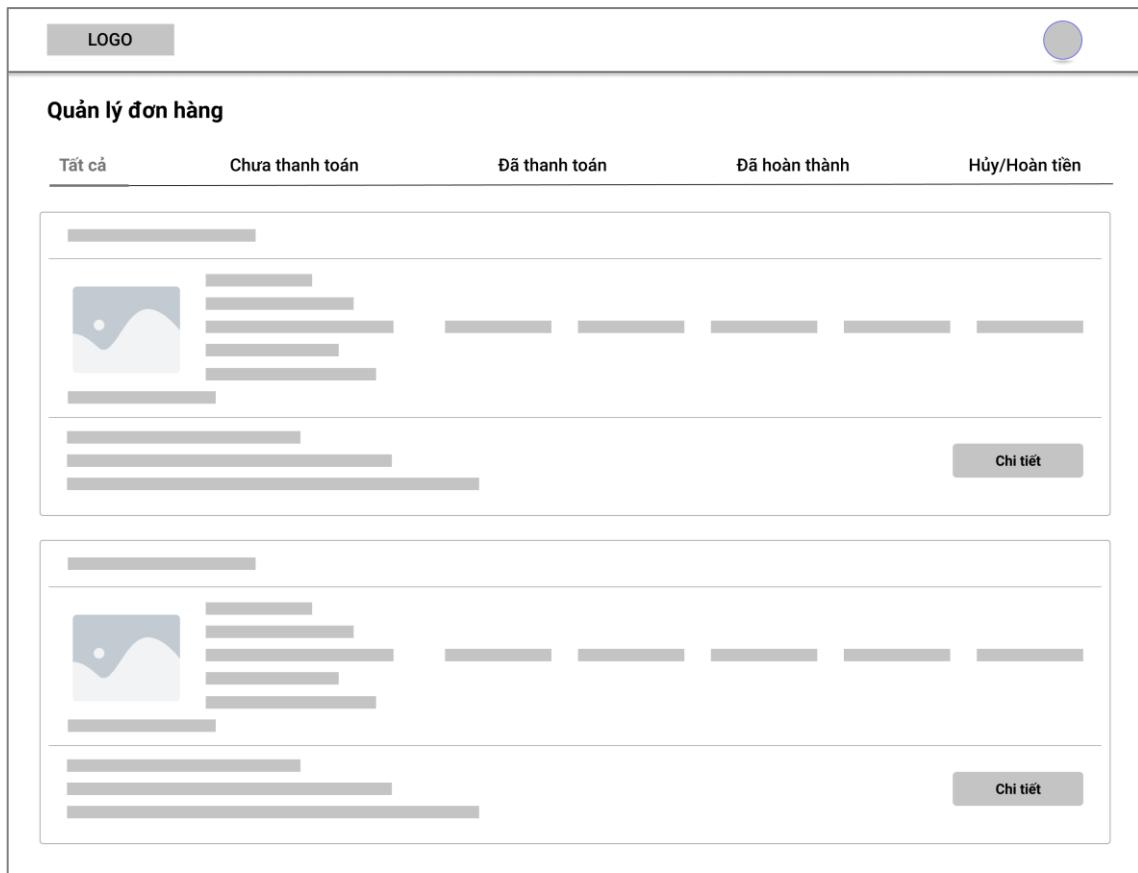


Figure 21: View Order List

- Function details:
  - View list of user orders.

#### 3.6.4 View Order Detail

- Screen layout:

The screenshot shows a user interface for viewing order details. At the top left is a placeholder for a logo. On the right side is a circular profile picture placeholder. Below these are two main sections: 'Thông tin đơn hàng' (Order Information) and 'Thông tin liên lạc' (Contact Information). The 'Thông tin đơn hàng' section contains two long, horizontal, grayed-out input fields. The 'Thông tin liên lạc' section contains two input fields labeled 'Họ và tên' (Name) and 'Số điện thoại' (Phone Number), each with a corresponding grayed-out input field below it. Below these sections is a table titled 'Thông tin sản phẩm' (Product Information). The table has columns: Sản phẩm (Product), Ngày bắt đầu sử dụng (Start Date), Đơn giá (Unit Price), Số lượng (Quantity), Số tiền (Total Amount), and Thao tác (Action). There are three rows in the table, each containing a small thumbnail image of a product and several grayed-out input fields. At the bottom right of the main content area is a small rectangular button labeled 'Quay lại' (Back).

Figure 22: View Order Detail

- Function details:
  - View detail of an order.

### 3.6.5 Create Refund Request

**Yêu cầu hoàn tiền dịch vụ**

Lý do yêu cầu hoàn tiền

Mô tả chi tiết

**Hủy** **Xác nhận**

Figure 23: Refund Request Form

- Screen layout:
- Function details:
  - Create a refund request for an item in an order.

### 3.7 Seller Service

#### 3.7.1 Shop Service List

- Screen layout:

LOGO		Danh sách dịch vụ							
		<input type="text"/> <input type="button" value="X"/> <span style="float: right;">+</span>							
		#	Ảnh	Dịch vụ	Địa điểm	Danh mục	Trạng thái	Ngày tạo	Tuỳ chọn
Quản trị		N							Chỉnh sửa Xoá
Tổng quan		N							Chỉnh sửa Xoá
Quản lý dịch vụ		N							Chỉnh sửa Xoá
Danh sách dịch vụ		N							Chỉnh sửa Xoá
Thêm dịch vụ mới		N							Chỉnh sửa Xoá
Quản lý đặt dịch vụ		N							Chỉnh sửa Xoá
Danh sách đặt		N							Chỉnh sửa Xoá
									Trang trước   1 ... 9   Trang sau

Figure 24: Shop Service List

- Function details:

- View list of services of a shop
- Delete a service

### 3.7.2 New Service

- Screen layout:

**Thêm dịch vụ mới**

Tên dịch vụ

Loại hình dịch vụ

Địa chỉ

Thành phố

Thời gian diễn ra

Ngày bắt đầu      Ngày kết thúc

Hình ảnh dịch vụ

Mô tả dịch vụ

**Thông tin chi tiết**

Tên dịch vụ con 1

Thêm dịch vụ con

Dịch vụ con 1

Giá      Số lượng

Hủy bỏ      Lưu dịch vụ

Figure 25: New Service

- Function details:

- Add new service to a shop

### 3.7.3 Update Service

- Screen layout:

The wireframe illustrates the 'Update Service' screen layout. It features a sidebar on the left with a 'LOGO' at the top and a vertical navigation menu containing the following items:

- Quản trị
- Tổng quan
- Quản lý dịch vụ** (highlighted)
- Danh sách dịch vụ
- Thêm dịch vụ mới
- Quản lý đặt dịch vụ** (highlighted)
- Danh sách đặt

The main content area is titled 'Chỉnh sửa dịch vụ' and includes the following fields:

- Tên dịch vụ: Text input field.
- Loại hình dịch vụ: Drop-down menu.
- Địa chỉ: Text input field.
- Thành phố: Drop-down menu.
- Thời gian diễn ra: Text input field.
- Thời gian diễn ra: Two adjacent text input fields labeled 'Ngày bắt đầu' and 'Ngày kết thúc'.
- Hình ảnh dịch vụ: Seven placeholder boxes for images.
- Mô tả dịch vụ: Large text area for description.
- Thông tin chi tiết: Section title.
- Tên dịch vụ con 1: Text input field.
- Thêm dịch vụ con: Button.
- Dịch vụ con 1: Sub-section header.
- Giá: Text input field.
- Số lượng: Text input field.

At the bottom of the screen are two buttons: 'Huỷ bỏ' (Cancel) and 'Lưu dịch vụ' (Save service).

Figure 26: Update Service

- Function details:
  - View details of a service
  - Update service information

#### 3.7.4 Order Record List

- Screen layout:

The screenshot shows a user interface for managing service orders. On the left is a vertical navigation sidebar with the following menu items:

- Quản trị**
  - Tổng quan
- Quản lý dịch vụ**
  - Danh sách dịch vụ
  - Thêm dịch vụ mới
- Quản lý đặt dịch vụ**
  - Danh sách đặt

The main content area has a header "Danh sách đặt" and a table with the following columns:

#	Mã đơn	Người đặt	Ngày đặt	Tổng tiền	Trạng thái	Tùy chọn
1	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
2	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
3	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
4	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]

At the bottom right of the main content area is a page navigation bar with the text: "Trang trước" [Redacted] 1 [Redacted] ... [Redacted] 9 [Redacted] "Trang sau".

Figure 27: Order Record List

- Function details:
  - View list order records of a shop

### 3.7.5 View Order Record Detail

- Screen layout:

#	Dịch vụ con	Số lượng	Ngày bắt đầu	Ngày kết thúc	Thành tiền
-	-	-	-	-	-
-	-	-	-	-	-

Figure 28: View Order Record Detail

- Function details:
  - View an order record's details

## 3.8 Moderator Service

### 3.8.1 View User List

- Screen layout:

LOGO		Danh sách người dùng								
<input checked="" type="checkbox"/> Danh sách quản lý <input checked="" type="checkbox"/> Danh sách người dùng <input checked="" type="checkbox"/> Danh sách cửa hàng <input checked="" type="checkbox"/> Danh sách dịch vụ <input checked="" type="checkbox"/> Danh sách yêu cầu hoàn trả		Tìm kiếm <input type="text"/> <input type="button" value="Tìm"/> <span style="float: right;"><input type="button" value="Bộ lọc"/></span>								
		Filer X	Filer X	ID	Họ tên	Email	Số điện thoại	Ngày đăng ký	Tình trạng	Tuỳ chọn
N										Chi tiết Khóa
N										Chi tiết Khóa
N										Chi tiết Khóa
N										Chi tiết Khóa
										Trang trước   1 ... 9   Trang sau

Figure 29: View User List

- Function details:
  - View the list of users in the system, lock and unlock users.

### 3.8.2 View User Detail

- Screen layout:

LOGO		Thông tin người dùng							
		ID							
		Họ tên							
Email				Giới tính					
Số điện thoại				Ngày đăng ký					
Ngày sinh				Tình trạng					
<input type="button" value="Quay lại"/>									

Figure 30: View User Detail

- Function details:
  - View user information.

### 3.8.3 View Shop List

- Screen layout:

ID	Tên cửa hàng	Chủ cửa hàng	Địa chỉ	Ngày đăng ký	Tình trạng	Tùy chọn
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa

Figure 31: View Shop List

- Function details:
  - View the list of shops in the system, lock and unlock shops.

#### 3.8.4 View Service List

- Screen layout:

#	Tên dịch vụ	Danh mục	Cửa hàng	Ngày tạo	Trạng thái	Tùy chọn
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Xem chi tiết Khóa

Figure 32: View Service List

- Function details:
  - View the list of services in the system, lock and unlock services.

### 3.8.5 View Refund Request List

- Screen layout:

ID	Mã đơn hàng	Mã SP ĐH	Ngày đặt hàng	Ngày gửi đơn	Lý do	Trạng thái	Tuỳ chọn
N	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Xem chi tiết
N	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Xem chi tiết
N	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Xem chi tiết
N	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Xem chi tiết
N	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Xem chi tiết

Figure 33: View Refund Request List

- Function details:
  - View the list of refund requests in the system.

### 3.8.6 View Refund Request Detail

- Screen layout:

The screenshot shows a user interface for viewing a refund request detail. At the top left is a placeholder for 'LOGO'. On the top right is a blue circular profile picture. Below the header, the title 'Chi tiết yêu cầu' is centered. The form contains several input fields and buttons. The fields include: 'ID' (with a long grey input bar), 'Mã SP đơn hàng' (with a long grey input bar), 'Người đặt hàng' (with a long grey input bar), 'Người bán hàng' (with a long grey input bar), 'Ngày đặt hàng' (with a long grey input bar), 'Ngày yêu cầu' (with a long grey input bar), 'Mã đơn hàng' (with a long grey input bar), 'Thời gian sử dụng' (with two grey input bars separated by a tilde (~)), 'Lý do' (with three long grey input bars stacked vertically), and 'Lý do từ chối' (with five shorter grey input bars stacked vertically). At the bottom left are two buttons: 'Đồng ý' (Accept) and 'Từ chối' (Reject). At the bottom right is a button labeled 'Quay lại' (Back).

Figure 34: View Refund Request Detail

- Function details:
  - View the refund request detail, accept or reject the request.

### 3.9 Admin Service

#### 3.9.1 View Moderator List

- Screen layout:

The screenshot shows a user interface for managing moderators. On the left, a sidebar contains five items: 'Danh sách quản lý' (selected), 'Danh sách người dùng', 'Danh sách cửa hàng', 'Danh sách dịch vụ', and 'Danh sách yêu cầu hoàn trả'. The main area is titled 'Danh sách quản lý' and includes a search bar ('Tim kiếm') and filter buttons ('Bộ lọc', 'Tạo mới'). Below is a table with columns: ID, Họ tên, Email, Ngày đăng ký, Tình trạng, and Tuỳ chọn. The table lists four rows, each with a status column labeled 'Khóa' (Locked). At the bottom right of the table is a pagination control ('Trang trước', 'Trang sau').

ID	Họ tên	Email	Ngày đăng ký	Tình trạng	Tuỳ chọn
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Khóa
N	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Khóa

Figure 35: View Moderator List

- Function details:
  - View list of admins and moderators in the system, lock and unlock moderators.

### 3.9.2 Add New Moderator

- Screen layout:

The screenshot shows a form titled 'Tạo quản lý' (Create Manager). It has a single input field labeled 'Email' with a placeholder. At the bottom are two buttons: a grey 'Xác nhận' (Confirm) button and a white 'Hủy' (Cancel) button.

Figure 36: Add New Moderator

- Function details:
  - View a form to input the user's email to give permission.

## 4. Non-Functional Requirements

### 4.1 External Interfaces

#### 4.1.1 User Interfaces

1. The UI (user interfaces) must display a success or error message.
2. The system must ask the user to confirm before important action.
3. User-friendly interface.

#### 4.1.2 Software Interfaces

1. Language
  - Java
  - Typescript
2. Payment method
  - Paypal
3. Technique
  - Spring economy: Spring Boot, Spring Security...
  - ReactJS
  - Microservice
  - SMTP email
  - RabbitMQ
  - MySQL

#### 4.1.3 Communication Interfaces

##### **Database server:**

- Master link:
- jdbc:mysql://itraveldb.czjgfne1uiqu.ap-southeast-1.rds.amazonaws.com:3306
- Database name:
  - itravel\_account\_portal
  - itravel\_auth\_portal
  - itravel\_payment\_portal
  - itravel\_shop\_portal

##### **Application domain:**

##### RabbitMQ:

- <https://armadillo.rmq.cloudamqp.com/>
- Username = vdxwvzmy
- Password = q4C7CvIJud8wKOaVN7gzdBcb-gykKCnR

##### Rest API docs:

- <http://itravel-api-portal-fptu.tk:8011/swagger-ui/>
- <http://itravel-api-portal-fptu.tk:8020/swagger-ui/>
- <http://itravel-api-portal-fptu.tk:8043/swagger-ui/>
- <http://itravel-api-portal-fptu.tk:8850/swagger-ui/>

##### UI:

- <https://demo-itravel.netlify.app/>

## 4.2 Quality Attributes

### 4.2.1 Usability

User-friendly and easy to use the first time.

### 4.2.2 Reliability

- Available: always.
- Mean time between failure: more than one month.
- Mean time to repair: from 12 to 24 hours.
- Bugs or Defect Rate: minor-80%, significant-15% and critical-5%

### 4.2.3 Performance

- Low process time/quick response: from 1 to 2 seconds/request.
- Can support more than 10000 transactions/second.

### 4.2.4 Supportability

- Clean code.
- Flexible.
- Readable.
- Maintainable.

### 4.2.5 Design Constraints

- Have required material design.

### 4.2.6 Support Documents

- Detailed description document.
- Document always be updated for the latest version.

## 5. Requirement Appendix

### 5.1 Business Rules

	<b>Rule Definition</b>
1	Moderator only manages user and seller role accounts.
2	Only the admin can manage the moderator account.
3	The actor will be granted seller permission when creating a shop.
4	Only shop owners can update/delete shop information.
5	Only the service owner can update/delete service information.
6	Only users who have used the service can rate the service.
7	The deleted shop will be updated status of DELETED instead of deleting it from the database.

	<b>Rule Definition</b>
8	Deleted service will be updated status to DELETED instead of deleting it from the database.
9	Sellers cannot rate their own service.
10	User role-account can create discussions about service without requiring had used the service before.
11	Users can reply to a discussion.
12	The actor can leave a discussion but there must log in first.
13	The actor also contacts a moderator via iTravel support email.
14	The actor must perform a purchase to complete the order action.
15	Moderator must leave a reason for each rejected action.
16	Verify action process outside iTravel system.
17	Transfer money to seller process outside iTravel system.

## 5.2 Application Messages List

	<b>Message code</b>	<b>Message Type</b>	<b>Context</b>	<b>Content</b>
1	MSG01	In red, under the text box	Input-required fields are empty	Please input this field.
2	MSG02	In red, under the text box	Input value is incorrect format	Error! Please enter another value.
3	MSG03	Toast message	Updating information successfully	Update successfully.
4	MSG04	Toast message	Save cart items successfully	Save successfully.
5	MSG05	Toast message	Moderator tries to lock admin account	Cannot lock admin account.
6	MSG06	In red, under the text box	Input email wrong format	Please input the right email.
7	MSG07	In red, under the text box	Input email which does not exist in the system or was given moderator permission	This email was given moderator permission or does not exist in the system.
8	MSG08	In red, under the text box	Input a phone number that is not	Please input the right phone number.

	<b>Message code</b>	<b>Message Type</b>	<b>Context</b>	<b>Content</b>
			the right Viet Nam phone number	
9	MSG09	Popup message	Order successfully	Order successfully.
10	MSG10	Alert Dialog	Seller adds a new service successfully	Add new service successfully.
11	MSG11	Alert Dialog	Seller adds a new service fail	An error occurred. Please try again!
12	MSG12	Alert Dialog	Seller updates a service successfully	Update service successfully.
13	MSG13	Toast Message	User uploads an image with a size of more than 2MB	Image file size should not exceed 2MB.
14	MSG14	Text Message	User accesses to the page that does not exist	The page you are looking for does not exist!
15	MSG15	Text Message	Not find the service matching requirements of the user	There are no search results matching the requirement.
16	MSG16	Toast message	Guest tries to use user's feature	Please login to use this feature.
17	MSG17	Toast message	User fills in missing information in Refund Request Form	Please fill in all information to submit a refund request.
18	MSG18	Toast message	User submitted a successful refund request	Submit successful refund request, we will review and reply to you as soon as possible.
19	MSG19	Toast message	User submitted a failed refund request (Server-side)	Submitting a refund request failed, an error occurred.
20	MSG20	Toast message	Store-registered users try to register again	You have already registered to sell, or your account is not supported with this feature!
21	MSG21	Toast message	User fills in missing information to update their Profile	Please fill in all information to update.

	<b>Message code</b>	<b>Message Type</b>	<b>Context</b>	<b>Content</b>
22	MSG22	Toast message	Update failed information (Server-side)	Update failed; an error occurred.
23	MSG23	Toast message	User fills in missing information to create their shop	Please fill in all the information to create a store!
24	MSG24	Toast message	Create a successful shop.	Create a successful shop.
25	MSG25	Toast message	Shop creation failed (Server-side)	Shop creation failed; an error occurred.
23	MSG23	Toast message	Users leave blank text while commenting	Comments cannot be left blank!
24	MSG24	Toast message	Fail in getting data (Server-side)	An error occurred, please try again later
25	MSG25	Toast message	The user does not select any service when booking or adding service(s) to the cart	Please select at least one service.
23	MSG23	Toast message	Fail in ordering (Server-side)	Something went wrong, the order failed.
24	MSG24	Toast message	Add service(s) to cart successfully	Service added to cart successfully.
25	MSG25	Toast message	Add service(s) to cart fail (Server-side)	An error occurred, add to cart failed.
23	MSG23	Toast message	User rates a service successfully	Submit a successful review.
24	MSG24	Toast message	User rates a service fail (already rated)	Review submission failed, it looks like you've already rated this service, please try again later.
25	MSG25	Alert Dialog	User want to create order but not select any cart item	Please select item.
26	MSG26	Alert Dialog	User have not saved changes but want to create order	Please save change.

	<b>Message code</b>	<b>Message Type</b>	<b>Context</b>	<b>Content</b>
27	MSG27	Alert Dialog	User have not save changes but want to leave cart page	Your changes will not be saved.

### 5.3 Application Error List

	<b>Message code</b>	<b>Error Message</b>
1	5	Payload parse exception!
2	6	Authentication Failed, please try again!
3	7	Access denied!
4	15	Invalid token!
5	16	Token expired!
6	20	Invalid json payload!
7	21	Account not found!
8	22	Seller info not found!
9	23	Seller info existed!
10	24	File uploads fail!
11	25	Shop not found
12	26	City not found!
13	27	Category not found!
14	28	Service not owned by shop!
15	29	Account is not shop owner!
16	30	Account is not service owner!
17	31	Cart item not found!
18	32	Account is not cart owner!
19	33	Gallery not found!
20	34	Shop cannot process!
21	35	Service cannot process!
22	36	Used date is not in event scope!

	<b>Message code</b>	<b>Error Message</b>
23	37	Cart item list is empty!
24	38	Not enough quantity required!
25	39	Account does not have any shop!
26	40	Service price invalid!
27	41	Sub service cannot process!
28	42	Order not found!
29	43	Get service frequency fail!
30	44	Service cannot be view now!
31	45	Invalid request!
32	99	Unknow error!

## IV. Software Design Document

### 1. System Design

#### 1.1 System Architecture

##### 1.1.1 Overall Architecture

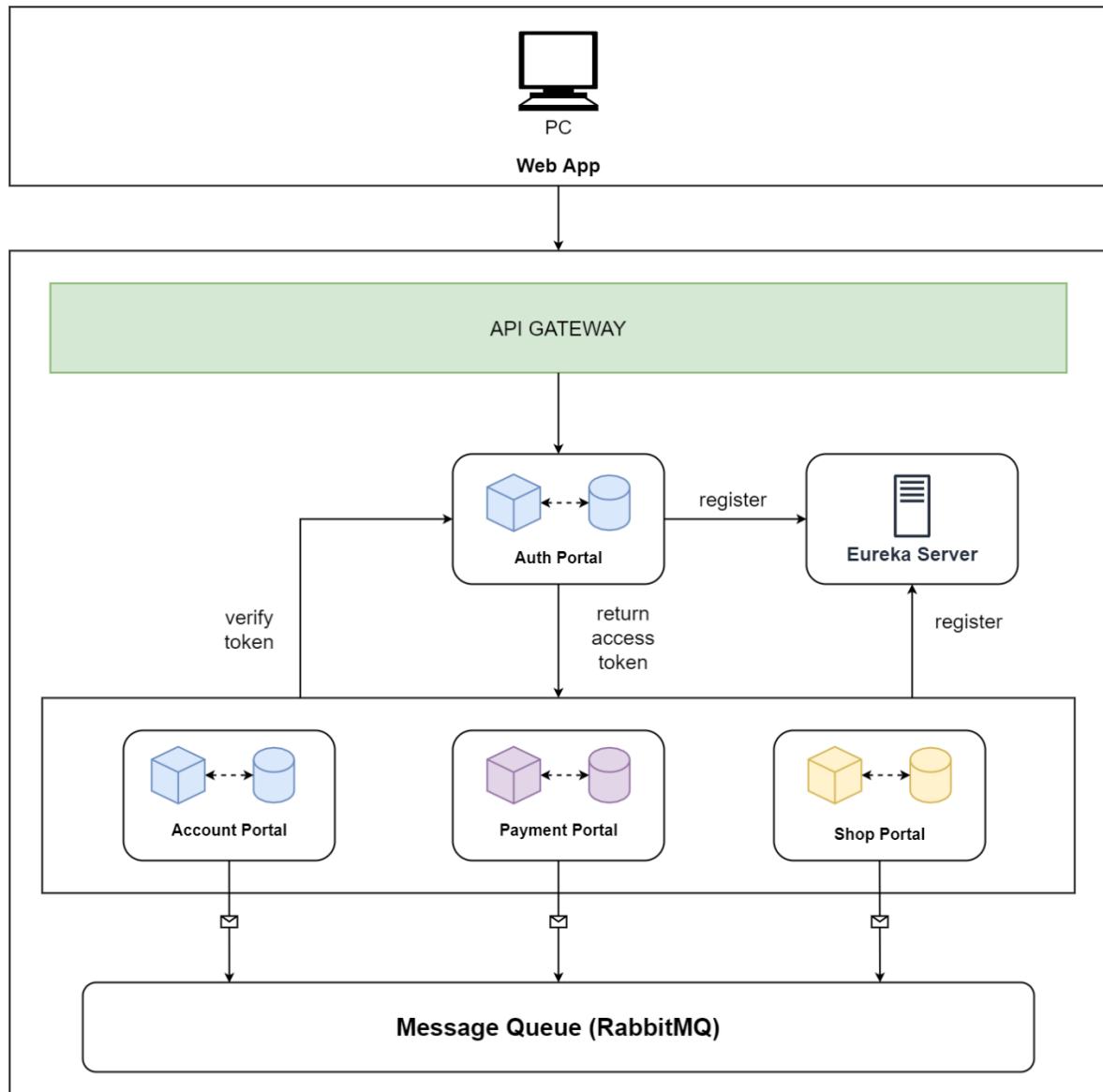


Figure 37: *Overall Architecture*

Backend System is built with Microservices Architecture.

- Backend System has 5 main Microservices communicating by RESTAPI and Message Bus (asynchronous).
- Web App communicate to Backend System through an API Gateway.

Detail for each Microservice:

Name	Detail
Auth Portal	Responsibility for authenticating and account processing.
Account Portal	Responsibility for advance user processing.
Shop Portal	Responsibility for shops and product services processing.
Payment Portal	Responsibility for payments and orders processing.
Eureka Server	Responsibility for register and manage all microservice

### 1.1.2 Deploy Architecture

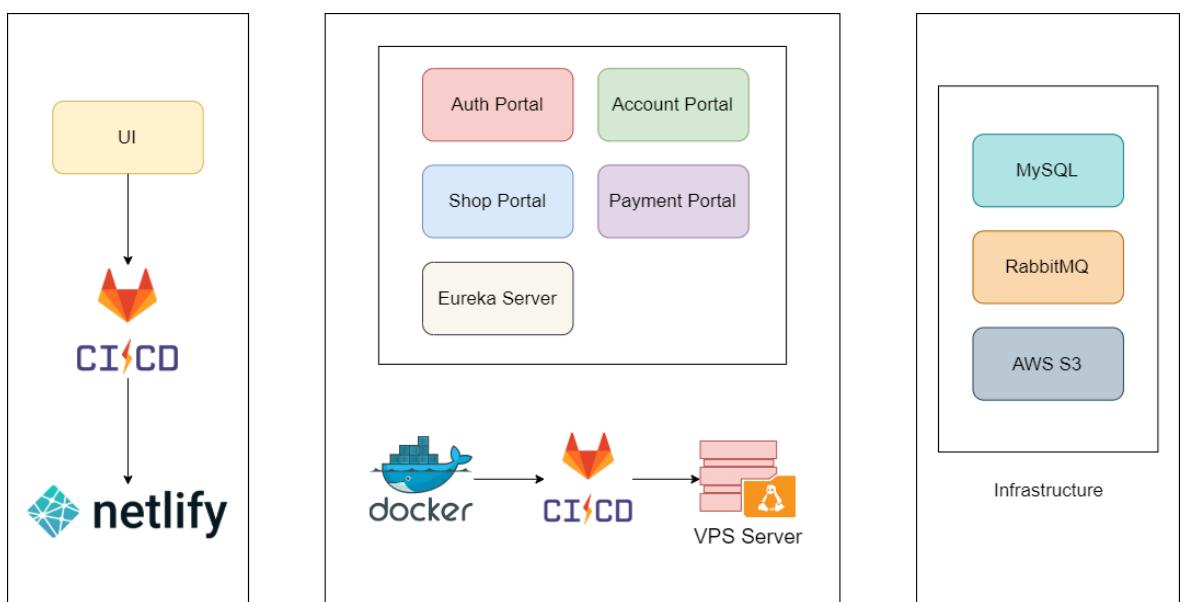


Figure 38: [Deploy Architecture](#)

### 1.1.3 CQRS For One Storage

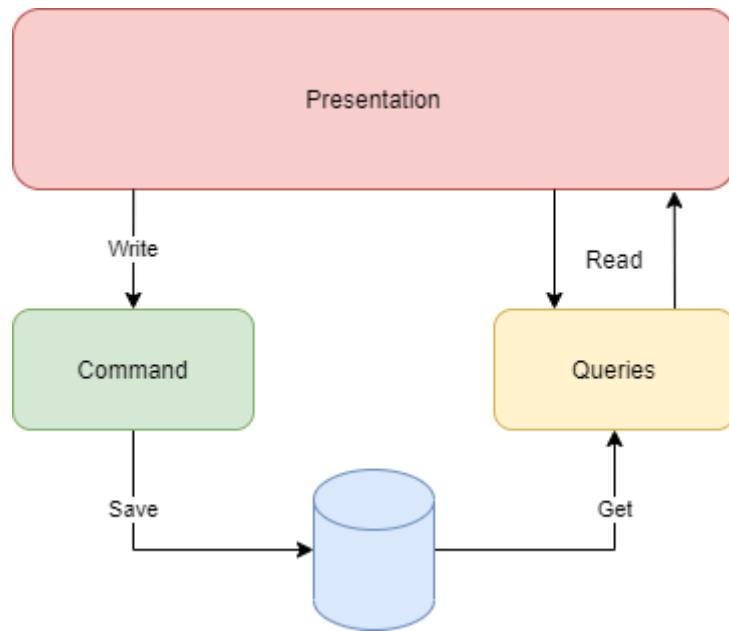


Figure 39: CQRS for one storage

### 1.1.4 CQRS For Two Storages

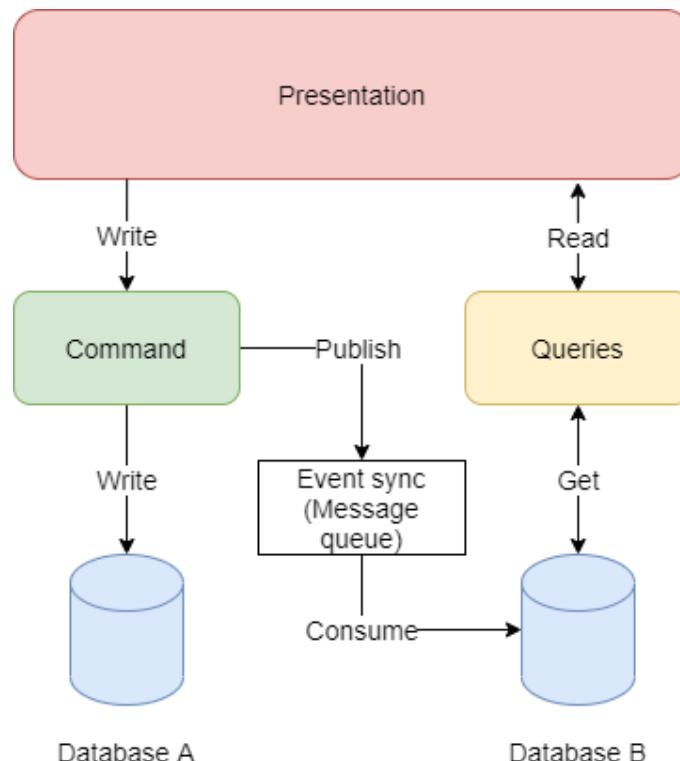


Figure 40: CQRS for two storages

### 1.1.5 Main flow

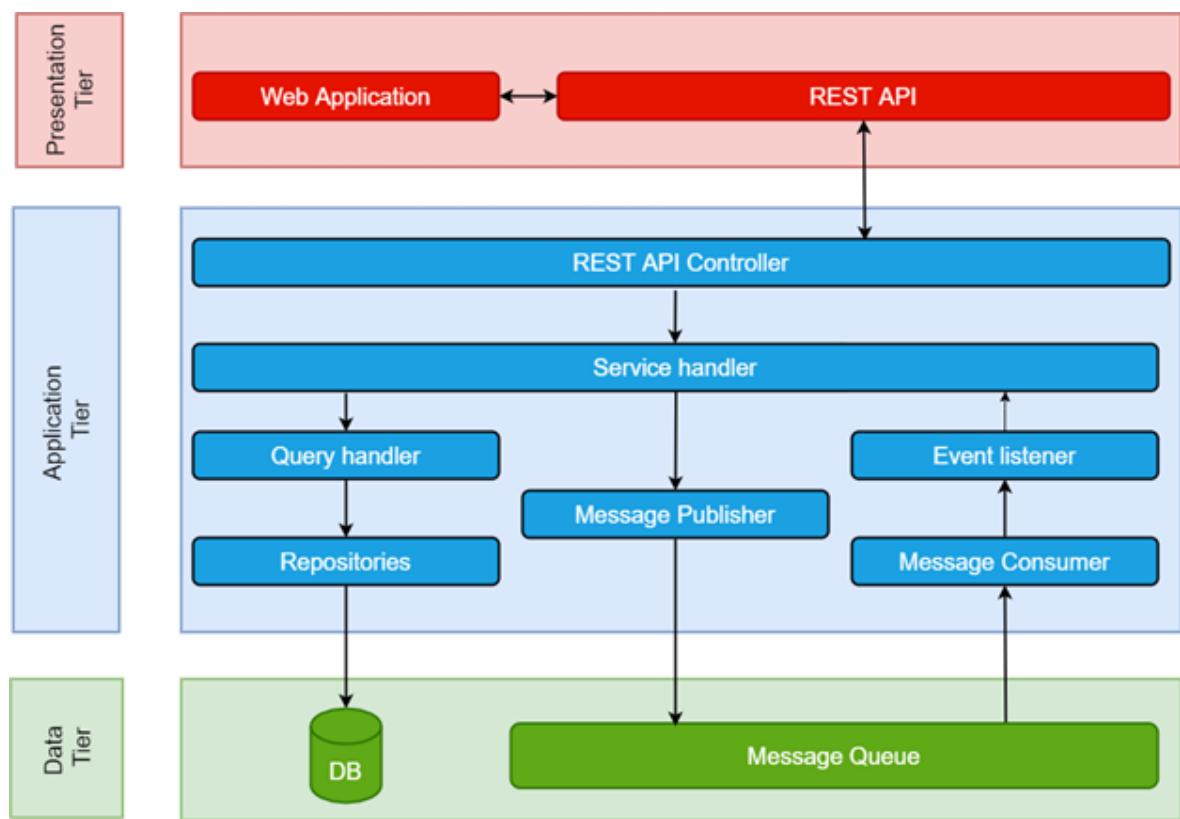


Figure 41: [Main flow](#)

### 1.2 Package Diagram

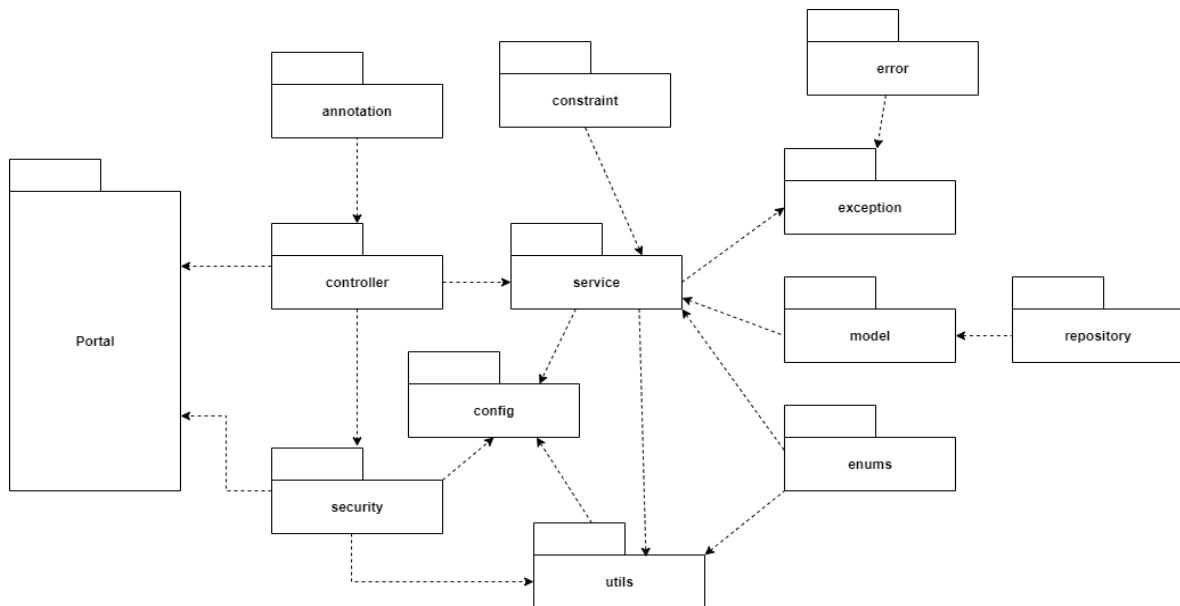


Figure 42: [Package Diagram](#)

### Package Descriptions

	Package	Description
1	portal	Responsible for the root of all other package
2	annotation	Contain custom annotation
3	controller	Contain public methods called Action methods, handles incoming browser requests, retrieves necessary model data, and returns appropriate responses
4	security	Handle custom security from request, include filter and validate token from request
5	config	Contain config for other service to work
6	service	Handle logic and defines the functionality provided by the service
7	constraint	Define common variables that are reused often
8	exception	Where define all errors exception that business logic can happen
9	error	Generate error constraint for specific exception
10	model	Contain all project entities, dto
11	repository	Encapsulate the logic required to access data sources
12	enums	Where define specific constraints data from the database
13	utils	Contain common logic function that can be reused often

## 2. Database Design

### 2.1 Auth Portal Microservice

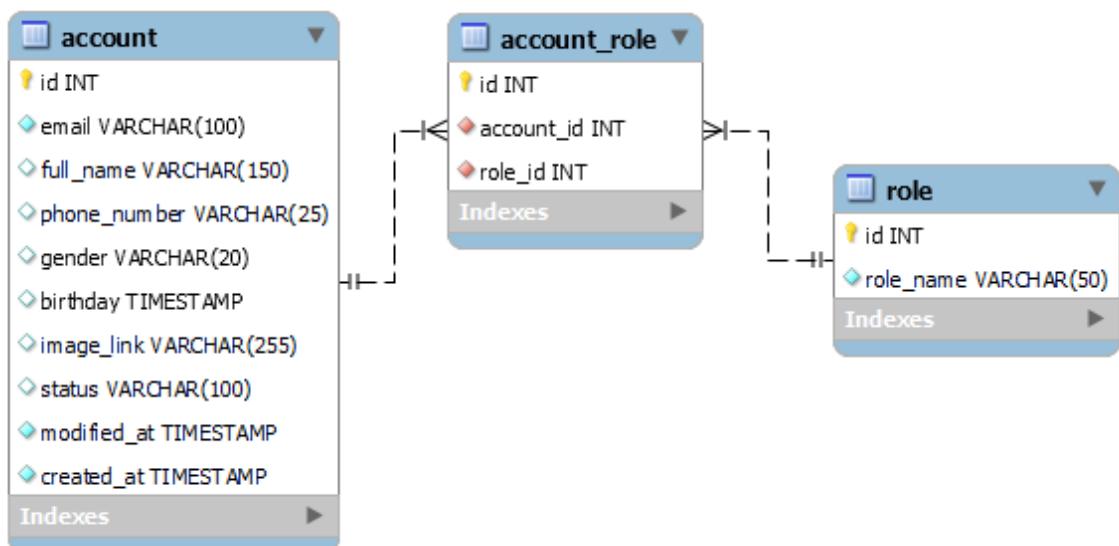


Figure 43: [Auth Portal Microservice Database](#)

### 2.2 Account Portal Microservice

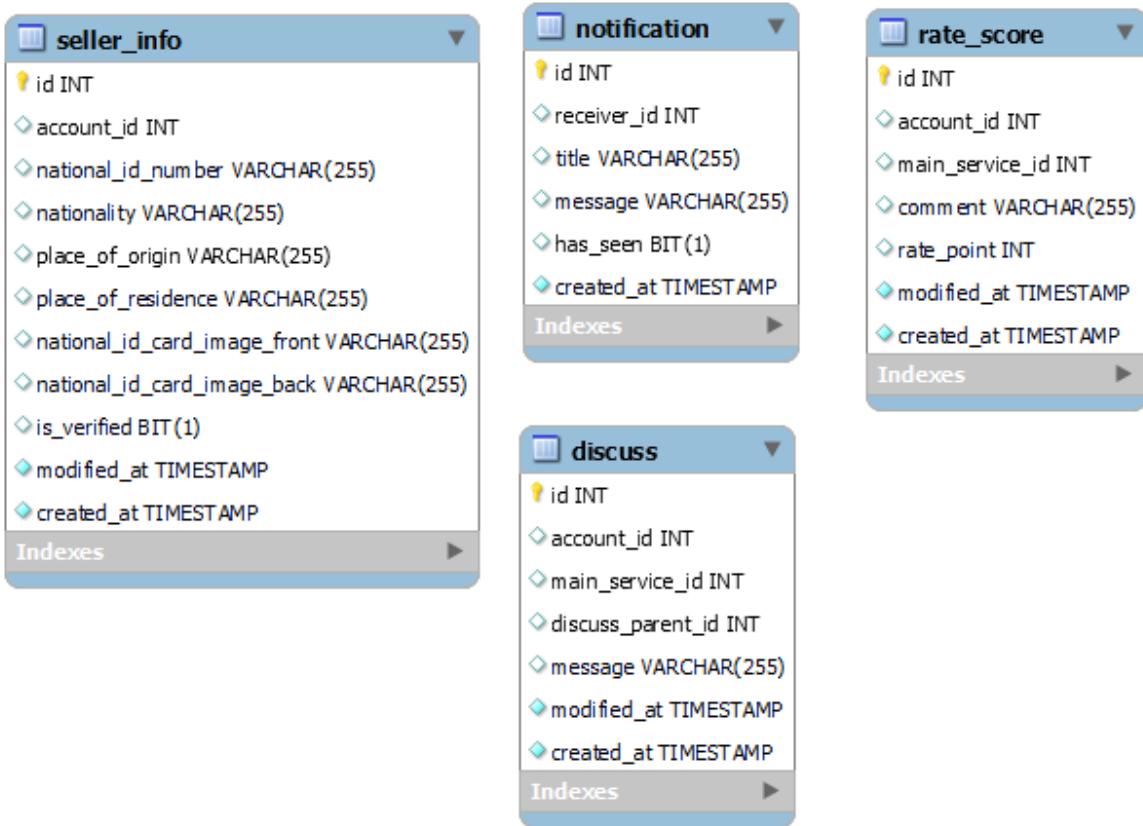


Figure 44: [Account Portal Microservice Database](#)

## 2.3 Shop Portal Microservice

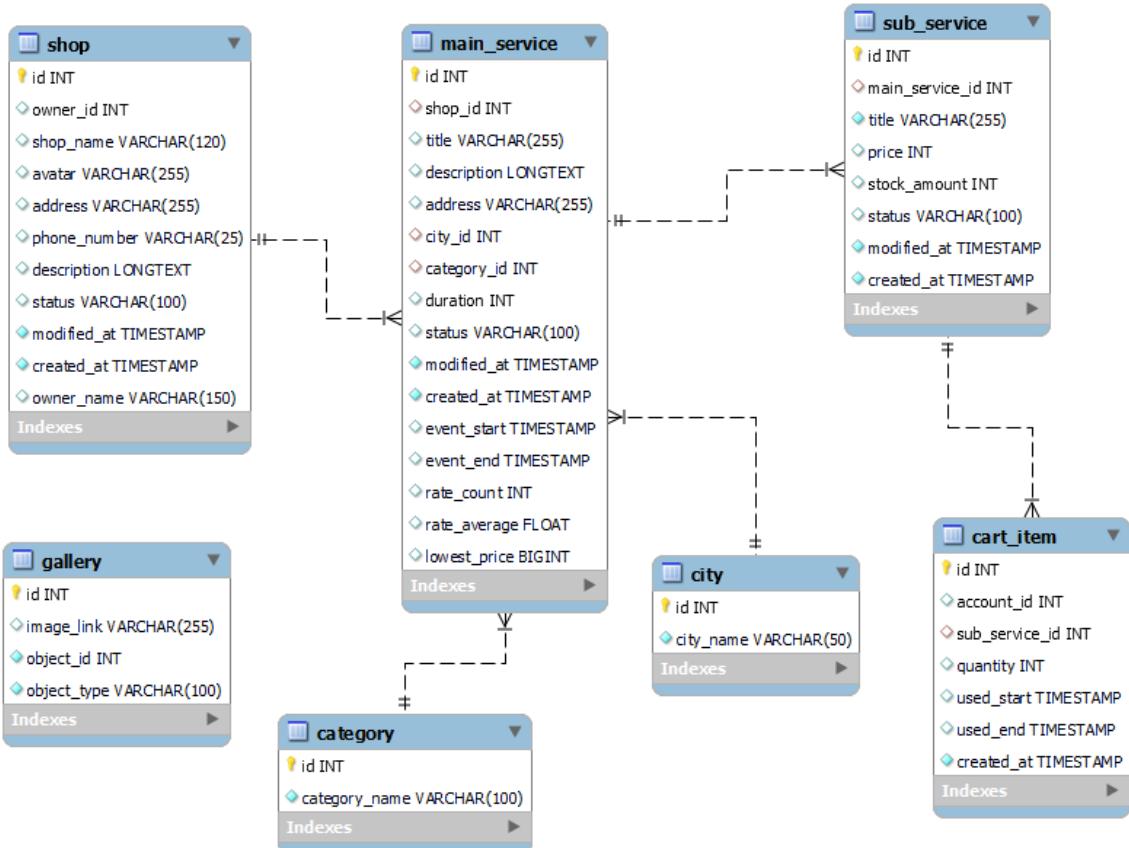


Figure 45: [Shop Portal Microservice Database](#)

## 2.4 Payment Portal Microservice

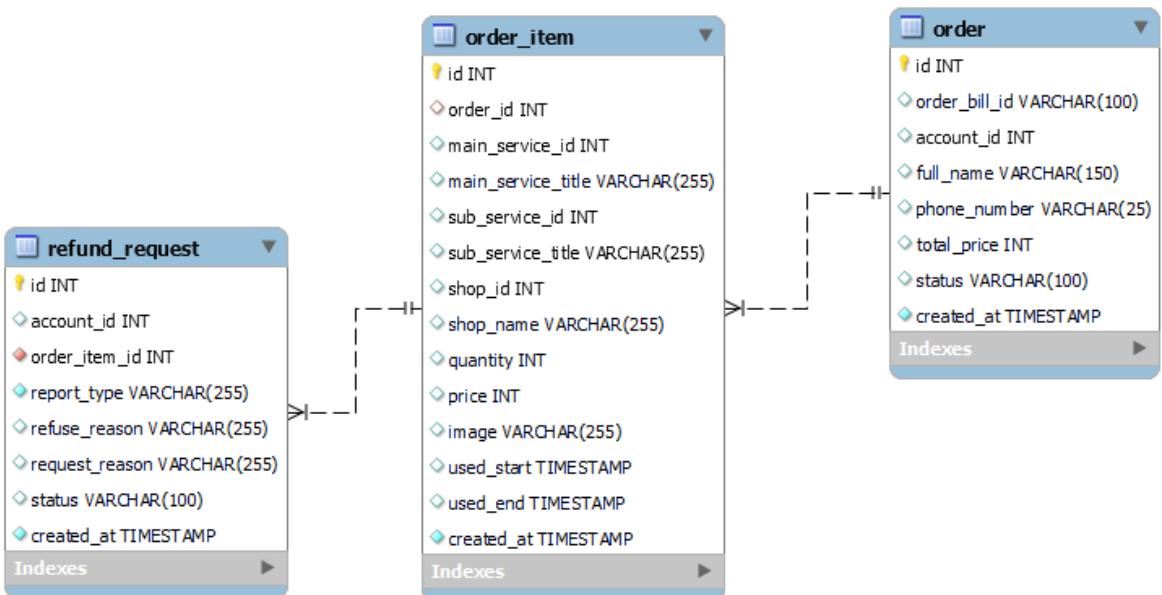


Figure 46: [Payment Portal Microservice Database](#)

## 2.5 Table Descriptions

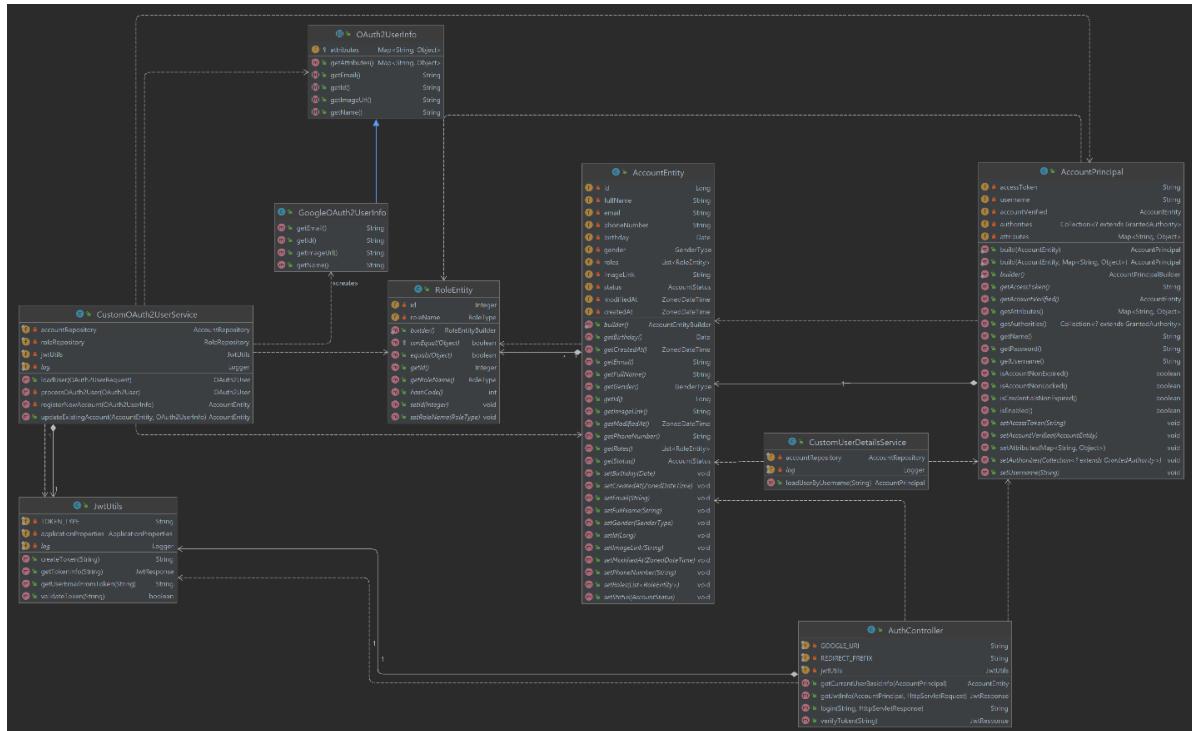
	<b>Table</b>	<b>Description</b>
1	account	Contain all account basic information - Primary keys: id (id of account) - Foreign keys:
2	role	Contain all default role - Primary keys: id (id of role) - Foreign keys:
3	account_role	Contain all account corresponds roles and claim - Primary keys: id (id of account_role) - Foreign keys: <ul style="list-style-type: none"><li>• account_id (id of account table)</li><li>• role_id (id of role table)</li></ul>
4	seller_info	Contain information needed for an account to register as a seller - Primary keys: id (id of seller_info) - Foreign keys:
5	discuss	Contain all discussion of all product service - Primary keys: id (id of discuss) - Foreign keys:
6	rate_score	Contain all rate point and comment about the service - Primary keys: id (id of rate_score) - Foreign keys:
7	notification	Contain all notification when account progressing some thing - Primary keys: id (id of notification) - Foreign keys:
8	shop	Contain all basic information about the shop of the seller - Primary keys: id (id of shop) - Foreign keys:
9	main_service	Contain all core service and related information every shop - Primary keys: id (id of main_service) - Foreign keys: <ul style="list-style-type: none"><li>• shop_id (id of shop table)</li><li>• city_id (id of city table)</li><li>• category_id (id of category table)</li></ul>
10	sub_service	Contain all sub service every main service - Primary keys: id (id of sub_service) - Foreign keys: <ul style="list-style-type: none"><li>• main_service_id (id of main_service table)</li></ul>
11	cart_item	Contain sub_item information when booking - Primary keys: id (id of cart_item) - Foreign keys: <ul style="list-style-type: none"><li>• sub_service_id (id of sub_service table)</li></ul>
12	city	Contain all default city information - Primary keys: id (id of city) - Foreign keys:

	Table	Description
13	category	Contain all default category information - Primary keys: id (id of category) - Foreign keys:
14	gallery	Contain all image link of every service, city and category. Technical note: objectType is used to verify objectId belongs to main_service or city or category - Primary keys: id (id of gallery) - Foreign keys:
15	order	Contain information about order when checkout and status payment - Primary keys: id (id of order) - Foreign keys:
16	order_item	Contain more detail information about order - Primary keys: id (id of order_item) - Foreign keys: order_id (id of order table)
17	refund_request	Contain all refund request of specific order_item - Primary keys: id (id of order) - Foreign keys: order_item_id (id of order_item table)

### 3. Detailed Design

### 3.1 Sign in/ Sign up

### 3.1.1 Class Diagram



*Figure 47: Sign in/sign up class diagram*

### 3.1.2 Login Sequence

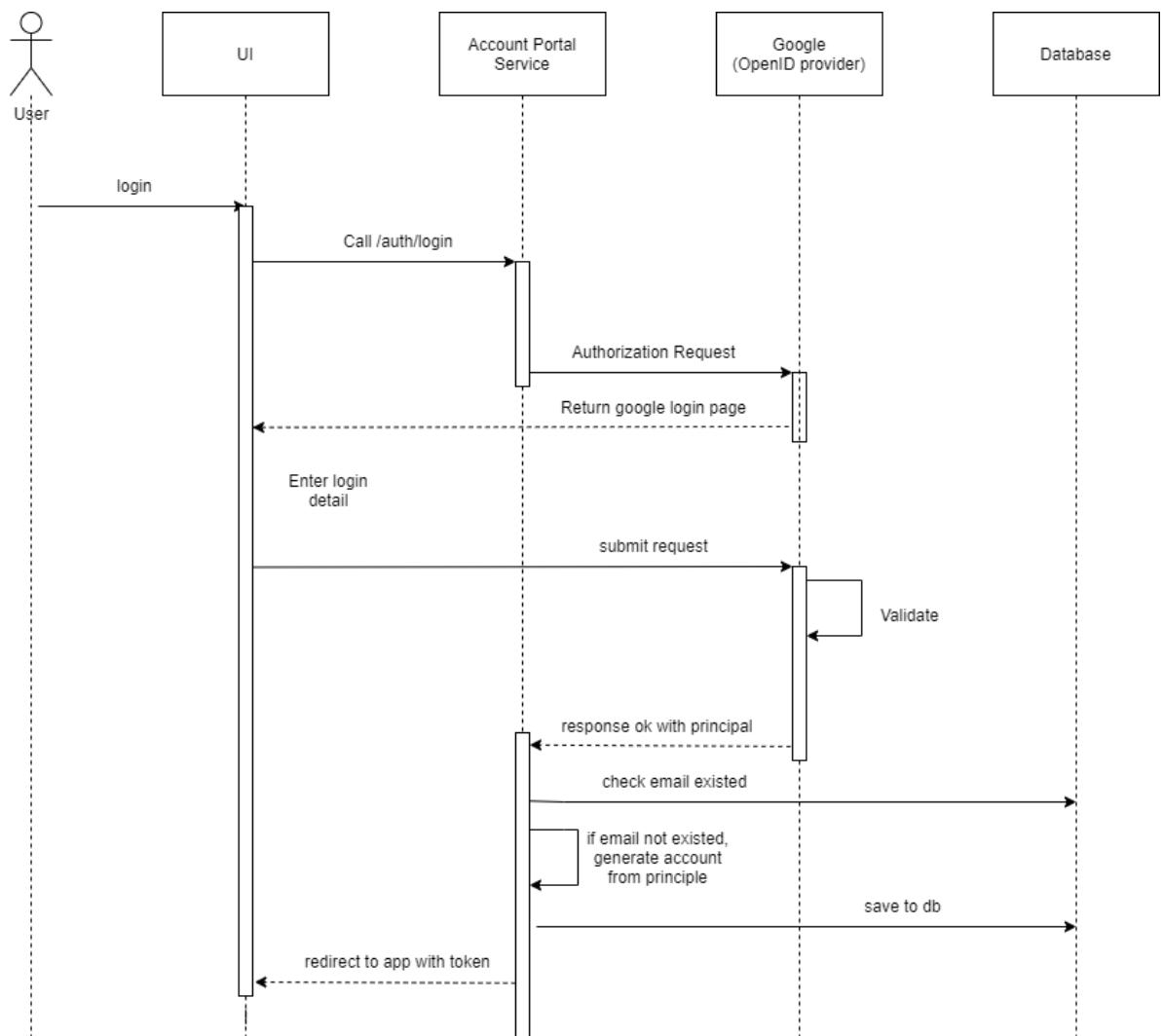


Figure 48: [Sign in/sign up sequence](#)

## 3.2 Seller register

### 3.2.1 Class Diagram



Figure 49: [Seller class diagram](#)

### 3.2.2 Seller Register Sequence

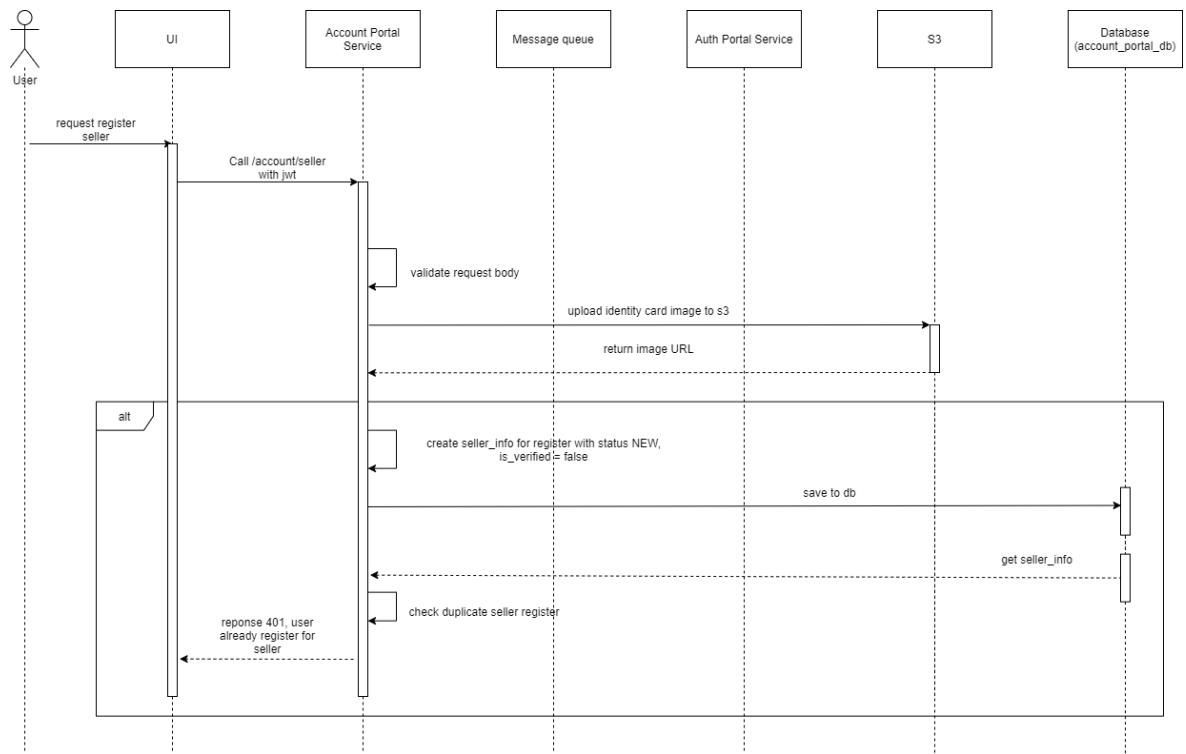


Figure 50: [Seller register sequence](#)

### 3.2.3 Verify Seller Register Sequence

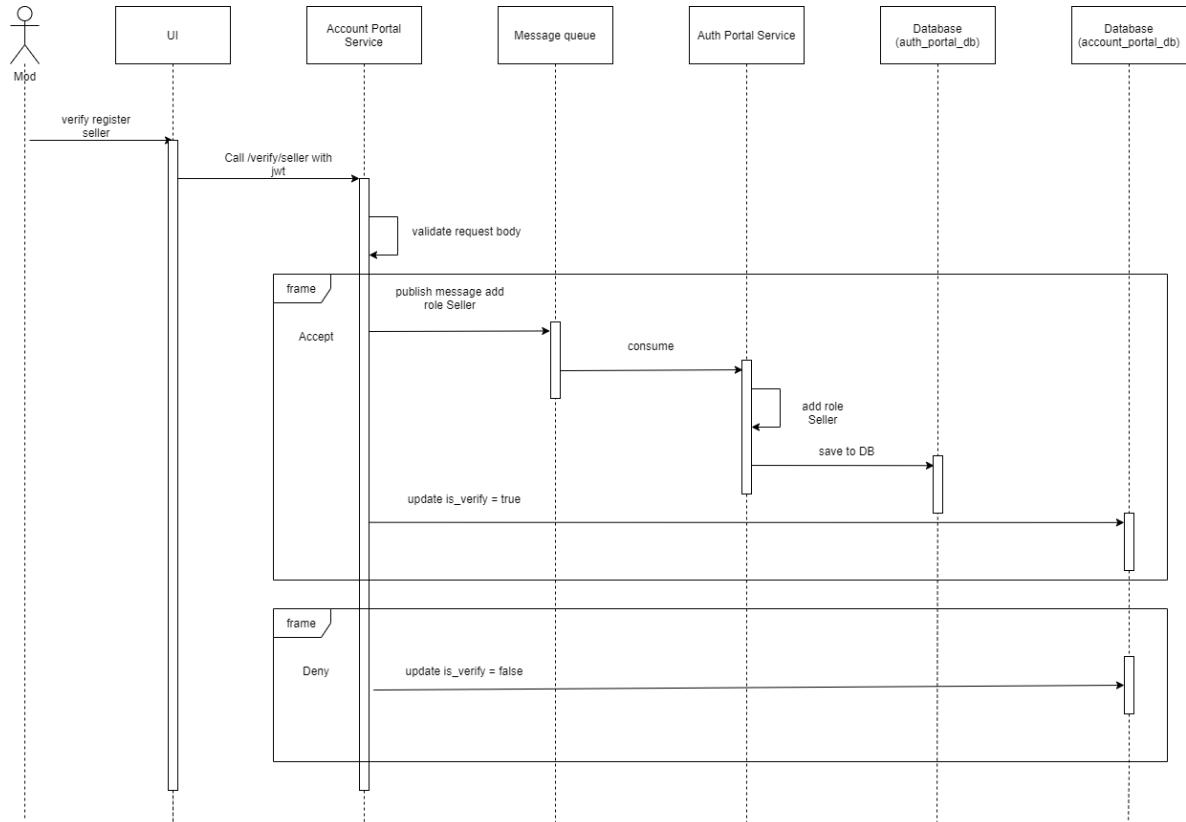


Figure 51: [Verify seller register sequence](#)

### 3.3 Notification

#### 3.3.1 Class Diagram

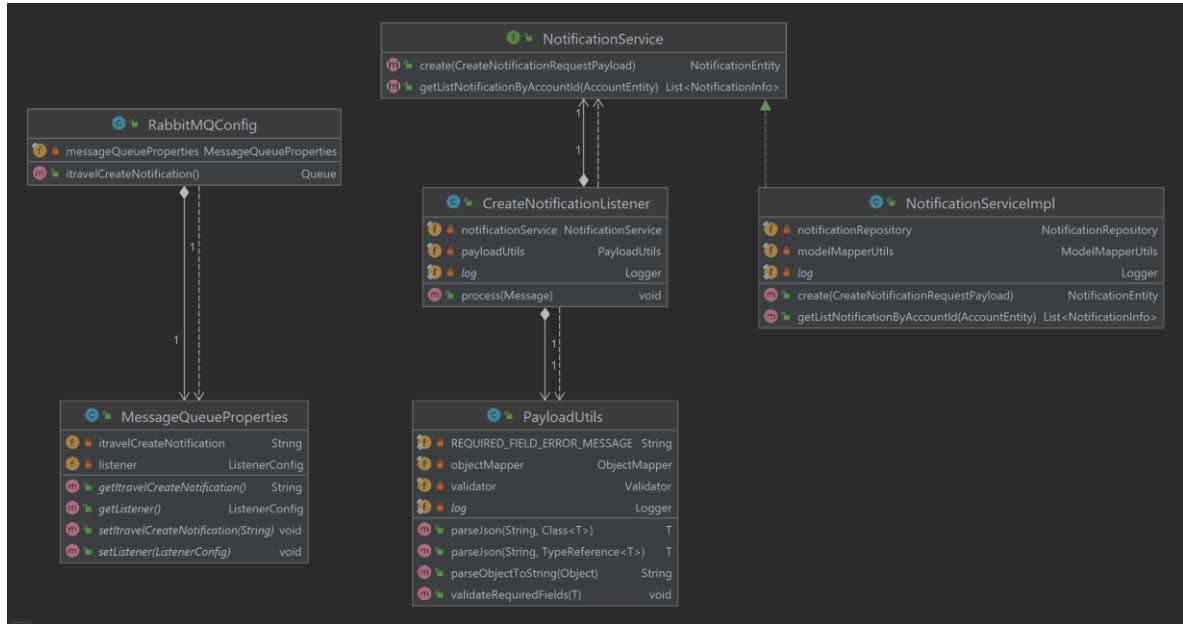


Figure 52: [Notification class diagram](#)

#### 3.3.2 Notification Sequence

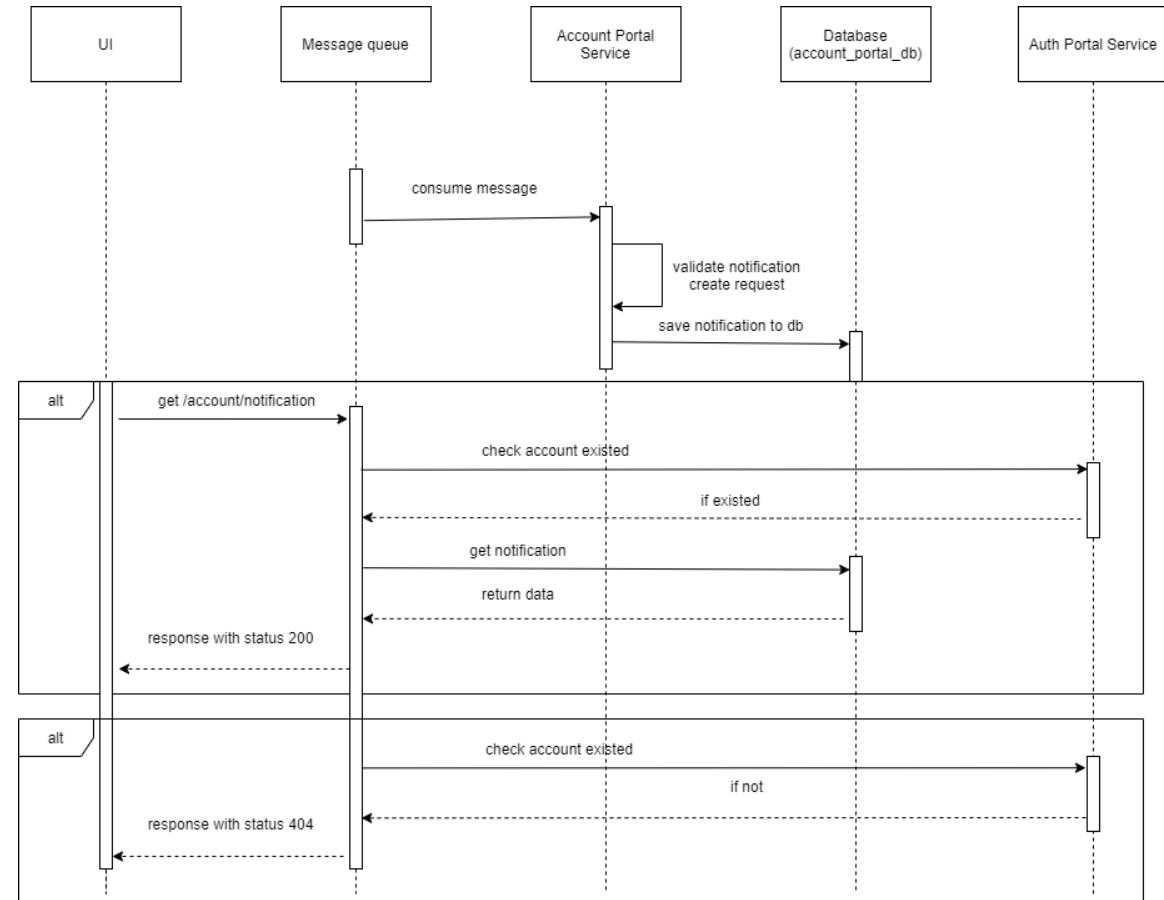
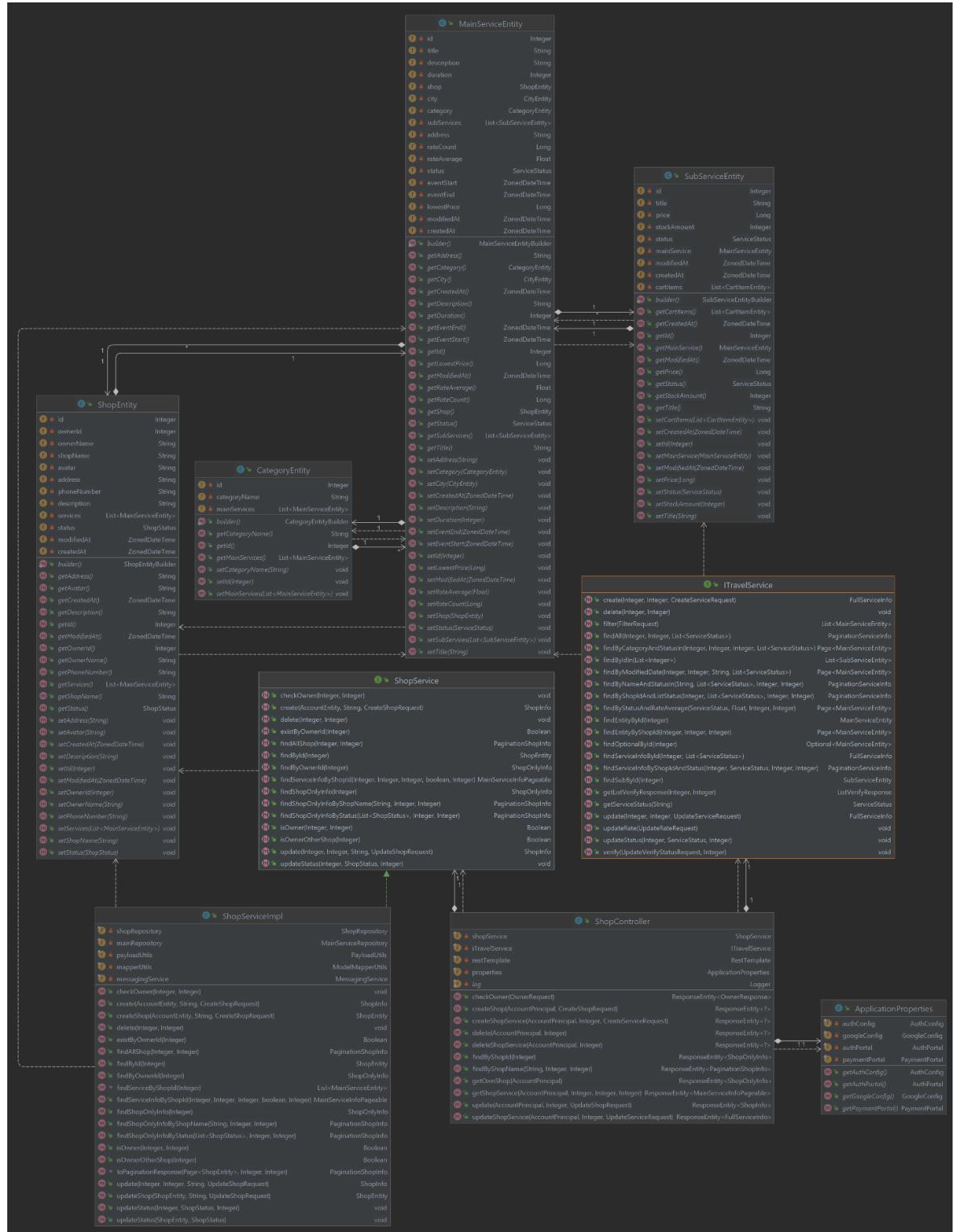


Figure 53: [Notification sequence](#)

### 3.4 Create Service

### 3.4.1 Class Diagram



*Figure 54: Create service class diagram*

### 3.4.2 Create Service Sequence

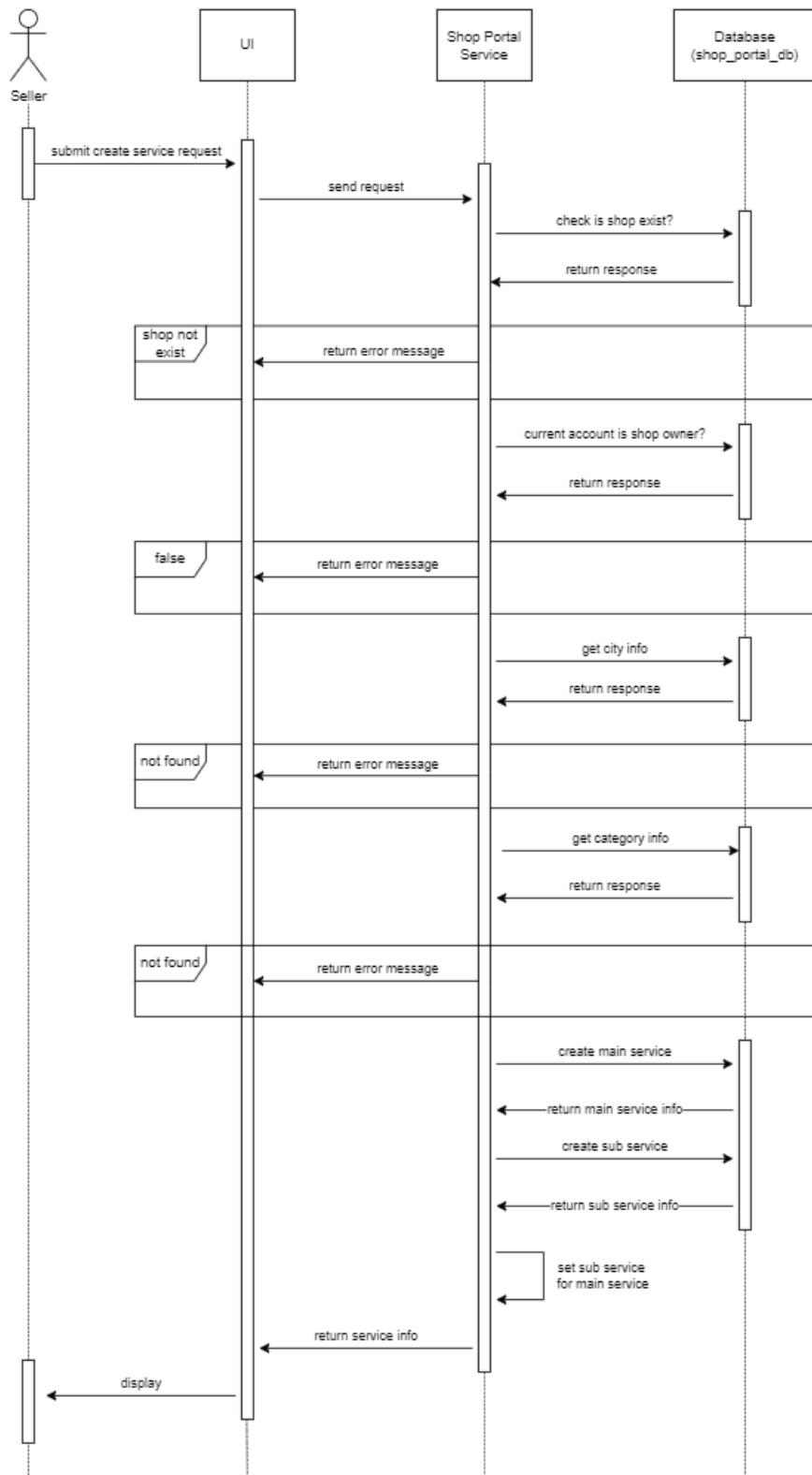


Figure 55: [Create service sequence diagram](#)

## 3.5 Create Order

### 3.5.1 Class Diagram

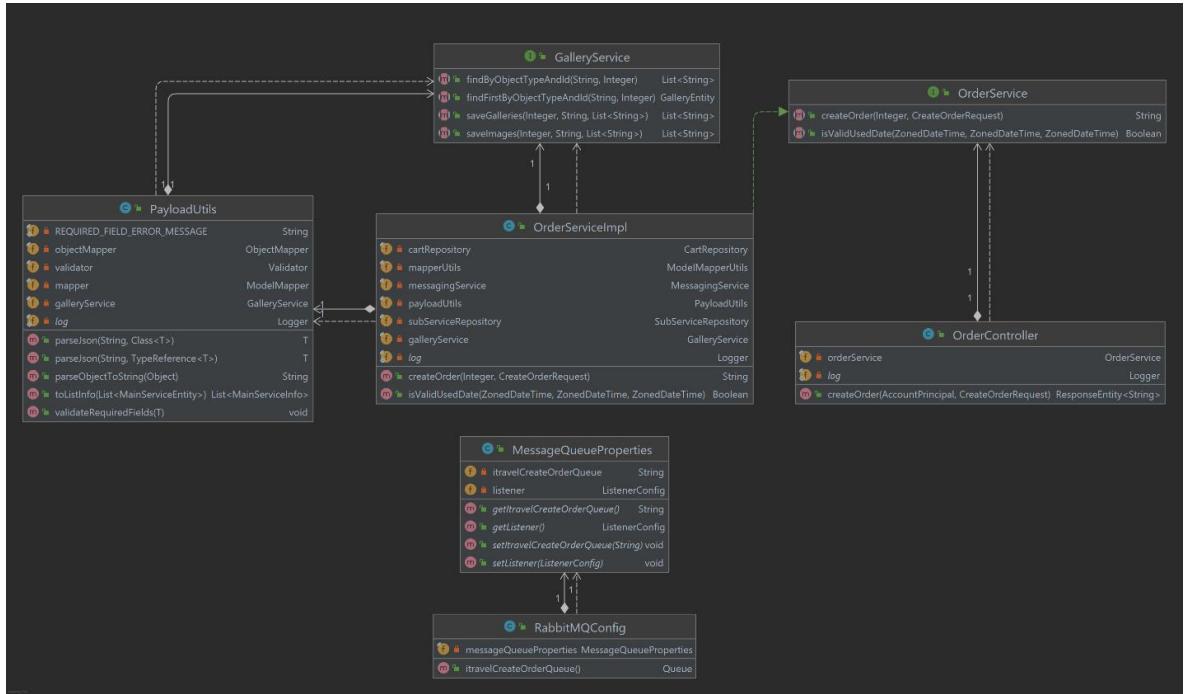


Figure 56: [Create order class diagram](#)

### 3.5.2 Create Order Sequence

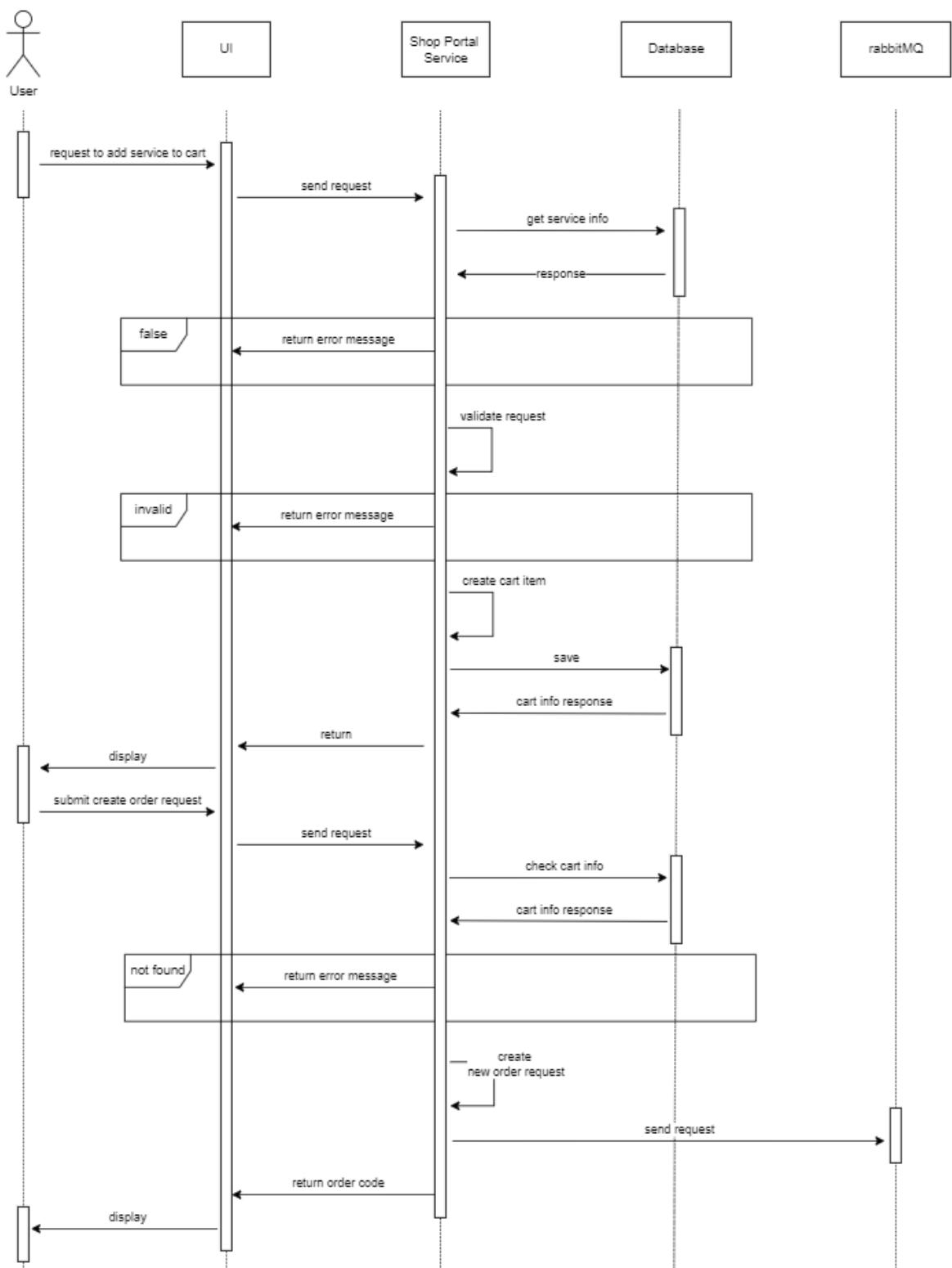


Figure 57: [Create order sequence diagram](#)

## 3.6 Payment

### 3.6.1 Class Diagram

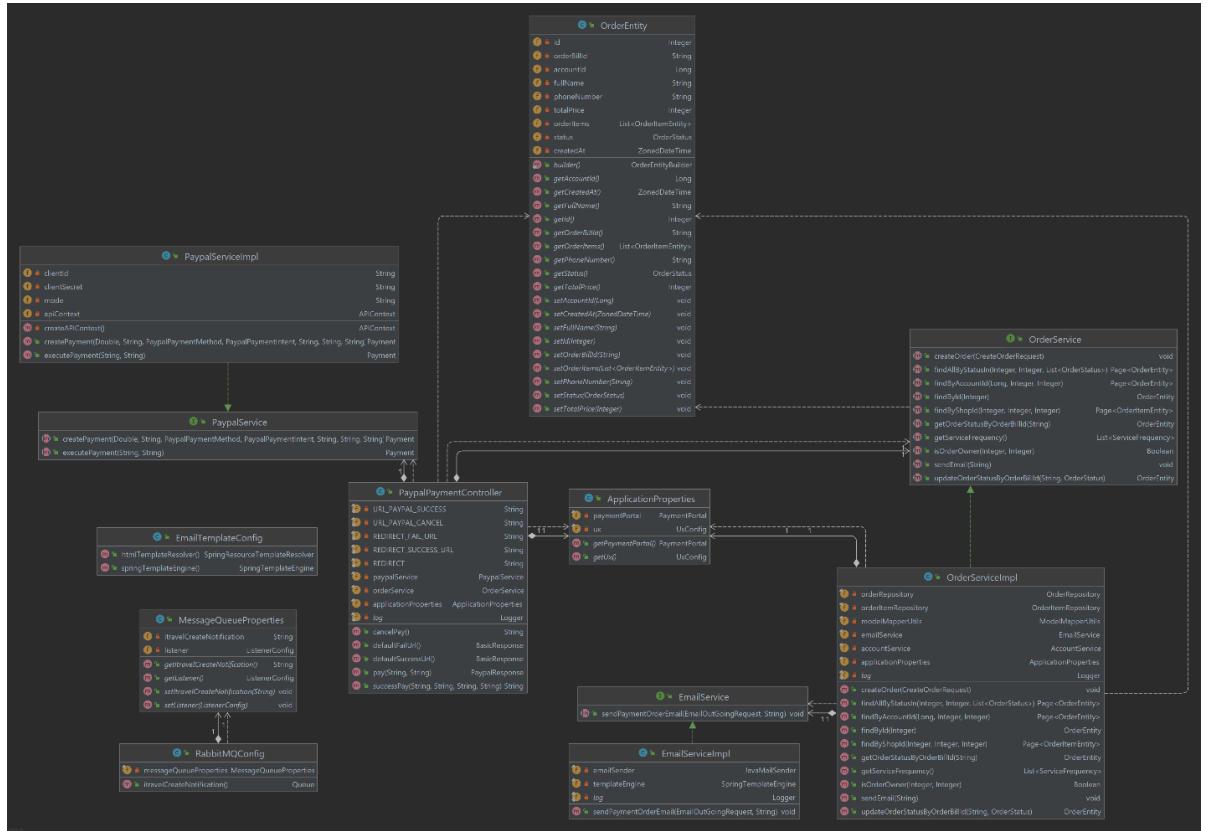


Figure 58: Payment class diagram

### 3.6.2 Payment Sequence

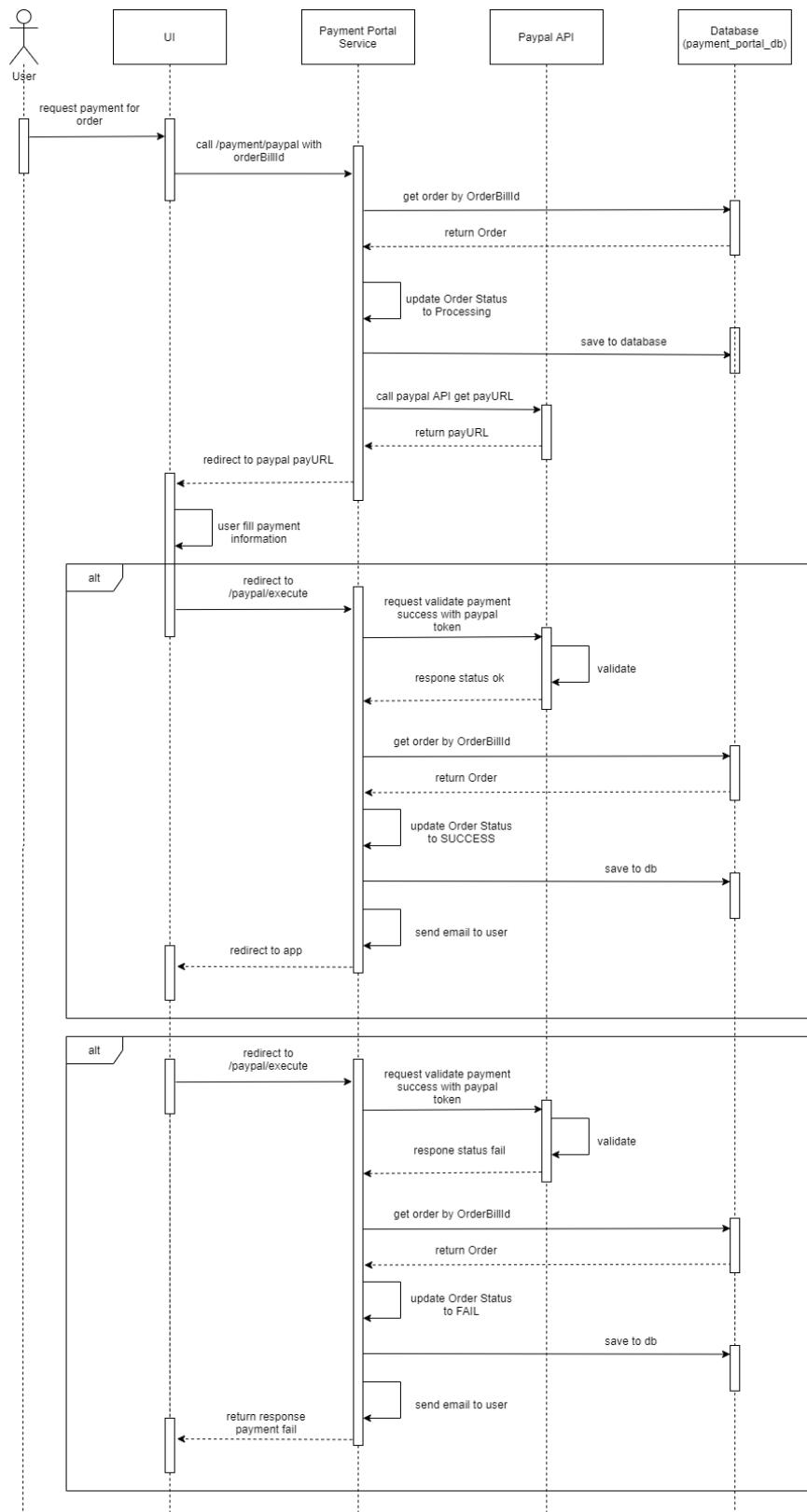


Figure 59: [Payment sequence](#)

## 3.7 Validate request with JWT

### 3.7.1 Class Diagram

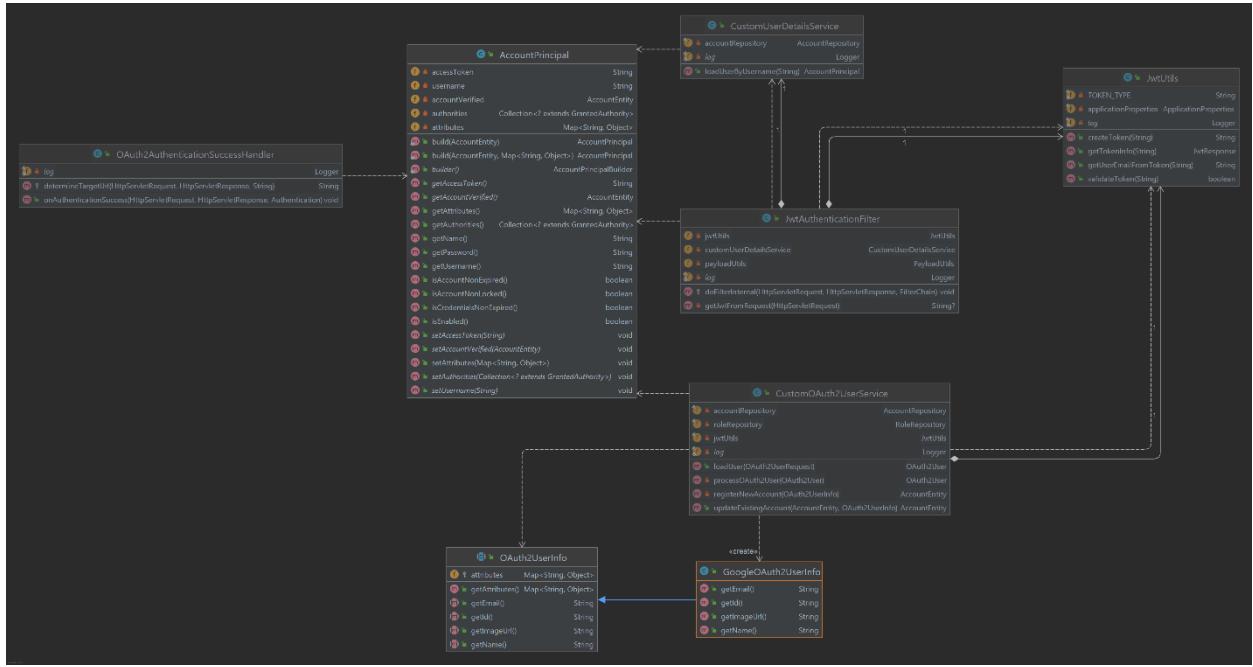


Figure 60: [Validate request with JWT](#)

### 3.7.2 Validate request with JWT sequence

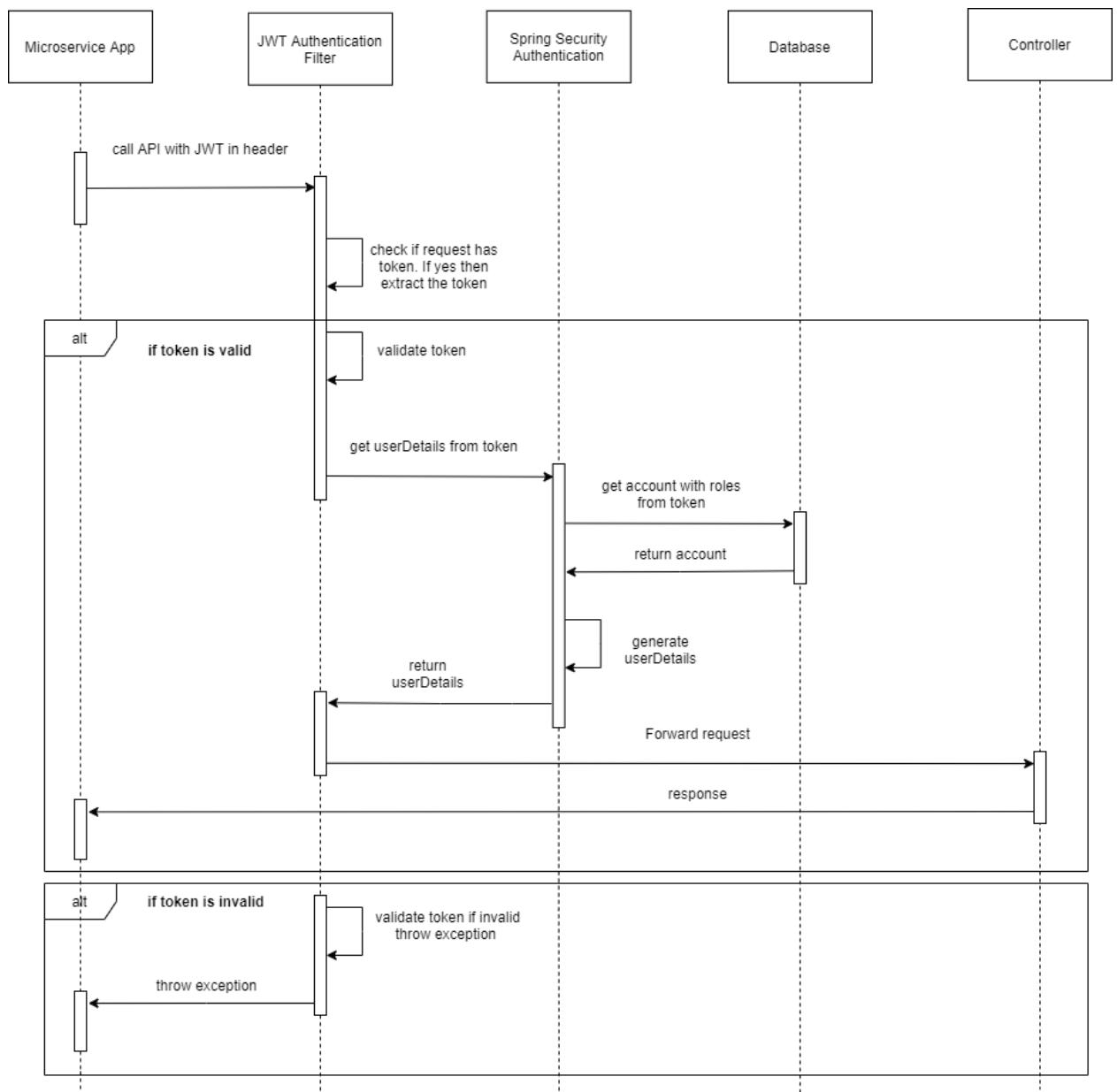


Figure 61: [Validate request with JWT sequence](#)

## V. Testing Documentation

### 1. Scope of Testing

All features, functions, and non-functional requirements, which are listed in Report3\_Software Requirement Specification, will be tested.

The testing levels that we are going to conduct through our project's development are unit testing and system testing, which includes integration testing.

### 2. Test Strategy

#### 2.1 Testing Types

There are two testing types in this application:

Functional Testing ensures that functions and features of the application work properly. This test checks the user interface, APIs, and database based on the requirements and business process.

Non-Functional Testing examines other aspects of how well the application works. This test checks the security of the functions.

The completion criteria are:

All test cases are tested.

All identified defects have been addressed to an agreed-upon resolution.

All defects are retested and there are no new defects.

#### 2.2 Test Levels

Type of Tests	Test Level			
	Unit	Integration	System	Acceptance
Function Test	X	X	X	
User Interface Test	X		X	
Security Test			Only check security about the roles	

#### 2.3 Supporting Tools

The only tool we use is test cases in the following files:

- [Report5\\_Unit Test.xls](#)
- [Report5\\_System Test.xlsx](#)

### 3. Test Plan

#### 3.1 Human Resources

Worker/Doer	Role	Specific Responsibilities/Comments
Le Thi Thanh Nhan	Testing Leader	Making test decisions to ensure product quality
Tran Minh Hai	Testing Member	Create test case, test document and test
Nguyen Viet Dung	Testing Member	Create test case, test document and test
Do Viet Khoa	Testing Member	Create test case, test document and test
Pham Duy Dat	Testing Member	Create test case, test document and test

#### 3.2 Test Environment

The test process takes place on <http://itravel-api-portal-fptu.tk> and <https://demo-ittravel.netlify.app/>.

#### 3.3 Test Milestones

Milestone Task	Start Date	End Date
Complete the test plan	07/03/2022	07/03/2022
Complete the unit test case	08/03/2022	30/03/2022
Complete the system test case	08/03/2022	23/03/2022
Complete the test report	30/03/2022	17/04/2022

### 4. Test Cases

All test cases are done and written in the following files, please access these files for more information:

- [Report5 Unit Test.xls](#)
- [Report5 System Test.xlsx](#)

### 5. Test Reports

We have already provided test reports for both Unit testing and System testing in the attached files, in the “Statistics” and “Test Statistics” tabs. Please follow the below links to get access to test reports:

- [Report5 Unit Test.xls](#)
- [Report5 System Test.xlsx](#)

## VI. Release Package & User Guides

### 1. Deliverable Package

	Deliverable Item	Description
1	Project Schedule/Tracking	<a href="#">Document</a>
2	Source Codes	<a href="#">Gitlab</a>
3	Test Cases Document	<a href="#">Unit test report</a> and <a href="#">System test report</a>
4	Defects and Issues List	<a href="#">Document</a>

### 2. Installation Guides

#### 2.1 System Requirements

- Minimum CPU 2 Core and 4GB RAM if using Docker Host
- Docker 20.10+
- MySQL database from AWS or Azure
- Cludia

#### 2.2 Installation Instruction

##### 2.2.1 Configuration for VPS or host server

- Setup OS
- Install docker engine
- Setup docker
- Configurate environment variables

##### 2.2.2 Configuration for Eureka Server

- Clone source from repository
- Open docker-compose.yml at the project root
- Run docker-compose.yml to run the system

Command: Docker-compose up -d

##### 2.2.3 Configuration for Auth Portal Service

- Clone source from repository
- Open docker-compose.yml at the project root
- Config DATABASE\_URL/PASSWORD/USERNAME in docker-compose.yml if needed

- Run docker-compose.yml to run the system

Command: Docker-compose up -d

#### 2.2.4 Configuration for Account Portal Service

- Clone source from repository
- Open docker-compose.yml at the project root
- Config DATABASE\_URL/PASSWORD/USERNAME/AWS\_ACCESS\_KEY/AWS\_SECRET\_KEY in docker-compose.yml if needed
- Run docker-compose.yml to run the system

#### 2.2.5 Configuration for Shop Portal Service

- Clone source from repository
- Open docker-compose.yml at the project root
- Config DATABASE\_URL/PASSWORD/USERNAME/AWS\_ACCESS\_KEY/AWS\_SECRET\_KEY in docker-compose.yml if needed
- Run docker-compose.yml to run the system

#### 2.2.6 Configuration for Payment Portal

- Clone source from repository
- Open docker-compose.yml at the project root
- Config DATABASE\_URL/PASSWORD/USERNAME/AWS\_ACCESS\_KEY/AWS\_SECRET\_KEY in docker-compose.yml if needed
- Run docker-compose.yml to run the system

### 3. User Manual

#### 3.1 Overview

This application has three feature workflows:

- Order Service Flow
- Create/ Update Service Flow
- Refund Flow

There are also some screens, outside of these workflows, for management purposes.

#### 3.2 Order Service Flow

This workflow describes the process order service in iTravel system.

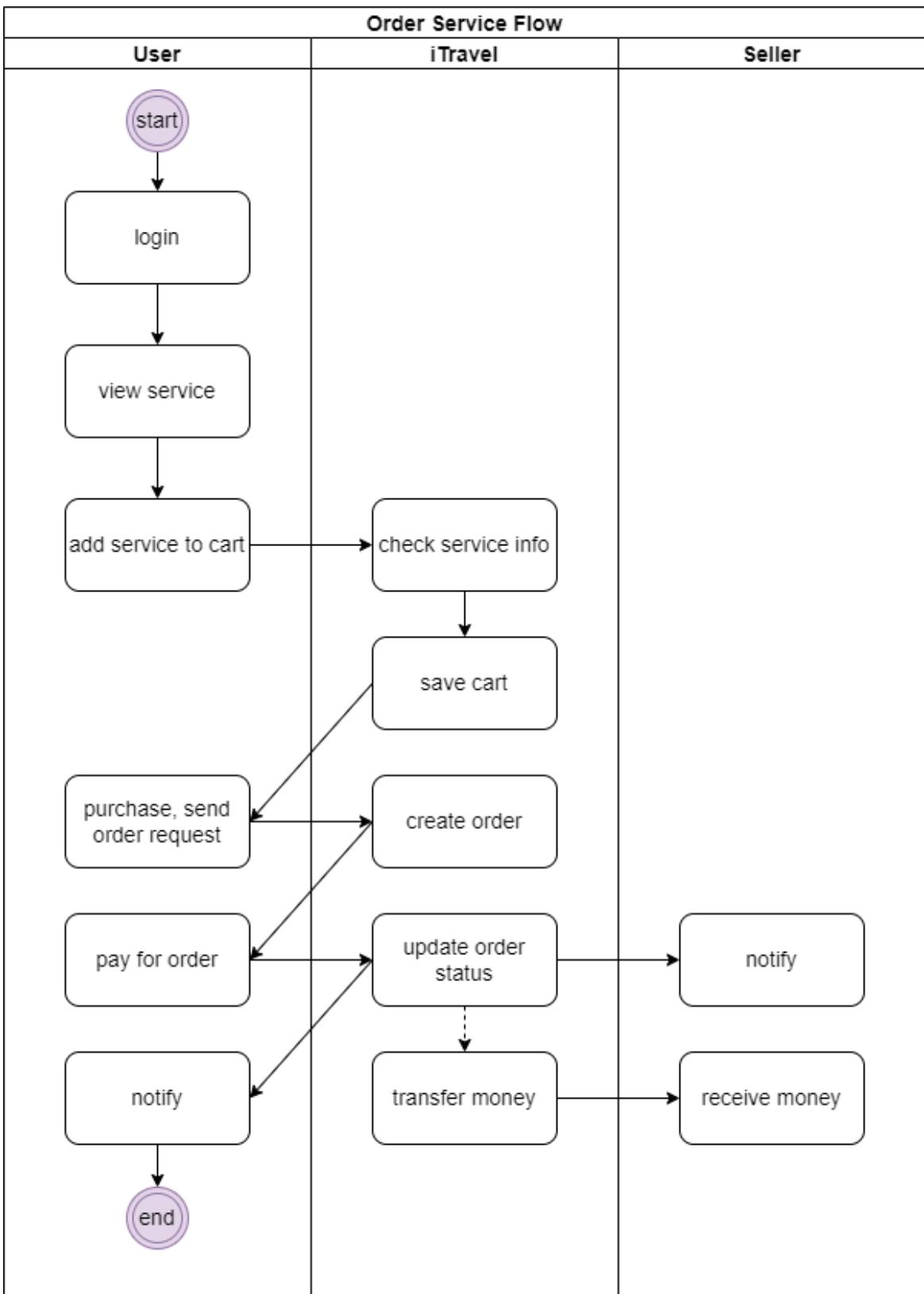


Figure 62: Order Service Flow

### 3.2.1 Login and logout

#### 3.2.1.1. Login into the system

This feature is used to manage the access to the system, provide security for the system as well as provide the best convenience and experience for users.

Step 1: Go to the home page of the iTravel website at <https://demo-itravel.netlify.app/>

Step 2: On the header bar, click on the avatar icon as shown

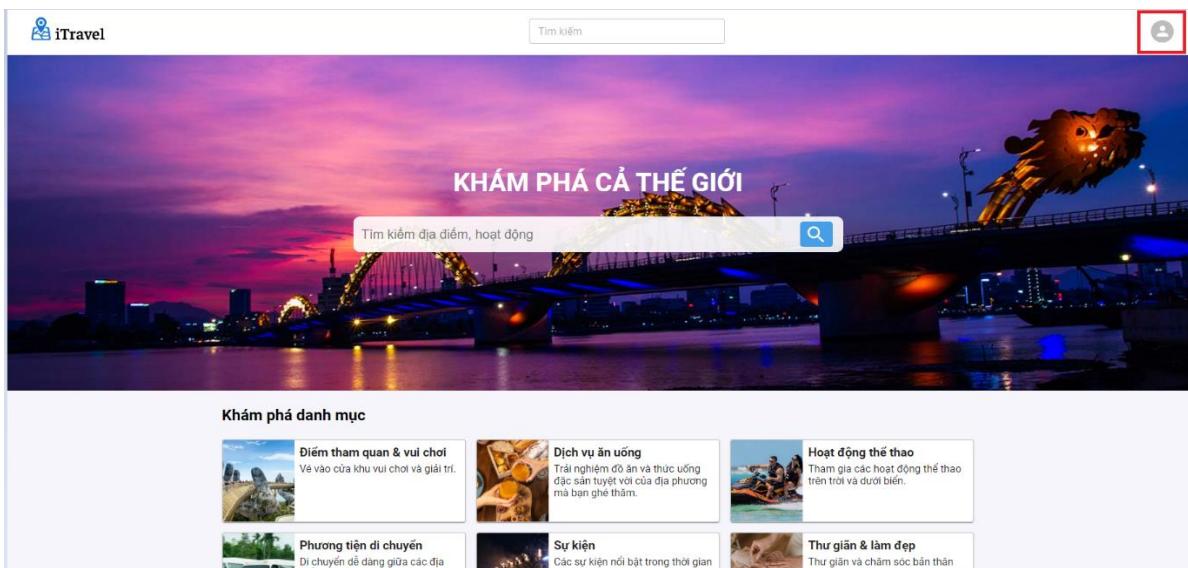


Figure 63: Home Page

Step 3: Click on “Login with Google”

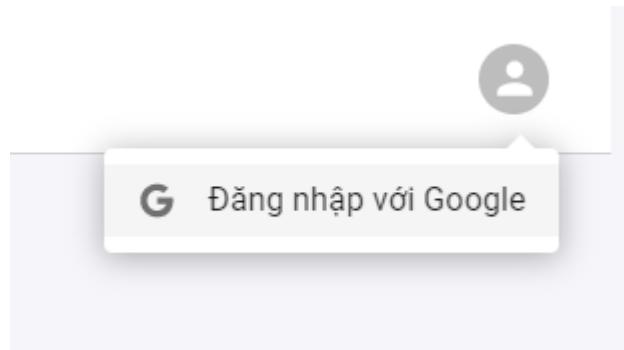
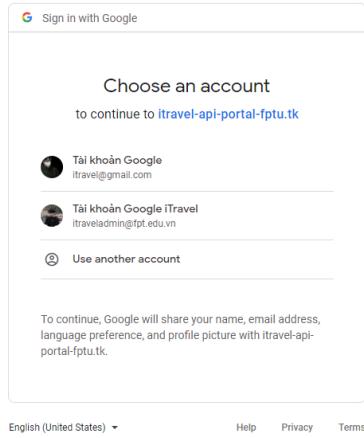


Figure 64: Profile Section

Step 4: Choose your Google account



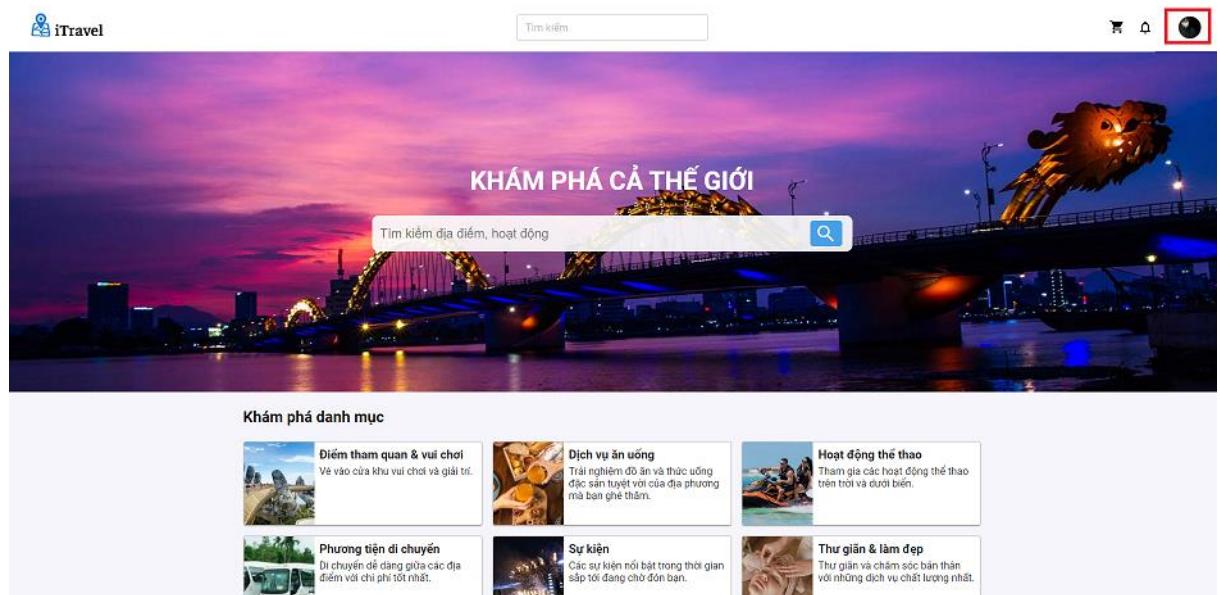
*Figure 65: Login with Google*

### 3.2.1.2. Logout of the system

This feature is used to log out of the system so the pre-condition is Login.

Step 1: Login into the system

Step 2: On the header bar, click on the avatar icon as shown



*Figure 66: Home Page*

Step 3: Click into “Logout”

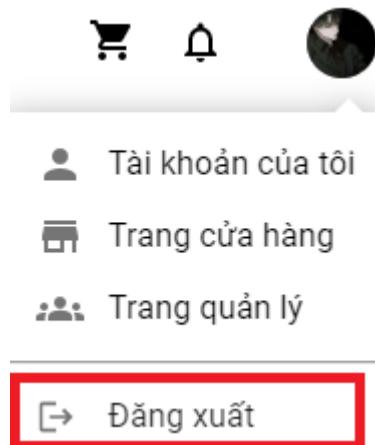


Figure 67: Profile Section

### 3.2.2. View service

To view a service detail, click on a service card. The app will navigate to view service page.

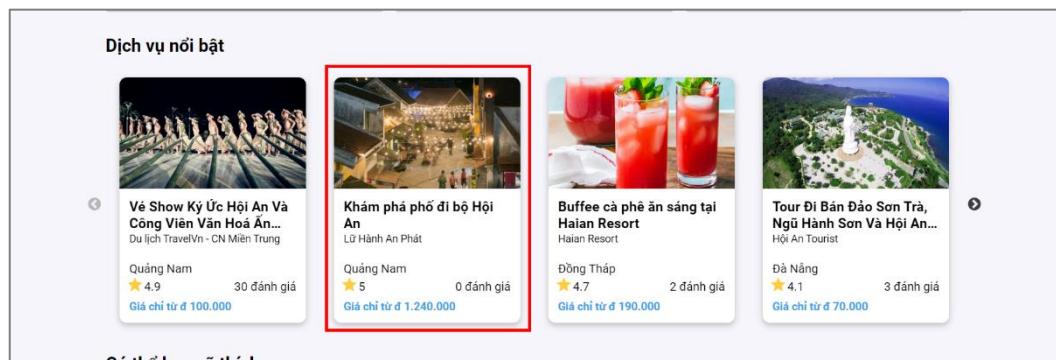


Figure 68: Service Card

### 3.2.3. Add service to cart

This feature is used to add the service the user is interested in into the cart for later checkout so the pre-condition is Login.

Step 1: Go to a specific service site: <https://demo-itravel.netlify.app/service/{serviceId}>

For example: <https://demo-itravel.netlify.app/service/1>



Figure 69: Service View

Step 2: Select the service start date and the number of corresponding subservices

Chọn ngày tham quan

Bắt đầu: 13/04/2022

Chọn số lượng gói dịch vụ

Vé Show Ký Úc Hội An	-	1	+	100,000đ
Công Viên Văn Hóa Án Tượng Hội An	-	1	+	150,000đ
Vé Show Ký Úc Hội An Và Công Viên Văn Hoa Án Tượng Hội An	-	0	+	225,000đ

Vé Vip Show Ký Úc Hội An  
120,000đ (Tạm ngừng hoạt động)

Vé Show Ký Úc Hội An (VIP)  
170,000đ (Hết hàng)

**250,000đ**

ĐẶT NGAY

Figure 70: Sub-Service Section

Step 3: Click into “Add to cart” icon as shown

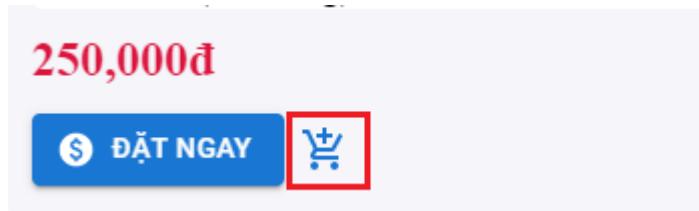


Figure 71: Add to cart button

Step 4: You will receive a success message as below

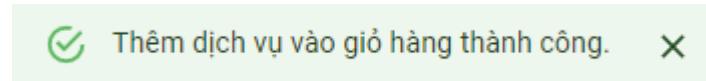


Figure 72: Success snack bar

### 3.2.4. Cart

This feature is used to manage the user's own cart so the pre-condition is Login.

#### 3.2.4.1. View the list of cart items

Step 1: Click on the Cart icon on the header, then the page will redirect to page Cart

Step 2: On the header bar, click on the avatar icon as shown



Figure 73: Cart icon

Sản phẩm	Ngày bắt đầu sử dụng	Đơn giá	Số lượng	Số tiền	Thao tác
Buffee cà phê ăn sáng tại HH Resort Vé cco bán - 1 ngày Shop: Paucek-Farrell	10/04/2022	100.000đ	- 4 +	400.000đ	XÓA
Vé Bà Nà dành cho 2 người Vé vào cổng Shop: Hand-Marks	10/04/2022	1.000.000đ	- 2 +	2.000.000đ	XÓA

Figure 74: View cart

#### 3.2.4.2. Update, delete cart's items

##### 3.2.4.2.1. Change start date of a cart item

Step 1: Click on the Calendar icon of the cart item, then a calendar will appear.

	Sản phẩm	Ngày bắt đầu sử dụng	Đơn giá	Số lượng	Số tiền	Thao tác
<input type="checkbox"/>	Buffee cà phê ăn sáng tại HH Resort Vé cơ bản - 1 ngày Shop: Paucek-Farrell	09/04/2022 <input type="button" value="XÁC NHẬN"/>	100.000đ	- 4 +	400.000đ	XÓA
<input type="checkbox"/>	Vé Bà Nà dành cho 2 người Vé vào cổng Shop: Hand-Marks	09/04/2022 <input type="button" value="XÁC NHẬN"/>	2.000.000đ	- 2 +	2.000.000đ	XÓA
<input type="checkbox"/> CHỌN TẤT CẢ XÓA LUU THAY ĐỔI					Tổng thanh toán (0 sản phẩm): 0đ	MUA HÀNG

Figure 75: Change cart item's date

Step 2: Select the date you want to change.

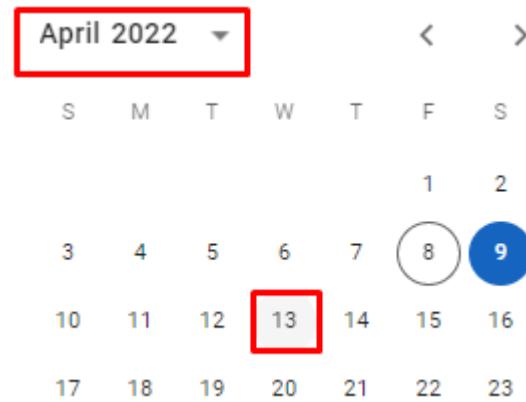


Figure 76: Select date for cart item

### 3.2.4.2.2. Change quantity of a cart item

Step 1: Click on the Plus icon to increase the quantity or click on the Minus icon to decrease the quantity of the cart item.

	Sản phẩm	Ngày bắt đầu sử dụng	Đơn giá	Số lượng	Số tiền	Thao tác
<input type="checkbox"/>	Buffee cà phê ăn sáng tại HH Resort Vé cơ bản - 1 ngày Shop: Paucek-Farrell	09/04/2022 <input type="button" value="XÁC NHẬN"/>	100.000đ	- 4 +	400.000đ	XÓA

Figure 77: Change the quantity of a cart item

### 3.2.4.2.3. Delete a cart item

Step 1: Click on the Delete button of the cart item, then a pop-up will appear to ask you to confirm to delete the item.

<input type="checkbox"/>	Sản phẩm	Ngày bắt đầu sử dụng	Đơn giá	Số lượng	Số tiền	Thao tác
<input type="checkbox"/>	 <b>Buffee cà phê ăn sáng tại HH Resort</b> Vé cơ bản - 1 ngày Shop: Paucek-Farrell	09/04/2022 <input type="button" value=""/>	100.000đ	<input type="button"/> 4 <input type="button"/>	400.000đ	<input type="button" value="XÓA"/>

Figure 78: Delete a cart item

## Xóa sản phẩm

×

Bạn có chắc muốn xóa sản phẩm này?

Figure 79: Confirm deleting an item

Step 2: Click Confirm to delete the cart item or Cancel to close the pop-up.

### 3.2.4.2.3. Delete many carts items

Step 1: Click on the check box of the items to delete or click on the Select button all to choose all items.

<input type="checkbox"/>	Sản phẩm
<input checked="" type="checkbox"/>	 <b>Buffee cà phê ăn sáng tại HH Resort</b> Vé cơ bản - 1 ngày Shop: Paucek-Farrell
<input type="checkbox"/>	 <b>Vé Bà Nà dành cho 2 người</b> Vé vào cổng Shop: Hand-Marks
<input type="checkbox"/>	<input type="button" value="CHỌN TẤT CẢ"/> <input type="button" value="XÓA"/> <input type="button" value="LƯU THAY ĐỔI"/>

Figure 80: Select many cart items

Step 2: Click on the Delete button beside the Select all button, then a pop-up will appear to ask you to confirm to delete the item.



Figure 81: Delete button

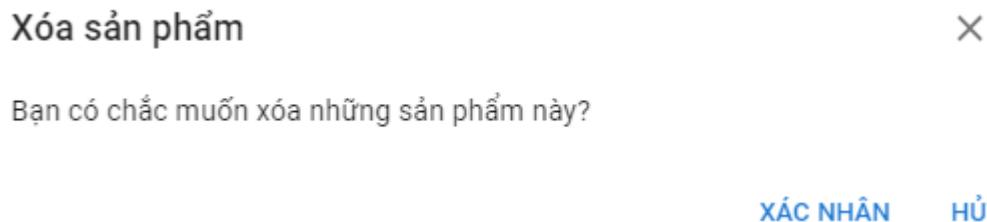


Figure 82: Confirm delete items

Step 3: Click Confirm to delete the cart items or Cancel to close the pop-up.

#### 3.2.4.2.4. Save all changes

This feature is used to save all changes you have done in the cart, if you do not save, all changes will disappear after refreshing the page.

Step 1: If you had updated some cart items, the Save button will appear. Click on that button.



Figure 83: Save button

#### 3.2.5. Purchase and send order request

##### 3.2.5.1. Purchase

###### 3.2.5.1.1. Choose the services to book in the cart

Step 1: Click on the check box of the items to delete or click on the Select all button to choose all items (like section 3.2.2.2.3).

Step 2: Click on the Purchase button, then the page will redirect to the Purchase page



Figure 84: Purchase button

**Điền thông tin**

**Thông tin liên lạc**

Họ và tên*	Số điện thoại*
------------	----------------

**Thông tin đơn hàng**

Sản phẩm	Ngày bắt đầu sử dụng	Đơn giá	Số lượng	Số tiền
 <b>Buffee cà phê ăn sáng tại HH Resort</b> Vé cơ bản - 1 ngày Shop:	08/04/2022	100000đ	4	400000đ
 <b>Vé Bà Nà dành cho 2 người</b> Vé vào cổng Shop:	08/04/2022	1000000đ	2	2000000đ

Tổng thanh toán (2 sản phẩm): 2.400.000đ

**ĐẶT HÀNG**

Figure 85: Purchase page

### 3.2.5.1.2. Input information and send an order request

Step 1: Input your full name and phone number into the text boxes.

**Thông tin liên lạc**

Họ và tên*	Số điện thoại*
------------	----------------

Figure 86: Input information

Step 2: Choose the payment method (Momo will be available soon).

**Cách thức thanh toán**



Thanh toán bằng ví PayPal



Thanh toán bằng ví Momo

Figure 87: Select Payment method

Step 3: Click on the Book button, then a pop-up will appear to notify booking success and ask to pay or view orders, click Pay to redirect to Payment or view order to redirect to the My Order page

Tổng thanh toán (2 sản phẩm): 2.400.000đ

**ĐẶT HÀNG**

Figure 88: Book button

Đặt hàng thành công! Bạn có muốn tiến hành thanh toán ngay không?

[THANH TOÁN](#) [XEM ĐƠN HÀNG](#)

*Figure 89: Booking success notification*

### 3.2.6. Pay for order

Step 1: Click on the Pay button on the Purchase page or the My Order page, then the page will redirect to the payment system.

Đặt hàng thành công! Bạn có muốn tiến hành thanh toán ngay không?

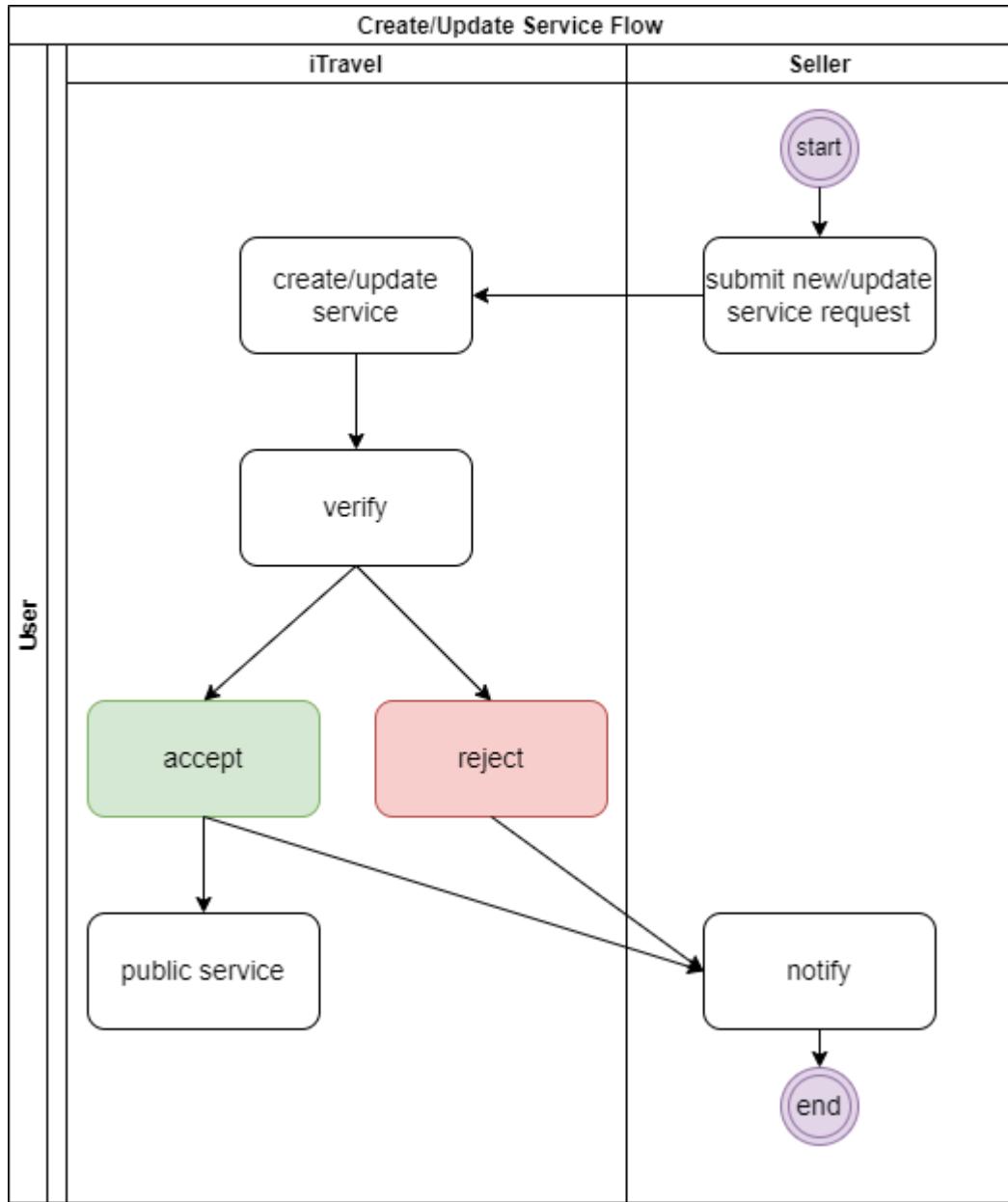
[THANH TOÁN](#) [XEM ĐƠN HÀNG](#)

*Figure 90: Pay button*

Step 2: Login and pay for the order in the payment system, then the page will redirect to the My Order page.

## 3.3 Create/Update Service Flow

This workflow describes the process Seller creates or updates service in iTravel system.



*Figure 91: Create/Update Service Flow*

### 3.3.1. Create a new service

This feature requires a user must have the authority of the seller.

- Step 1: After login into the system, click on the avatar icon in the header bar.

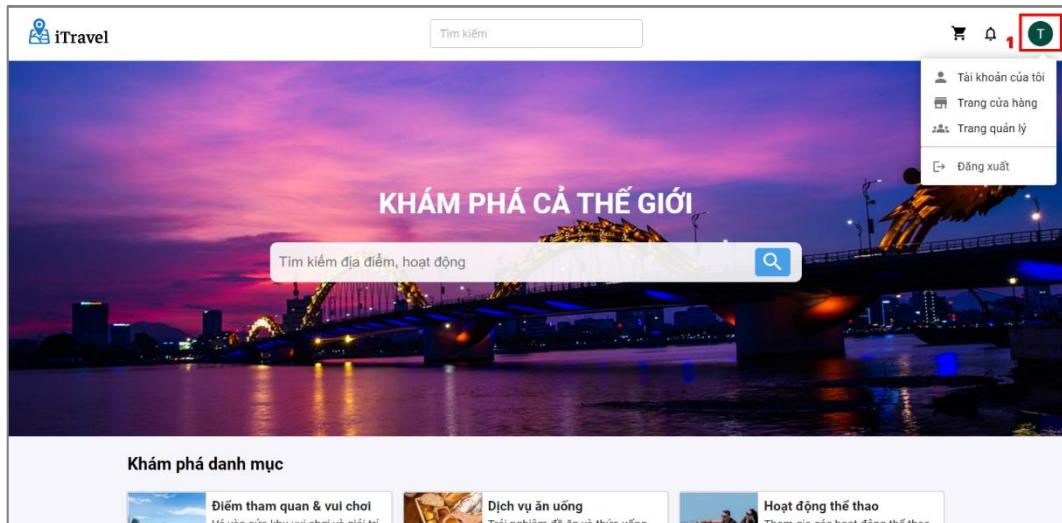


Figure 92: View Account Menu

- Step 2: If the account has the authority of the seller, the account menu will have a “View Shop Page” item. Click “View Shop Page” to navigate to the Seller page.

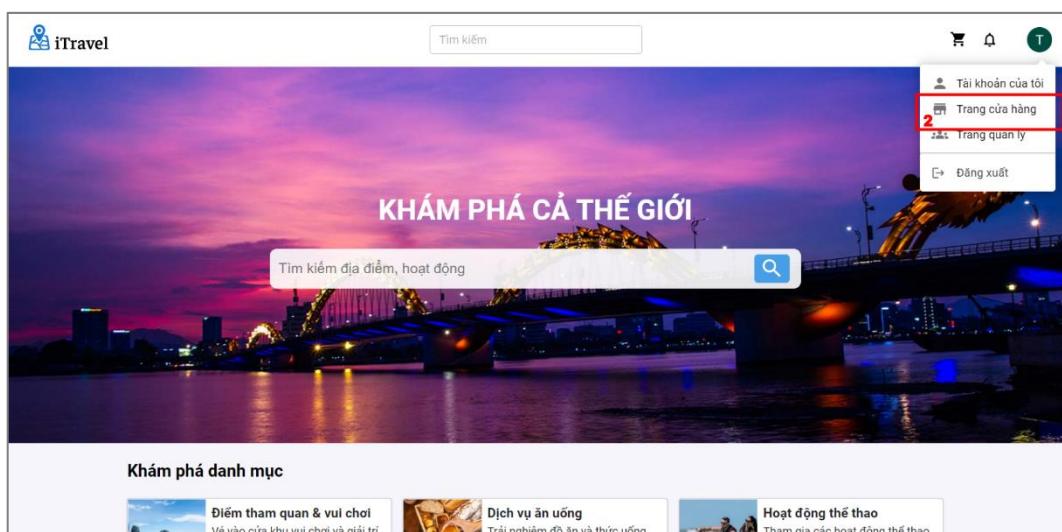


Figure 93: View Shop Page icon on Account Menu

- \* If the account menu does not have “View Shop Page”, you have to register your shop to have the seller authority. Please read [3.5.4.4. Shop Registration](#)

- Step 3: The current page is the seller page. The left sidebar will have a list of actions for a seller. Click on “Add New Service” on the sidebar or the “+” button on “Shop Service List” screen.

STT	Ảnh	Dịch vụ	Địa điểm	Danh mục	Trạng thái	Ngày tạo	Tùy chọn
1		Tour tham quan địa đạo Củ Chi	Đ. Tỉnh Lộ 15, Phú Hiệp, Củ Chi	Điểm tham quan & vui chơi	Không khả dụng	01/05/2021	<a href="#">Chỉnh sửa</a>
2		Dịch vụ đưa đón sân bay Tân Sơn Nhất - TP Thủ Đức	Sân bay Tân Sơn Nhất	Phương tiện di chuyển	Đang hoạt động	16/02/2022	<a href="#">Chỉnh sửa</a> <a href="#">Xóa dịch vụ</a>
3		Ăn tối trên du thuyền sông Sài Gòn	85 Đô Bá	Điểm tham quan & vui chơi	Chờ phê duyệt	03/02/2022	<a href="#">Chỉnh sửa</a>
4		Du ngoạn trên sông Sài Gòn	85 Đô Bá	Điểm tham quan & vui chơi	Chờ phê duyệt	23/12/2021	<a href="#">Chỉnh sửa</a>
Rows per page: 10 < 1-10 of 73 >							

Figure 94: New Service link on Seller Sidebar Menu

- Step 4: Now you are navigating to the “New Service” screen

**Thêm dịch vụ mới**

**Tên dịch vụ \***

**Chọn danh mục dịch vụ \***

Điểm tham quan & vui chơi

**Địa chỉ \***

**Thành phố \***

Thành phố Hà Nội

**Thời gian diễn ra \***

0

**Thời gian diễn ra \***

Định dạng: dd/mm/yyyy

Ngày bắt đầu 15-04-2022		tới	Ngày kết thúc 15-04-2022	
----------------------------	--	-----	-----------------------------	--

Figure 95: New Service screen

- Step 5: Input required information of service to the input field

**Thêm dịch vụ mới**

**Tên dịch vụ \***

**Chọn danh mục dịch vụ \***

**Địa chỉ \***

**Thành phố \***

**Thời gian diễn ra \***

**Thời gian diễn ra \***

Định dạng: dd/mm/yyyy

Ngày bắt đầu	15-04-2022	Ngày kết thúc	15-04-2022
	<input type="button" value=""/>		<input type="button" value=""/>

Figure 96: Input new service's information-1

**Hình ảnh dịch vụ**

<input type="text"/>					
Anh bìa *	Ảnh 1	Ảnh 2	Ảnh 3	Ảnh 4	Ảnh 5

**Mô tả dịch vụ \***

**Thông tin chi tiết**

**Danh sách dịch vụ phụ**

Dịch vụ phụ 1 \*

**THÊM DỊCH VỤ PHỤ**

**Thông tin chi tiết dịch vụ phụ**

Dịch vụ phụ 1 \*

Giá	Số lượng
<input type="text" value="0"/>	<input type="text" value="0"/>

Figure 97: Input new service's information-2

- Step 6: Click “Save” button to add a new service. If you want to cancel your input, click “Cancel” button.



Figure 98: Save and Cancel add new service

- Step 7-1: After adding a new service successfully or failing, an alert dialog will show the result. Click “Confirm” button to close the dialog.

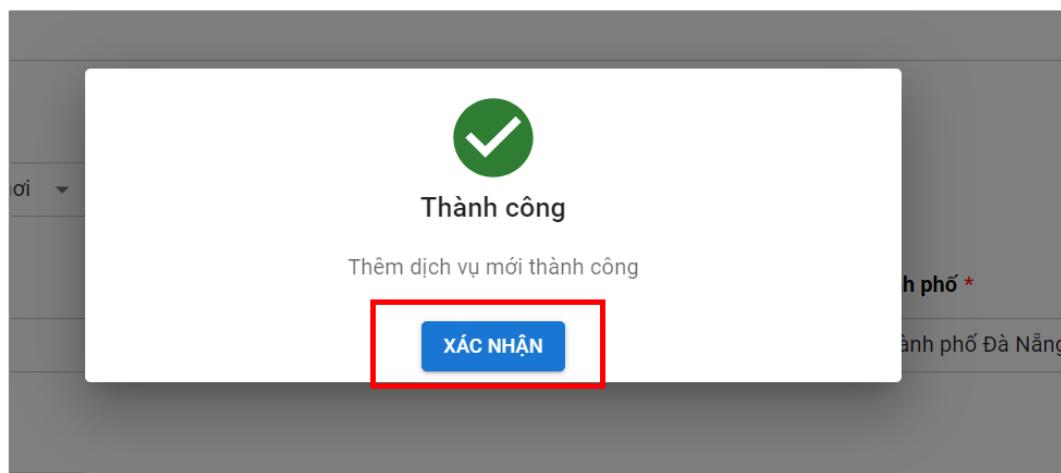


Figure 99: Alert Dialog adds new service success

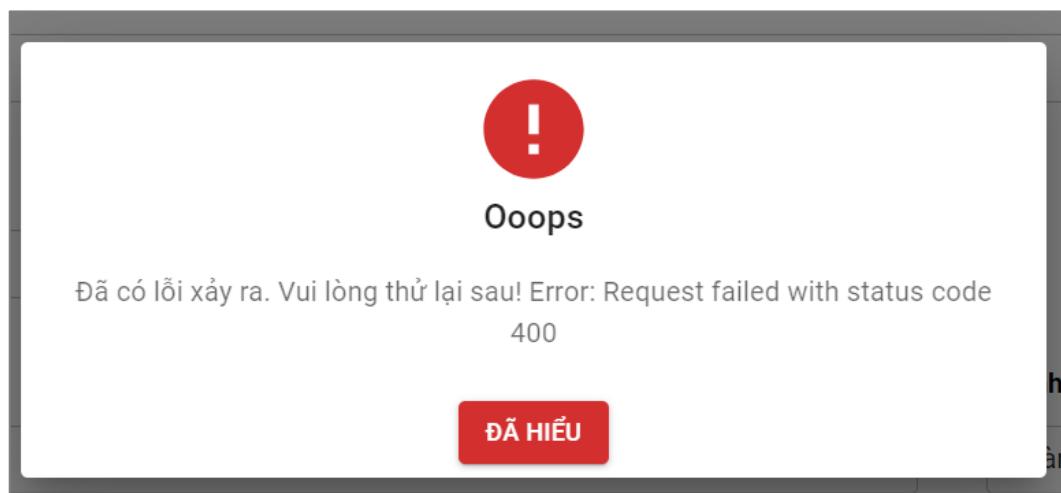


Figure 100: Alert Dialog add new service fail

- Step 7-2: If click “Cancel” button, the confirm dialog will show to confirm your decision.

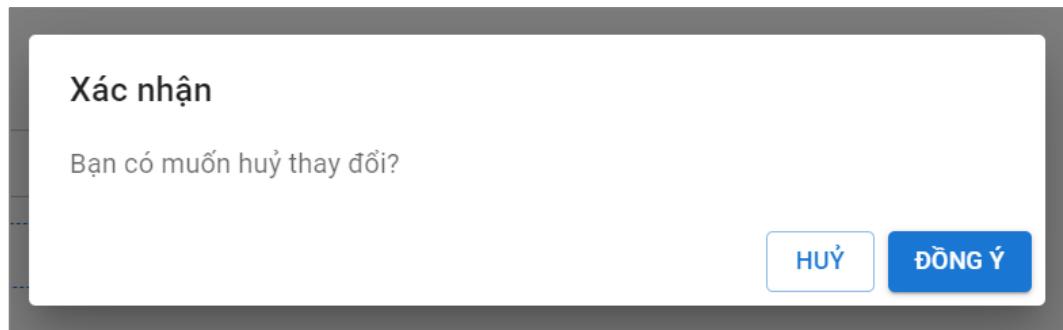


Figure 101: Confirm cancel add new service dialog

- Step 8: After adding a new service done. You will be redirected to the “Shop Service List” screen.

### 3.3.2. Update service

- Step 1: In the “Shop Service List” screen, click on “Edit” option of a service item on the table.

Danh sách dịch vụ							
STT	Ảnh	Dịch vụ	Địa điểm	Danh mục	Trạng thái	Ngày tạo	Tùy chọn
1		Tour tham quan địa đạo Củ Chi	Đ. Tỉnh Lộ 15, Phù Hiệp, Củ Chi	Điểm tham quan & vui chơi	Không khả dụng	01/05/2021	<a href="#">Chỉnh sửa</a>
2		Dịch vụ đưa đón sân bay Tân Sơn Nhất - TP. Thủ Đức	Sân bay Tân Sơn Nhất	Phương tiện di chuyển	Đang hoạt động	16/02/2022	<a href="#">Chỉnh sửa</a> <a href="#">Xoá dịch vụ</a>
3		Ăn tối trên du thuyền sông Sài Gòn	85 Đỗ Bá	Điểm tham quan & vui chơi	Chờ phê duyệt	03/02/2022	<a href="#">Chỉnh sửa</a>
4		Du ngoạn trên sông Sài Gòn	85 Đỗ Bá	Điểm tham quan & vui chơi	Chờ phê duyệt	23/12/2021	<a href="#">Chỉnh sửa</a>
Rows per page:							
1-10 of 73							

Figure 102: “Edit” option on Shop Service List

- Step 2: View and edit service information

**Thêm dịch vụ mới**

Tên dịch vụ \*

Vé vào công khu du lịch Bà Nà - Đà Nẵng

Chọn danh mục dịch vụ \*

Điểm tham quan & vui chơi

Địa chỉ \*

thôn An Sơn, xã Hòa Ninh, huyện Hòa Vang

Thành phố \*

Thành phố Đà Nẵng

Thời gian diễn ra \*

2

Thời gian diễn ra \*

Định dạng: dd/mm/yyyy

Ngày bắt đầu: 15-04-2022

tới

Ngày kết thúc: 15-04-2022

Figure 103: View and Edit service information

- Step 3: After editing the information, click “Save” button to update the new change or click “Cancel” to cancel your change.



Figure 104: Save and Cancel update service

- Step 4: After updating the service successfully or failing, an alert dialog will show the result. Click “Confirm” button to close the dialog.

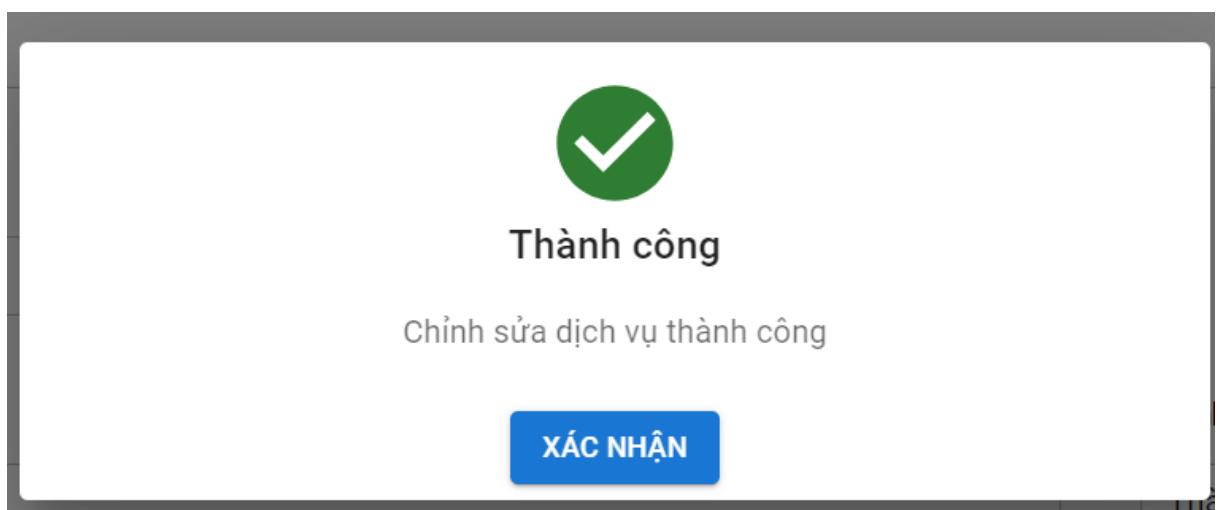


Figure 105: Alert dialog update service success

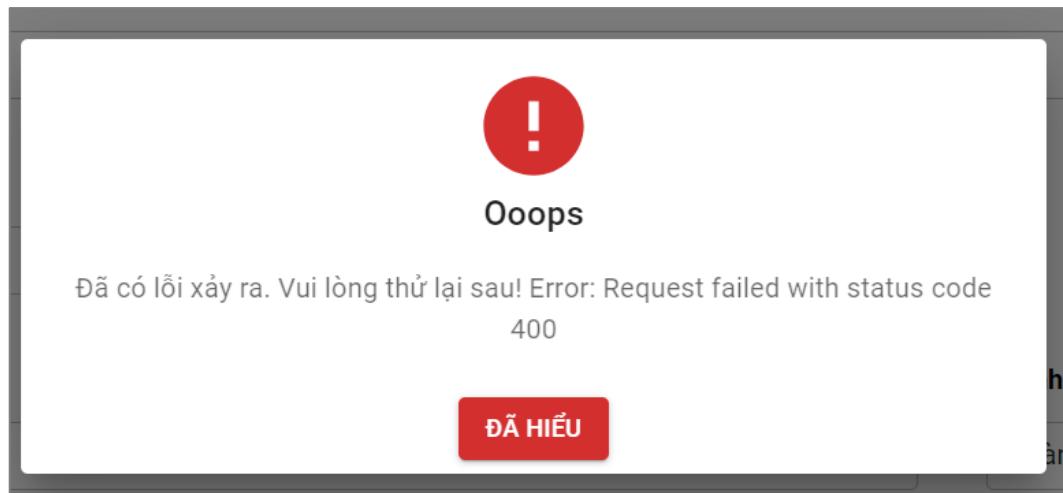


Figure 106: Alert dialog update service fail

- Step 5: If click “Cancel” button, the confirm dialog will show to confirm your decision.

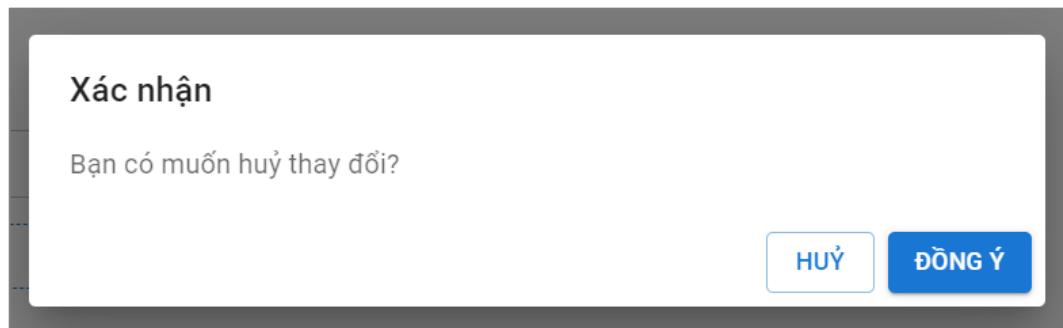


Figure 107: Confirm cancel update service dialog

- Step 6: After updating service is done. You will be redirected to the “Shop Service List” screen.

### 3.3.3. Verify service request

This feature only works when you are the moderator.

#### 3.3.3.1. View Service List

Step 1: Click on the avatar on the header, then a menu will appear.

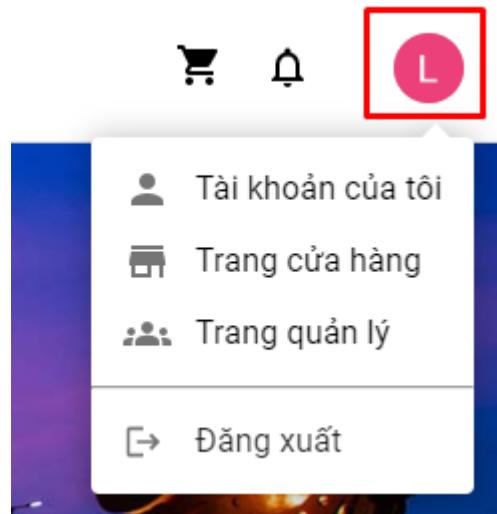


Figure 108: The avatar

Step 2: Click on “Manager Site”, then the page will redirect to the User List page of the manager site.

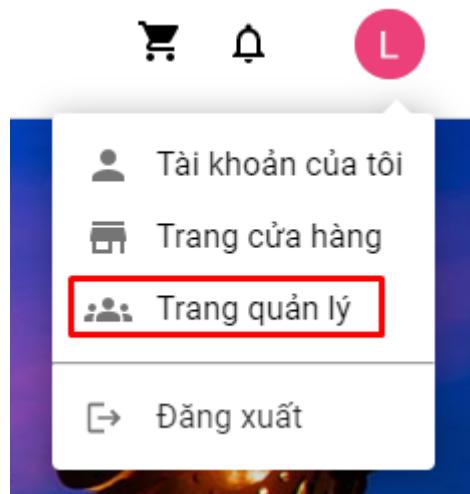


Figure 109: Manager Site in menu

Step 3: Click on “Service List” in the sidebar, then the page will redirect to the Service List page.

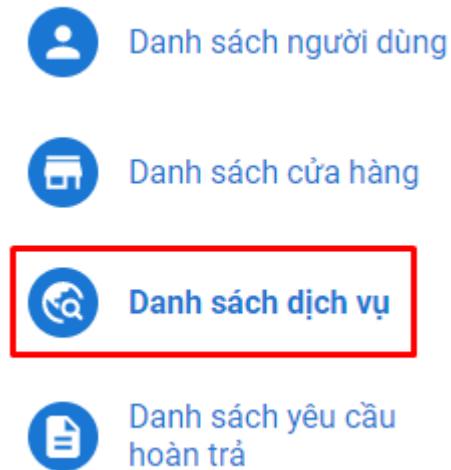


Figure 110: Service List in sidebar

### 3.3.3.2. Search Service in Service List

Step 1: Input the service name into the search box and press Enter or click on the search icon, then the table below will display the services match with the search text.

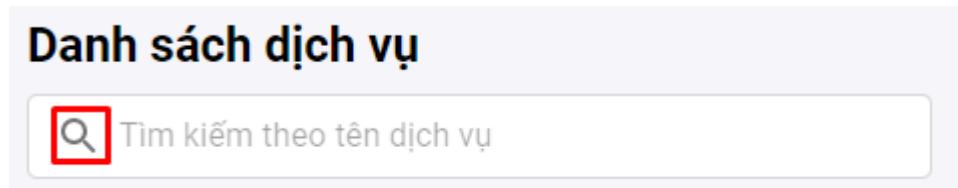


Figure 111: Search box and search icon

### 3.3.3.3. Filter Service by status

Step 1: Click on the Filter button, then the filter box will appear.



Figure 112: Filter button

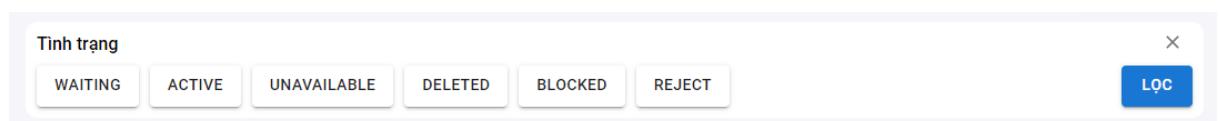


Figure 113: Filter box

Step 2: Select the status to filter by clicking on the status button and clicking again or clicking on the X icon in the “Selected” line to remove the status.

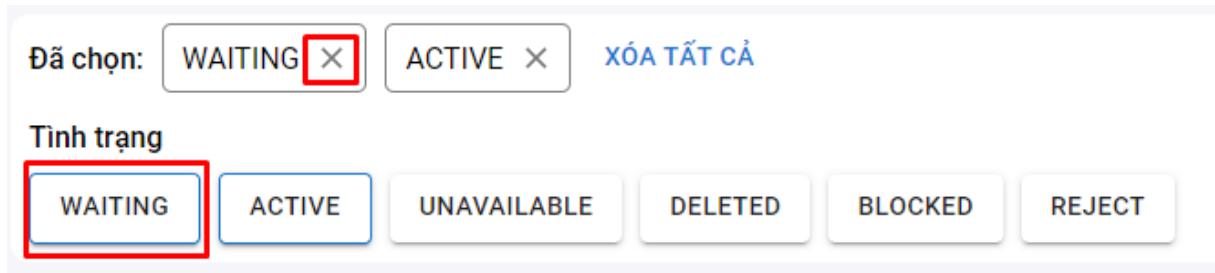


Figure 114: Select filters

Step 3: Click on the Apply button to apply filter(s), then the table below will display the results.

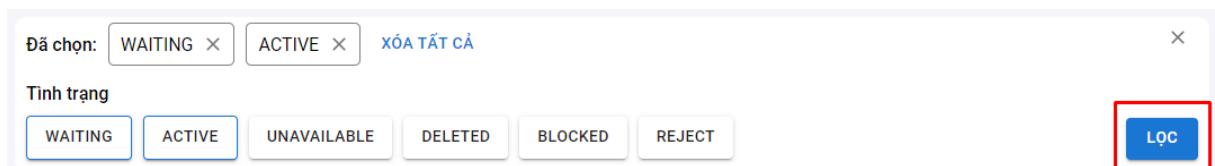


Figure 115: Apply button

To view all service requests, select status WAITING and apply filter.

#### 3.3.3.4. Verify service request

Step 1: Click on the menu icon in the service row, then a menu will appear.



Figure 116: Menu icon

Step 2: Click on “Accept” to accept and “Reject” to reject the service request, then a notification will appear.

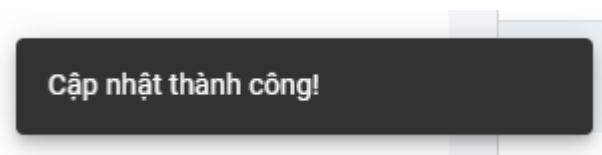


Figure 117: Update success notification

### 3.4 Refund Flow

This workflow describes the processing of refunding an order in the iTravel system.

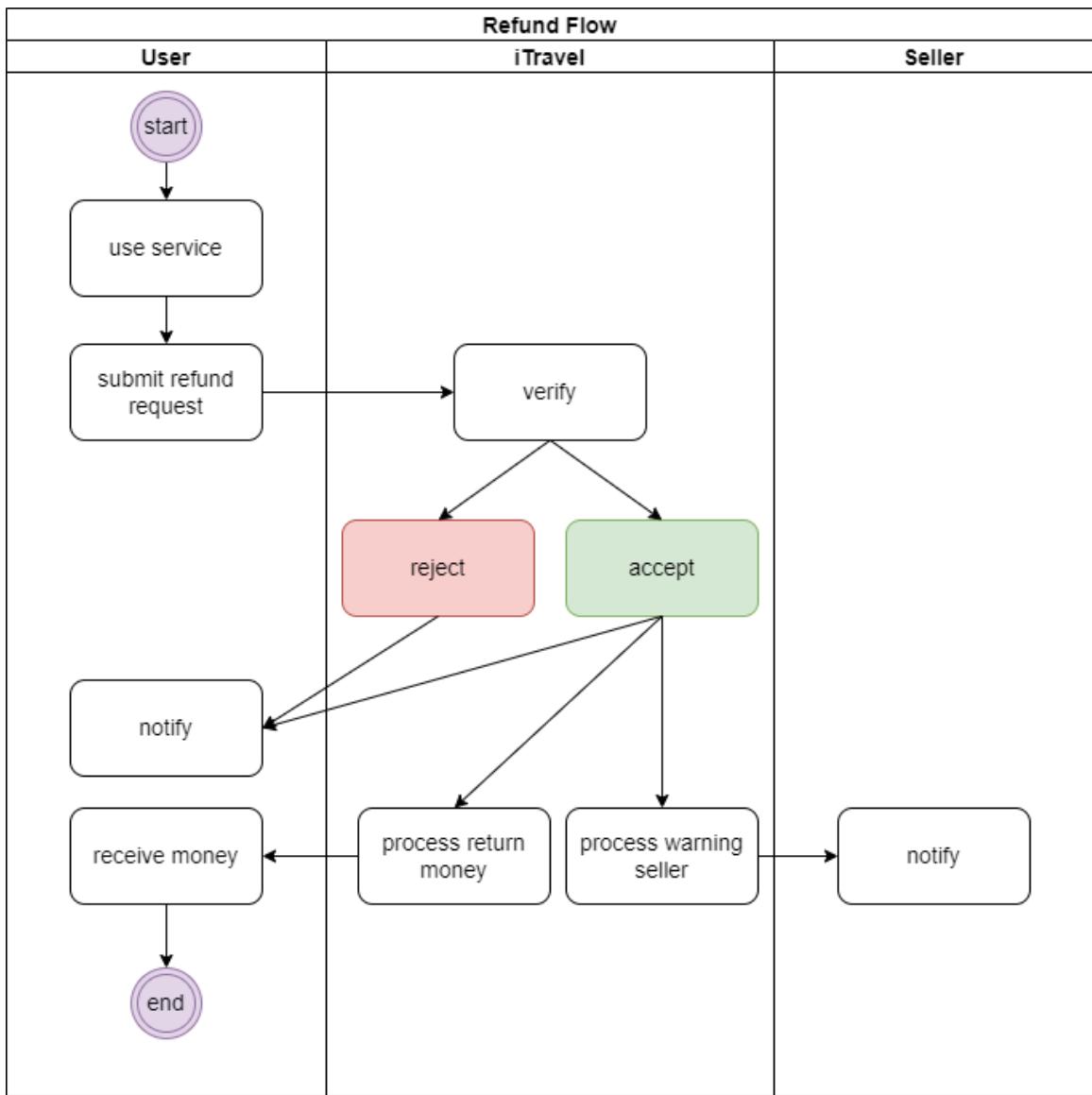


Figure 118: Refund Flow

### 3.4.1. Submit Refund Request

#### 3.4.1.1. View order list

This feature is used to see the history of the user's order so the pre-condition is Login.

Step 1: On the header bar, click on the avatar icon as shown:

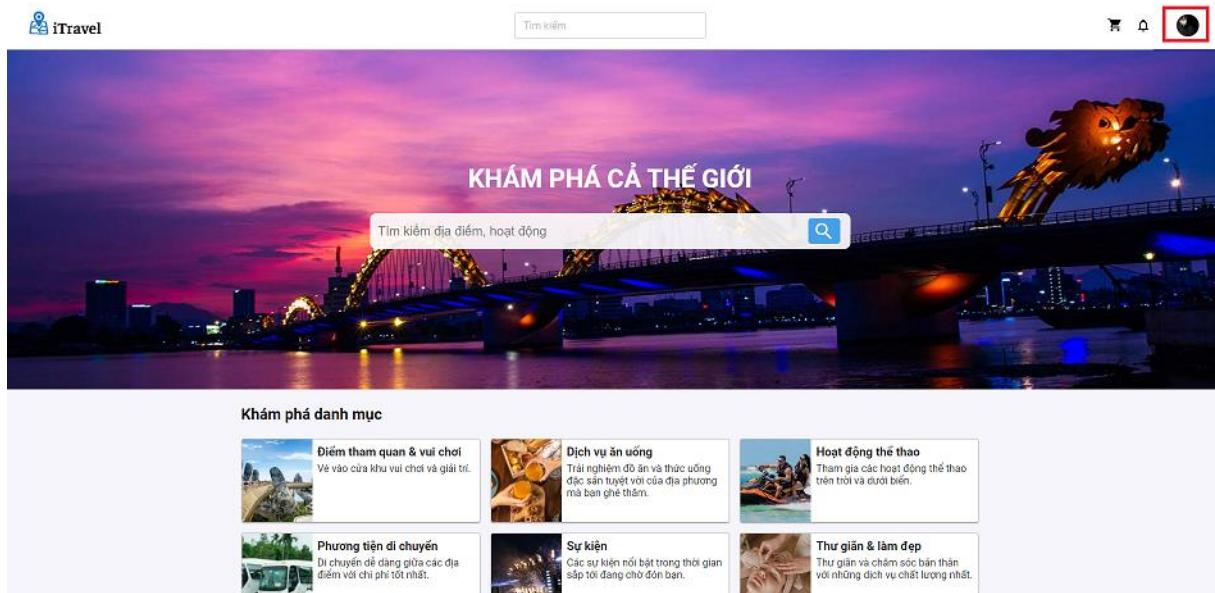


Figure 119: Home Site

Step 2: Click into “My Profile”, you will be redirected to the Profile site

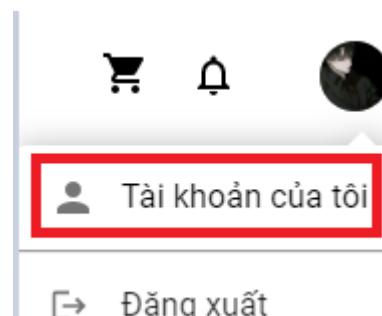


Figure 120: My Profile

Step 3: On the Profile page, click on “My Orders”, you will be redirected to the My Order site

This screenshot shows the user profile page with more detailed information. On the left, there is a sidebar with a user profile picture and three buttons: "Lịch sử mua hàng" (Purchase History), "Đăng kí bán hàng" (Sell), and "Đăng xuất". The main area contains a form for "Thông tin cá nhân" (Personal Information) with fields for name, date of birth, email, phone number, and gender. Below this, there is a "Giới tính" (Gender) section with radio buttons for "Nam", "Nữ", and "Khác", and a "CẬP NHẬT" (Update) button. At the bottom of the page, there is a footer with company information, links to various sections like "VỀ iTRAVEL", "ĐỐI TÁC", and "ĐIỀU KHOẢN", and a copyright notice.

Figure 121: My Profile

Lịch sử mua hàng	
	TẤT CẢ CHƯA THANH TOÁN ĐÃ THANH TOÁN ĐÃ HOÀN THÀNH
<b>Hội An Tourist</b>	XEM CỬA HÀNG ĐÁNH GIÁ
	Tour Đi Bán Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng Tour cả ngày cùng ăn tối Số lượng: 2
<b>Hội An Tourist</b>	XEM CỬA HÀNG ĐÁNH GIÁ
	Tour Đi Bán Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng Tour sáng chiều Số lượng: 1
Tổng thanh toán: <b>550,000đ</b> (Đã thanh toán)	
<b>CHI TIẾT</b>	

Figure 122: My Order

### 3.4.1.2. Create refund request

This feature is used to create a Refund Request Form for a service that you do not satisfied with.

Step 1: Follow [section 3.4.1.2.](#) to get to the My Order site. On the My Order site, click on “Detail” of the Order you want to refund, you will be redirected to the Order Detail site

Lịch sử mua hàng	
	TẤT CẢ CHƯA THANH TOÁN ĐÃ THANH TOÁN ĐÃ HOÀN THÀNH
<b>Hội An Tourist</b>	XEM CỬA HÀNG ĐÁNH GIÁ
	Tour Đi Bán Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng Tour cả ngày cùng ăn tối Số lượng: 2
<b>Hội An Tourist</b>	XEM CỬA HÀNG ĐÁNH GIÁ
	Tour Đi Bán Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng Tour sáng chiều Số lượng: 1
Tổng thanh toán: <b>550,000đ</b> (Đã thanh toán)	
<b>CHI TIẾT</b>	

Figure 123: My Order

Step 2: In the Order Detail site, click on “Refund” of the Order Item you want to refund, you will see a popup-form as below

Thông tin liên lạc					
Họ và tên đầy đủ	Số điện thoại liên lạc				
Nguyễn Việt Dũng	0799371927				
Thông tin đơn hàng					
Sản phẩm	Ngày bắt đầu sử dụng	Đơn giá	Số lượng	Số tiền	Thao tác
 Tour Di Bản Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng Tour cả ngày cùng ăn tối HỘI AN TOURIST	11/04/2022	200,000đ	2	400,000đ	<button>HOÀN TRẢ</button>
 Tour Di Bản Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng Tour sáng chiều HỘI AN TOURIST	11/04/2022	150,000đ	1	150,000đ	<button>HOÀN TRẢ</button>
Tổng thanh toán: 550,000đ					

Figure 124: Order Detail

Yêu cầu hoàn tiền dịch vụ (Mã đơn: 32)	
Vui lòng mô tả chính xác lí do yêu cầu hoàn tiền để được hỗ trợ nhanh nhất.	
Lý do	
Mô tả chi tiết	
HỦY XÁC NHẬN	

Figure 125: Refund Request Form

Step 3: Select a “Reason” and fill out “Detail description”, then click “Confirm” to send a Request Refund as below

### Yêu cầu hoàn tiền dịch vụ (Mã đơn: 32)

Vui lòng mô tả chính xác lí do yêu cầu hoàn tiền để được hỗ trợ nhanh nhất.

Lý do

Dịch vụ không đúng như mô tả

Mô tả chi tiết

Dịch vụ không đúng như mô tả, thái độ phục vụ của nhân viên không làm khách hàng hài lòng



HỦY

XÁC NHẬN

Figure 126: Refund Request Form

You will receive a successful snack bar as shown

Gửi yêu cầu hoàn trả thành công, chúng tôi sẽ xem xét và trả lời quý khách sớm nhất có thể.



Figure 127: Success Snack Bar

### 3.4.2. Verify Refund Request

This feature only works when you are the moderator or admin.

Follow steps 1 and 2 of [section 3.3.3.1](#) to access the manager site.

#### 3.4.2.1. View Refund Request List

Step 1: Click on “Refund Request List” in the sidebar, then the page will redirect to the Refund Request List page.

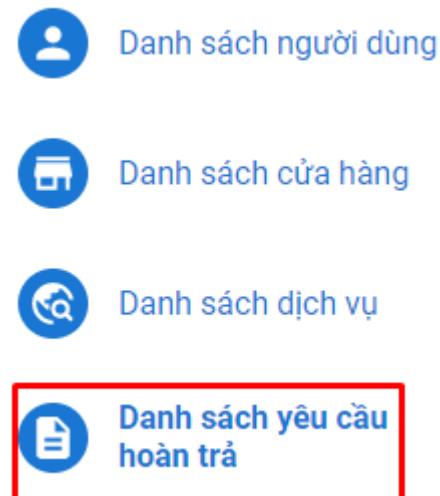


Figure 128: Refund Request List in the sidebar

#### 3.4.2.2. Search Refund Request

This feature is similar to the search service in [section 3.3.3.2](#).

#### 3.4.2.3. Verify Refund Request

Step 1: Click on the Info icon of a refund request that has the status PROCESSING, then the page will redirect to the Refund Request Detail page.



Figure 129: Info icon

Step 2.1: Click on Accept button to accept the refund request.

ĐỒNG Ý

Figure 130: Accept button

Step 2.2: Input Reject reason into the reject reason textbox and click on the Reject button.

A screenshot of a form interface. At the top left is a label 'Lý do từ chối' followed by a large empty text input box. Below the input box are two blue rectangular buttons: 'ĐỒNG Ý' on the left and 'TỪ CHỐI' on the right. The 'TỪ CHỐI' button is highlighted with a red rectangular border. In the bottom right corner of the form area is a small blue button labeled 'QUAY LẠI'.

Figure 131: Reject reason textbox and Reject button

### 3.5 Other screens

#### 3.5.1 User management for Moderator

This feature only works when you are the moderator or admin.

Follow steps 1 and 2 of [section 3.3.3.1](#) to access the manager site.

##### 3.5.1.1 View User List

Step 1: Click on “User List” in the sidebar, then the page will redirect to the User List page.

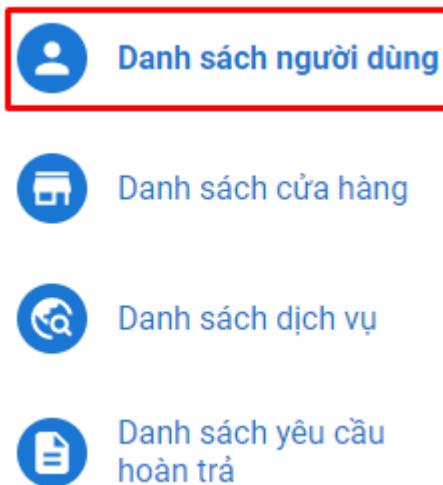


Figure 132: User List in the sidebar

##### 3.5.1.2 Search User

This feature is similar to the search service in [section 3.3.3.2](#).

##### 3.5.1.3 View User Detail

Step 1: Click on the View Info icon in the User's row, then the page will redirect to the User Detail page.

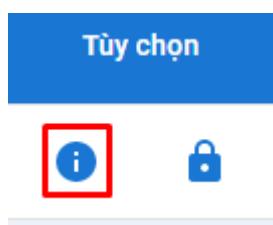


Figure 133: Info icon in the User's row

## Thông tin người dùng

	ID	2	
	Họ tên	Đạt Phạm	
Email	datpd0507123@gmail.com	Giới tính	FEMALE
Số điện thoại	3368962907	Ngày đăng ký	12:36 09-03-2022
Ngày sinh	09-03-2022	Trạng thái	ACTIVE

[QUAY LẠI](#)

Figure 134: User Detail page

### 3.5.1.4 Lock and Unlock a User

Step 1: Click on the Closed Lock icon in the User's row to lock the user or the Opened Lock icon to unlock the user, then the status of the user will change and a notification will appear.

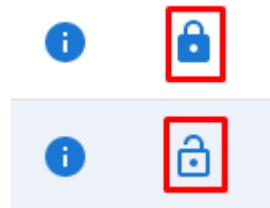


Figure 135: Lock and Unlock a User

### 3.5.2 Shop management for Moderator

This feature only works when you are the moderator or admin.

Follow steps 1 and 2 of [section 3.3.3.1](#) to access the manager site.

#### 3.5.2.1 View Shop List

Step 1: Click on “Shop List” in the sidebar, then the page will redirect to Shop List page.

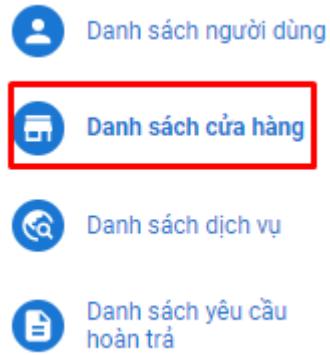


Figure 136: Shop List in side bar

### 3.5.2.2 Search and Filter Shop

These features are similar to the search and filter service in [section 3.3.3.2](#) and [section 3.3.3.3](#).

### 3.5.2.3 View Services List of a Shop

Step 1: Click on the “View Service” in the Shop’s row, then the page will redirect to the Service List page and only show the shop’s services.

ID	Tên cửa hàng	Chủ cửa hàng	Địa chỉ	Ngày đăng ký	Tình trạng	Dịch vụ	Tùy chọn
1	iTravel	Owner	Da Nang	05:07 10-03-2022	LOCKED	XEM DỊCH VỤ	

Figure 137: View Service button

### 3.5.2.4 View Shop Detail

Step 1: Click on the View Info icon in the Shop’s row, then the page will redirect to the Shop Detail page.

ID	Tên cửa hàng	Chủ cửa hàng	Địa chỉ	Ngày đăng ký	Tình trạng	Dịch vụ	Tùy chọn
1	iTravel	Owner	Da Nang	05:07 10-03-2022	LOCKED	XEM DỊCH VỤ	

Figure 138: Info icon in the Shop's row

### 3.5.2.5 Lock and Unlock a Shop

Step 1: Click on the Closed Lock icon in the Shop’s row to lock Shop or the Opened Lock icon to unlock the shop, then the status of the shop will change and a notification will appear.

ID	Tên cửa hàng	Chủ cửa hàng	Địa chỉ	Ngày đăng ký	Tình trạng	Dịch vụ	Tùy chọn
1	iTravel	Owner	Da Nang	05:07 10-03-2022	LOCKED	XEM DỊCH VỤ	
2	Bà Nà Hill	Owner	Da Nang	02:43 23-03-2022	ACTIVE	XEM DỊCH VỤ	

Figure 139: Lock and Unlock a Shop

### 3.5.3 Moderator management for Admin

This feature only works when you are the admin.

Follow steps 1 and 2 of [section 3.3.3.1](#) to access the manager site.

#### 3.5.3.1 View Moderator List

Step 1: Click on “Moderator List” in the sidebar, then the page will redirect to the Moderator List page.

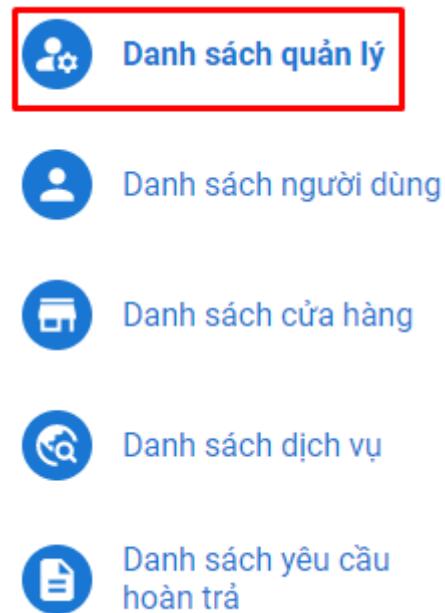


Figure 140: Moderator List in the sidebar

#### 3.5.3.2 Search Moderator

This feature is similar to the search service in [section 3.3.3.2](#).

#### 3.5.3.3 Lock and Unlock a Moderator

Step 1: Click on the Closed Lock icon in the Moderator’s row to lock Moderator or the Opened Lock icon to unlock Moderator, then the status of the Moderator will change and a notification will appear.

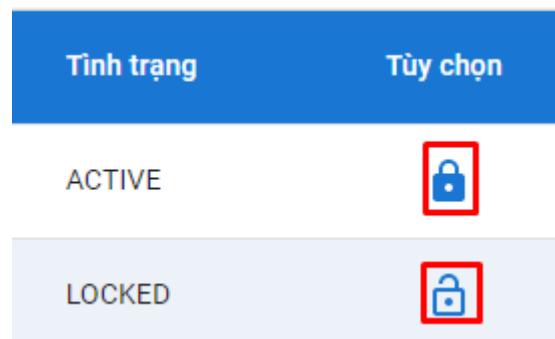


Figure 141: Lock and Unlock a Moderator

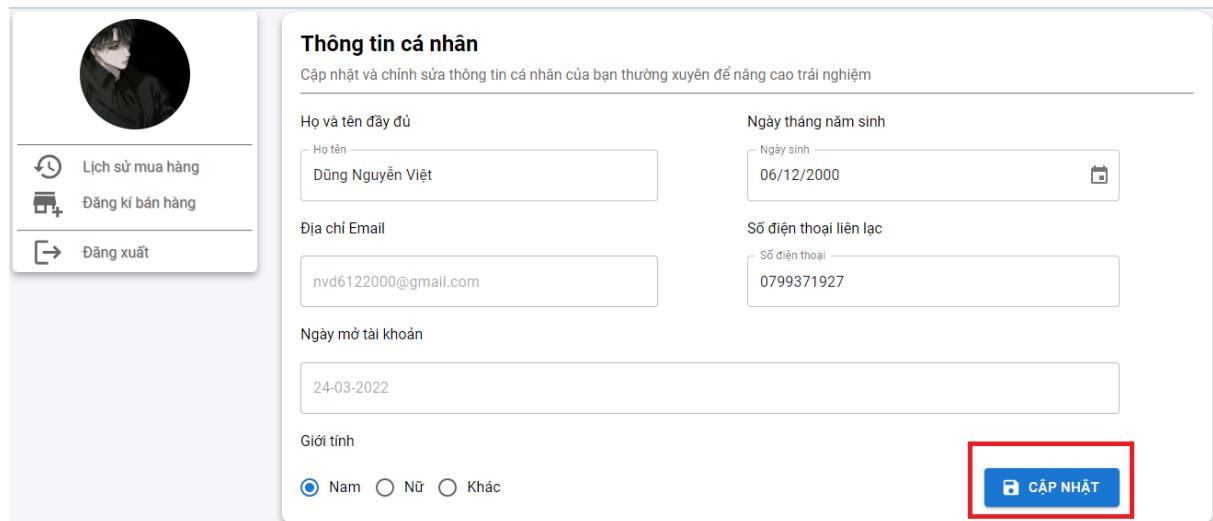
### 3.5.4 User Profile management

This feature helps the user as well as the system to manage a user's information.

Follow steps 1 and 2 of [section 3.4.1.1](#) to access the User Profile site.

#### 3.5.4.1 Update User's basic information

Step 1: Fill out all basic information and click “Update” to update your account's basic information.



The screenshot shows a user profile management interface. On the left, there is a circular profile picture placeholder. Below it are three buttons: 'Lịch sử mua hàng' (Order History), 'Đăng kí bán hàng' (Register Shop), and 'Đăng xuất' (Logout). The main area is titled 'Thông tin cá nhân' (Personal Information) with a sub-instruction: 'Cập nhật và chỉnh sửa thông tin cá nhân của bạn thường xuyên để nâng cao trải nghiệm' (Update and edit your personal information frequently to improve your experience). It contains fields for 'Họ và tên đầy đủ' (Full Name) with 'Đặng Nguyễn Việt' entered, 'Ngày tháng năm sinh' (Date of Birth) with '06/12/2000' and a calendar icon, 'Địa chỉ Email' (Email Address) with 'nvd6122000@gmail.com', 'Số điện thoại liên lạc' (Contact Phone Number) with '0799371927', 'Ngày mở tài khoản' (Account Creation Date) with '24-03-2022', 'Giới tính' (Gender) with radio buttons for 'Nam' (Male) checked, 'Nữ' (Female), and 'Khác' (Other), and a blue 'CẬP NHẬT' (Update) button with a red border.

Figure 142: User Profile

#### 3.5.4.2 My order

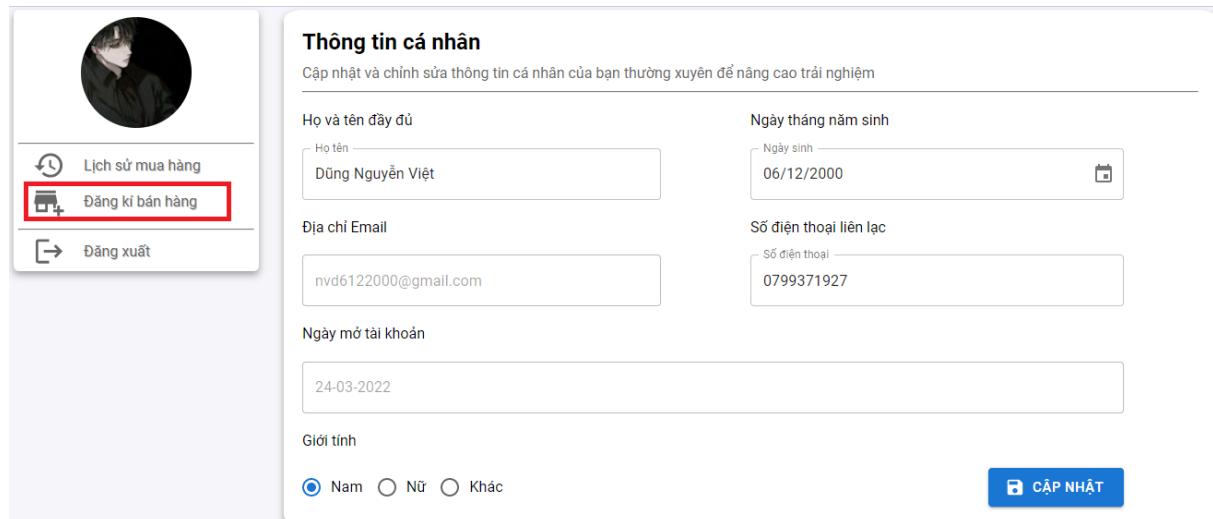
This feature is similar to the View order list in [section 3.4.1.1](#).

#### 3.5.4.3 Logout

This feature is similar to Logout in [section 3.2.1.2](#).

#### 3.5.4.4 Shop Registration

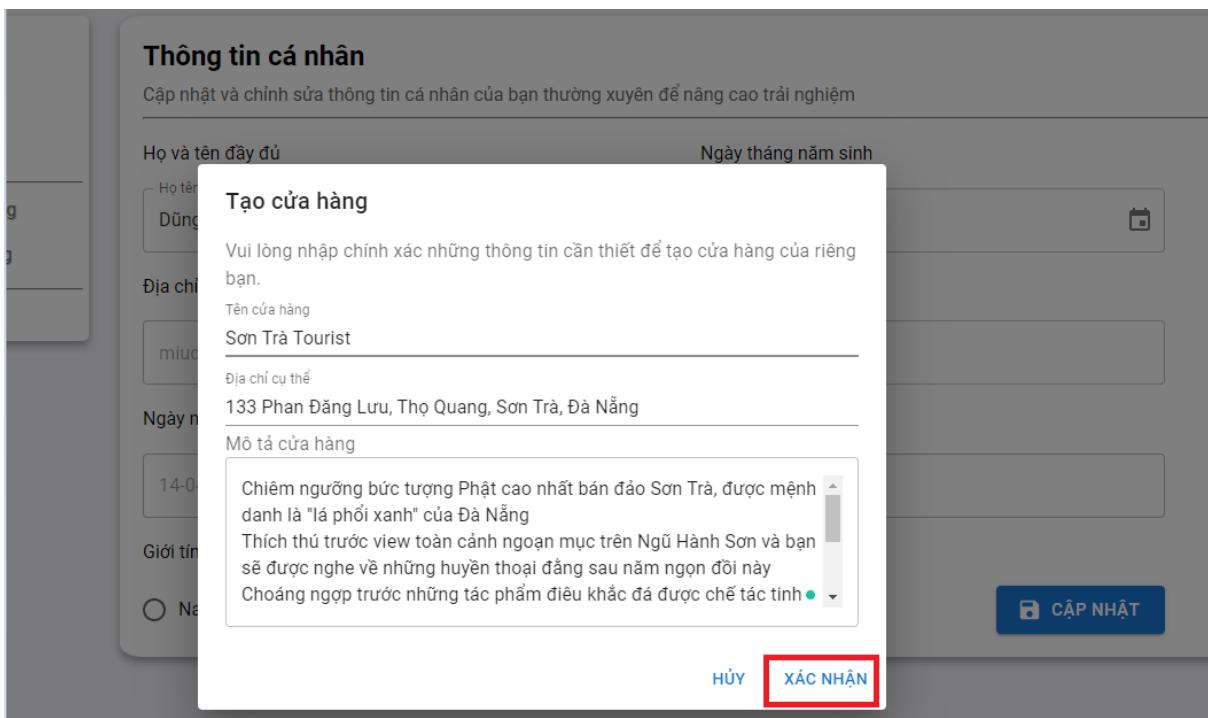
Step 1: In the User Profile site, click on “Shop Registration”.



The screenshot shows the 'Shop Registration' section of the User Profile management interface. The left sidebar has the 'Đăng kí bán hàng' button highlighted with a red box. The main form is identical to Figure 142, containing fields for full name ('Đặng Nguyễn Việt'), date of birth ('06/12/2000'), email ('nvd6122000@gmail.com'), contact phone number ('0799371927'), account creation date ('24-03-2022'), gender selection ('Nam' checked), and a blue 'CẬP NHẬT' (Update) button.

Figure 143: Shop Registration

Step 2: Fill out all fields in the Shop Registration popup form then click “Confirm” to send a request.



The screenshot shows a modal dialog titled "Thông tin cá nhân" (Personal Information). The main heading is "Cập nhật và chỉnh sửa thông tin cá nhân của bạn thường xuyên để nâng cao trải nghiệm". The form is for creating a shop, with fields for name, address, and description. The "Tạo cửa hàng" (Create shop) button is at the top right. Below it is a note: "Vui lòng nhập chính xác những thông tin cần thiết để tạo cửa hàng của riêng bạn." The shop name is "Sơn Trà Tourist", address is "133 Phan Đăng Lưu, Thọ Quang, Sơn Trà, Đà Nẵng", and the description includes "Chiêm ngưỡng bức tượng Phật cao nhất bán đảo Sơn Trà, được mệnh danh là "lá phổi xanh" của Đà Nẵng". At the bottom are "HỦY" and "XÁC NHẬN" buttons, with "XÁC NHẬN" highlighted by a red box.

Figure 144: Shop Registration form

You will receive a successful snack bar as below



Figure 145: Success Snack Bar

Step 3: Reload the page, on the header bar, click on the avatar icon, you will see a link to your Shop Management

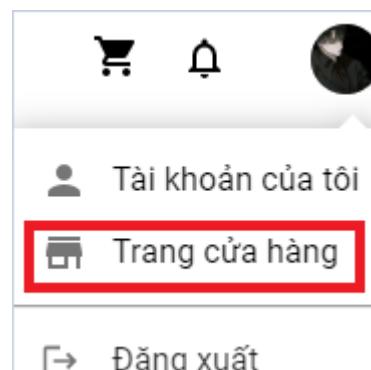


Figure 146: Shop Management

### 3.5.5 My Order

This feature is used to see the history of a user's order.

Follow [section 3.4.1.1](#) to access the My Order site.

### 3.5.5.1 View Shop

This feature is used to go to Order Item's shop owner site

Step 1: On the My Order site, click on “View Shop” at your Order item.

The screenshot shows a list of order items from 'Hội An Tourist'. The first item is highlighted with a red box around the 'XEM CỬA HÀNG' button. The page includes tabs for 'TẤT CẢ', 'CHƯA THANH TOÁN', 'ĐÃ THANH TOÁN', and 'ĐÃ HOÀN THÀNH'. Below the items, there is a total payment amount of '550,000đ (Đã thanh toán)' and a 'CHI TIẾT' button.

Figure 147: View Shop

Shop site is shown below

The screenshot shows the shop page for 'Hội An Tourist' on the iTravel platform. It features a profile picture, a search bar, and a 'Tim kiem' button. Below the profile, there is a brief description of the shop and its rating. A section titled 'Tất cả dịch vụ' displays several tour packages with small images, names, ratings, and review counts. The packages include tours to Da Nang, Lang Son, Hanoi, and Ho Chi Minh City.

Figure 148: Shop

### 3.5.5.2 Order Detail

This feature is used to view an order detail.

Step 1: Follow Step 1 of [section 3.4.1.2](#)

### 3.5.5.3 Service Rating

This feature is used to Rate the Service they used

Step 1: On the My Order site, click on “Rate” at your Order item, and you will be redirected to the Service View site.

Lịch sử mua hàng

TẤT CẢ CHUA THANH TOÁN ĐÃ THANH TOÁN ĐÃ HOÀN THÀNH

Hội An Tourist XEM CỬA HÀNG DÁNH GIÁ

Tour Đi Bán Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng  
Tour cả ngày cùng ăn tối  
Số lượng: 2

Hội An Tourist XEM CỬA HÀNG DÁNH GIÁ

Tour Đi Bán Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng  
Tour sáng chiều  
Số lượng: 1

Tổng thanh toán: **550,000đ** (Đã thanh toán) CHI TIẾT

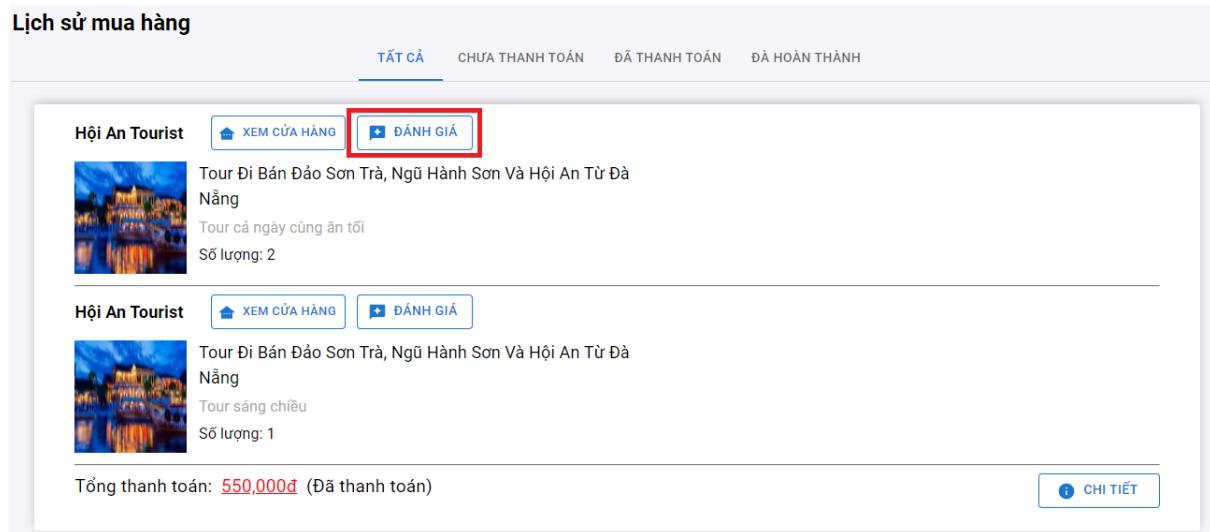
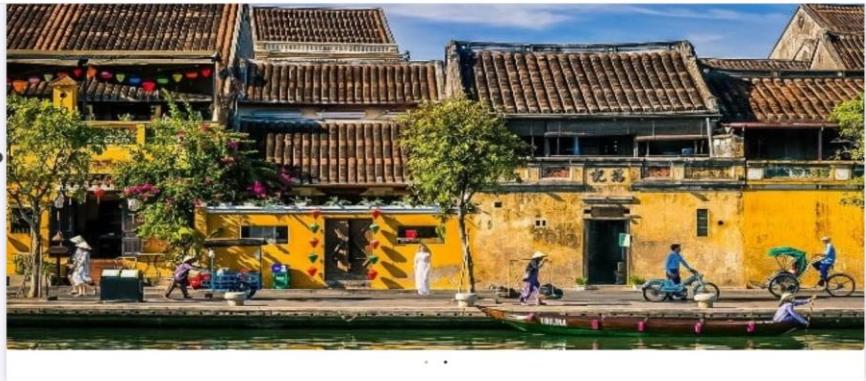


Figure 149: Service Rating

iTravel

Tìm kiếm



**Tour Đi Bán Đảo Sơn Trà, Ngũ Hành Sơn Và Hội An Từ Đà Nẵng (10 ngày)**  
Tr 112,000 vnd  
★★★★☆ (40 đánh giá)

HỘI AN TOURIST

Tham quan Công viên Giải Tri Ân Tượng Hội An tuyệt vời và Show Hội An Kỳ Niên với chiếc vé này ngay! Kinh ngạc trước chương trình nghệ thuật lớn nhất của Việt Nam với 500 nghệ sĩ biểu diễn trên sân khấu ngoài trời trong trang phục áo dài truyền thống và kỹ thuật dân dụng hiện đại. Du hành ngược thời gian khi bạn khám phá ngôi làng theo chủ đề truyền

Chọn ngày tham quan  
Bắt đầu

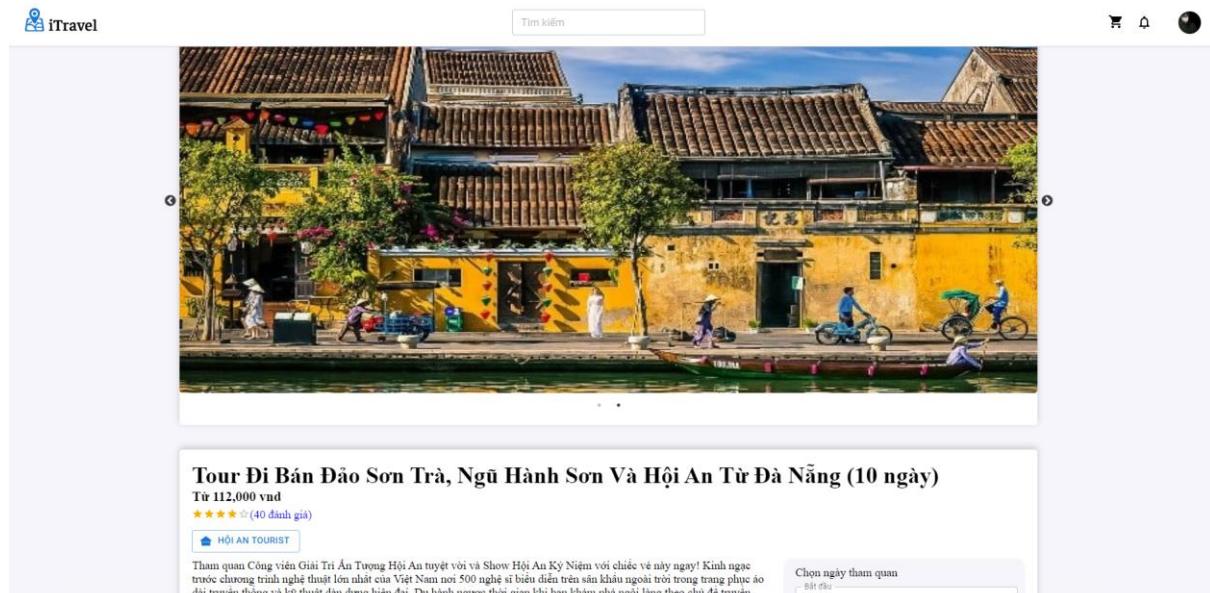


Figure 150: Service View

Step 2: In the “Rating” section, choose the score (star) you want, and click “Rate” to rate that service.



Figure 151: Service Rating

You will receive a successful snack bar as below

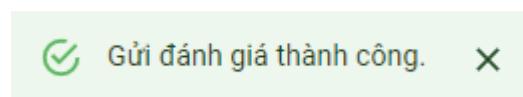


Figure 152: Success Snack Bar

### 3.5.6 Order Detail

This feature is used to see the detail of an order user bought.

Follow Step 1 of [section 3.4.1.2](#) to the access Order Detail site.

#### 3.5.6.1 Refund Request

This feature is similar to Create refund request in [section 3.4.1.2](#).

### 3.5.7 Service View

This feature is used to see the detail of a service.

Follow [section 3.2.2](#) to access the View Service site.

#### 3.5.7.1 View Shop

This feature is used to go to Service's Shop site

Step 1: On the Service View site, click on the Shop Name button as below, you will be redirected to the Shop site.

The screenshot shows a travel service website for a show in Hoi An. At the top is a large image of performers in traditional costumes. Below it is a title: "Vé Show Ký Ức Hội An Và Công Viên Văn Hóa Án Tượng Hội An (10 ngày)". A price of "Từ 100,000 vnd" is listed, along with a rating of "★★★★☆ (30 đánh giá)". A red box highlights the "HỘI AN TOURIST" logo. To the right, there are sections for selecting a viewing date ("Chọn ngày tham quan") and choosing the number of service packages ("Chọn số lượng gói dịch vụ").

Figure 153: View Shop

Shop site is shown below

The screenshot shows a travel agency's shop page. At the top is the agency's logo, "iTravel". Below it is a search bar and a sidebar with links like "Tất cả dịch vụ". The main area displays several tour packages in a grid format:

- Tour Đi Bán Đảo Sơn Trà, Núi Hành Sơn Và Hội An...** (Hội An Tourist)
  - Đà Nẵng
  - 4 đánh giá
  - Giá chỉ từ ₫ 700.000
- Tour Đi Bán Đảo Sơn Trà, Núi Hành Sơn Và Hội An...** (Hội An Tourist)
  - Lang Son
  - 5 đánh giá
  - Giá chỉ từ ₫ 860.000
- Tour Đi Bán Đảo Sơn Trà, Núi Hành Sơn Và Hội An...** (Hội An Tourist)
  - Hà Nội
  - 4 đánh giá
  - Giá chỉ từ ₫ 350.000
- Du Thuyền Sài Gòn Với Bữa Tối Trên Tàu Saigon...** (Hội An Tourist)
  - Bình Phước
  - 3 đánh giá
  - Giá chỉ từ ₫ 1.000.000

Figure 154: Shop

### 3.5.7.2 Booking/Add to cart

This feature is similar to the Add service to cart in [section 3.2.3](#).

### 3.5.7.3 Service Rating

This feature is similar to the Service Rating in [section 3.5.5.3](#).

### 3.5.7.4 Discuss

This feature is used by users to discuss the service.

In “Discuss” section:

- Fill out your comment in the green area to leave a comment to the service
- Fill out your comment in the blue area to reply to a comment on the service
- Click into the corresponding button (red area) to send your comment/reply

The screenshot shows a discussion interface. At the top, there is a green-bordered input field labeled "Bình luận" (Comment) with a red arrow button on the right. Below it, a comment is shown from a user named Dung Nguyen Viet, with a timestamp of 06:52 12-04-2022. This comment has a blue-bordered reply input field labeled "Trả lời" with a red arrow button on the right. Further down, another comment is shown from a user named Sei Silver, with a timestamp of 10:02 11-04-2022. This comment also has a blue-bordered reply input field labeled "Trả lời" with a red arrow button on the right. The entire interface is framed by a light gray border.

### 3.5.8 Service Management for Seller

These features will require an account with seller authority. To have seller permission, please read section [3.5.4.4 Shop Registration](#).

#### 3.5.8.1 View Shop Service List

To view the shop service list, go to the seller sidebar and choose "Service List".

- To search a service, input the keyword on the search bar then press enter.
- To create a new shop service, click the new service button.
- Choose a number of rows per page to view a number of services at once.
- Change the next or previous page by clicking on change page button.

The screenshot shows a service management interface. On the left is a sidebar with user information and navigation links. The main area is titled 'Danh sách dịch vụ' (Service List) and contains a table of services. Annotations highlight several UI elements:

- Search bar:** A red box highlights the search input field and its search icon.
- New service button:** A red box highlights the '+' button in the top right corner of the table header.
- Change rows per page:** A red box highlights the 'Rows per page' dropdown and its value '10'.
- Change page button:** A red box highlights the left and right arrows used for navigating through pages.

STT	Ảnh	Dịch vụ	Địa điểm	Danh mục	Trạng thái	Ngày tạo	Tùy chọn
1		Tour tham quan địa đạo Củ Chi	Đ. Tỉnh Lộ 15, Phù Hiệp, Củ Chi	Điểm tham quan & vui chơi	Không khả dụng	01/05/2021	Chỉnh sửa
2		Dịch vụ đưa đón sân bay Tân Sơn Nhất - TP Thủ Đức	Sân bay Tân Sơn Nhất	Phương tiện di chuyển	Đang hoạt động	16/02/2022	Chỉnh sửa Xóa dịch vụ
3		Ăn tối trên du thuyền sông Sài Gòn	85 Đô Bá	Điểm tham quan & vui chơi	Chờ phê duyệt	03/02/2022	Chỉnh sửa
4		Du ngoạn trên sông Sài Gòn	85 Đô Bá	Điểm tham quan & vui chơi	Chờ phê duyệt	23/12/2021	Chỉnh sửa
		địa chỉ 0744, Quận		Phương tiện di			

Figure 155: Shop Service List

### 3.5.9 Order Record Management for Seller

These features will require an account with seller authority. To have seller permission, please read section [3.5.4.4 Shop Registration](#).

#### 3.5.9.1 View Order Record List

To view the shop order record list, go to the seller sidebar and choose "Order Record List".

- To filter order records, choose date start and date end then press the “Enter” button.
- To view the detail of an order, click on the “View order detail” link.
- Choose a number of rows per page to view a number of orders at once.
- Change the next or previous page by clicking on the change page button.

The screenshot shows an order record list interface. On the left is a sidebar with user information and navigation links. The main area is titled 'Danh sách đơn hàng' (Order Record List) and contains a table of orders. Annotations highlight several UI elements:

- Filter by date:** A red box highlights the date range filters ('Ngày bắt đầu' and 'Ngày kết thúc') and the search button ('TÌM KIẾM').
- View order detail:** A red box highlights the 'Xem chi tiết' link next to the second order record.
- Change rows per page:** A red box highlights the 'Rows per page' dropdown and its value '10'.
- Change page button:** A red box highlights the left and right arrows used for navigating through pages.

STT	Mã đơn	Người đặt	Ngày đặt	Tổng tiền	Trạng thái	Tùy chọn
1	157	Võ Tiên Huy	17/02/2022	1.966.000	Đã hoàn thành	Xem chi tiết
2	314	Nguyễn Xuân Diệu	01/04/2022	3.932.000	Đã hoàn thành	Xem chi tiết
3	376	Phan Văn Vũ	14/04/2022	983.000	Khởi tạo	Xem chi tiết

Figure 156: View Order Record List

#### 3.5.9.2 View Order Record Detail

Step 1: On the “Order Record List” screen, click on the “View Order Detail” link to navigate to detail order.

STT	Mã đơn	Người đặt	Ngày đặt	Tổng tiền	Trạng thái	Tùy chọn
1	157	Võ Tiên Huy	17/02/2022	1,966.000	Đã hoàn thành	Xem chi tiết
2	314	Nguyễn Xuân Diệu	01/04/2022	3.932.000	Đã hoàn thành	Xem chi tiết
3	376	Phan Văn Vũ	14/04/2022	983.000	Khởi tạo	Xem chi tiết

Figure 157: View order record detail link

Step 2: The detail order screen is shown, it contains info booking of a user and order record item detail.

Tên người đặt: Võ Tiên Huy
Số điện thoại: 0906686815
Ngày đặt: 10/04/2022
Trạng thái: Hoàn thành
Tổng tiền: 1.966.000 VNĐ

STT	Dịch vụ con	Số lượng	Ngày bắt đầu	Ngày kết thúc	Thành tiền
1	Lướt sóng trên biển Mỹ Khê, Đà Nẵng	2	17/04/2022	29/04/2022	1.966.000

Figure 158: View order record detail screen

### 3.5.10 Home Page

#### 3.5.10.1 View Home Page

Go to the homepage of iTravel by entering "<https://demo-itravel.netlify.app/>" or click on the iTravel logo on the header.

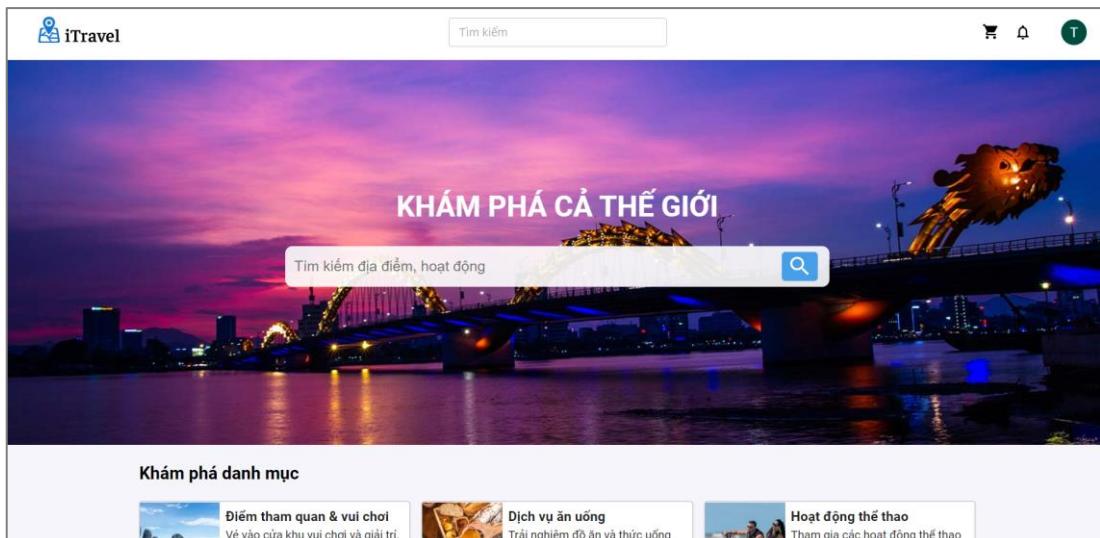


Figure 159: Homepage

### 3.5.10.2 Navigate on Header

The header bar is on the top of the application. It contains a logo, icons, and a search bar.

- Click on the logo to navigate to the Homepage.
- “Go to cart” icon will navigate to the Cart page.
- View the notification list by clicking on the “View notification” icon.
- Enter input to the “Search bar” to search service.

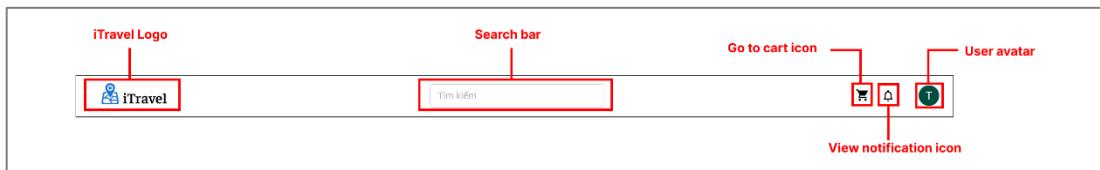


Figure 160: Header when user login



Figure 161: Header when user not login

Click the avatar icon to view the account menu, the menu item will show based on the roles of the account.

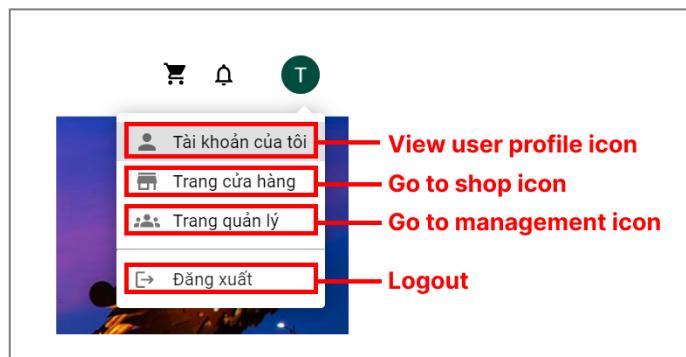


Figure 162: Account Menu

### 3.5.10.3 View Notification List

After clicking on the “View notification icon” on the header bar, a list of notifications of an account will show.

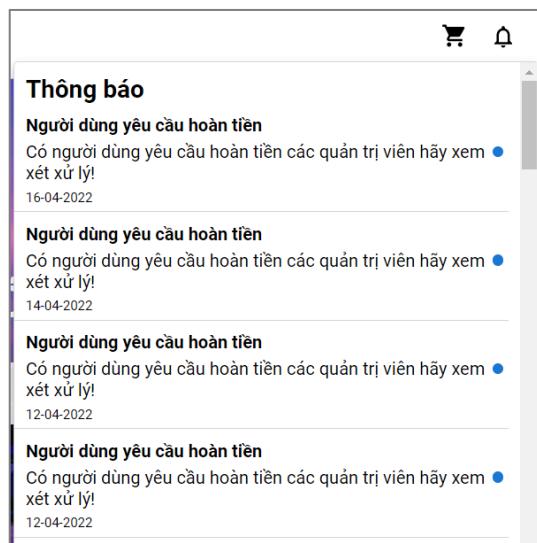


Figure 163: Notification List

### 3.5.11 Search Service

To search services, you can use the search bar on the header or the search bar in the hero section of the Homepage. Input the keyword to the bar then get the result list.

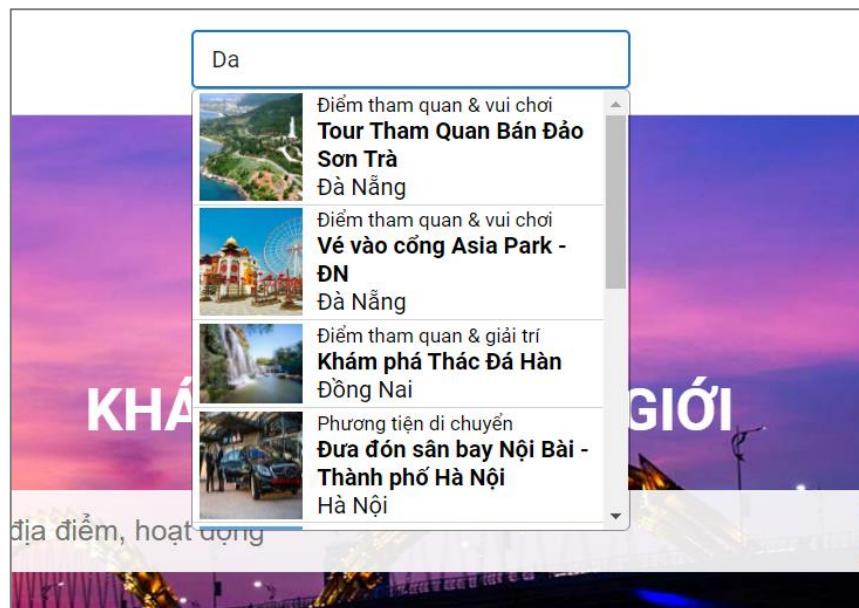


Figure 164: Search on header bar



Figure 165: Search on Homepage

After inputting the keyword, press the “Enter” button to go to the Search Result List screen.

- Check to Combobox to filter by categories.
- Select sort types to filter by sort.

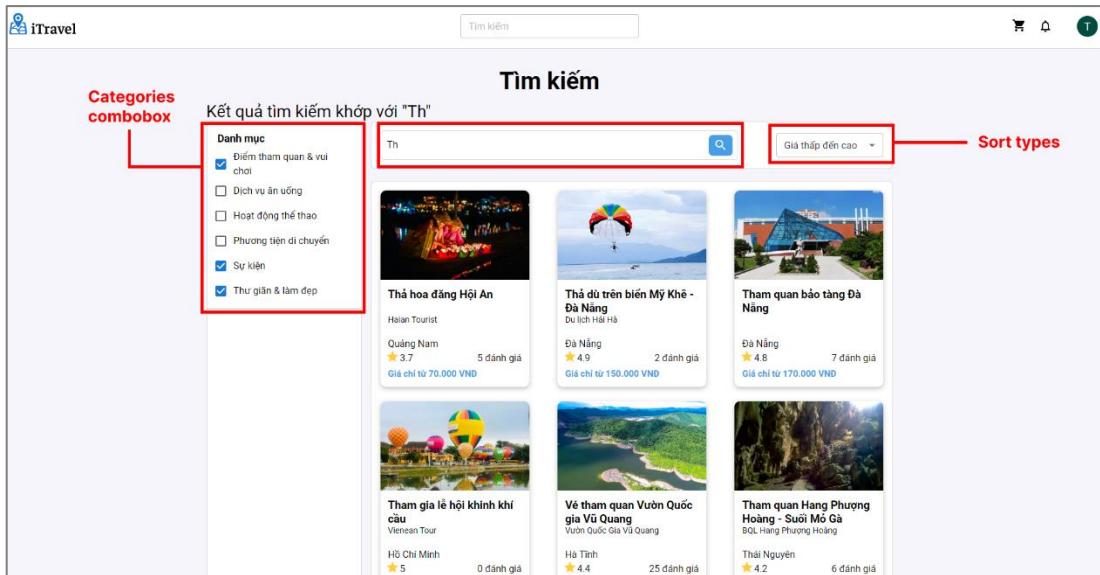


Figure 166: View Service List Result

## VII. Conclusion

Because of the limited time, the technology is quite new, the whole team is inexperienced as well as having to complete the study program and manage the project, the team has 2 people working, the above reasons cause Many difficulties made the whole team unable to spend enough time and effort to perfect and overcome all the limitations mentioned above as the original goal that the team was aiming for.

### 1. Strength

- Using trendy technologies: Using new and trending technologies like Spring Boot, Spring Security (Back End), React + Typescript (Front End),...
- User-Friendly Interface: iTavel gives users a simple, harmonious interface, no excess, no shortage
- Navigation ability: Our team always aims to make it easy for users to use the system right from the first try, even for customers with the least technological capabilities.
- Security: Only supporting login through google account makes the system have a high level of security in the login section because google has already made the most difficult part for the system. In addition, the use of Spring Security along with the token also contributes to the security level of iTavel

### 2. Weakness and Expansion capacity

- Only support for website platform, lack of responsive and mobile application
- Lack of data management tools for the Management team and Sellers
- No support for personalized, our goal is recommendations based on personal information
- Money transfer from the system to the seller is outside of the system
- Payment method only through PayPal

The limitations of the project are the opportunities, the driving force for the expansion of the system. In addition, iTravel can expand its business to more areas in the future.

### 3. Future Plan

- Integrate payment methods with Vietnamese e-wallets to facilitate the payment process.
- Proceed to apply AI to the system to be able to make suitable service suggestions for each user through their search history, or their interaction with services such as clicking to view or purchase history.
- Use AI to create combos of travel experiences that match the user's personality and preferences.
- User Interface / User Experience upgrade. Automatically process data instead of having to do it manually.

## VIII. Appendix

### 1. References

- [1] Statistic data from [vietnamtourism.gov.vn](http://vietnamtourism.gov.vn)
- [2] [Văn Phòng Chính Phủ. \(2022, February 16\)](#)
- [3] [Documentation: Table of Contents — RabbitMQ](#)
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- [5] [Spring | Microservices](#)
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- [9] [Spring Boot OAuth2 Social Login with Google](#)
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- [11] [Reference documentation](#)
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