FPT Fpt University

TRƯỜNG ĐẠI HỌC FPT

Capstone project presentation
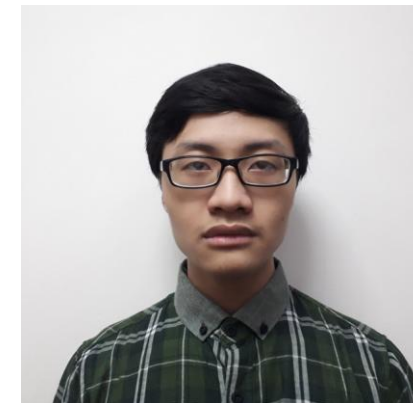
Travel with Locals

Supervisor: **Mr. Dao Trong Duy**

Pham Tung Duong
Team leader

Nguyen Gia Dang
Team member

Tran Hoang Long
Team member

Nguyen Duc Dung
Team member

Hoang Hai
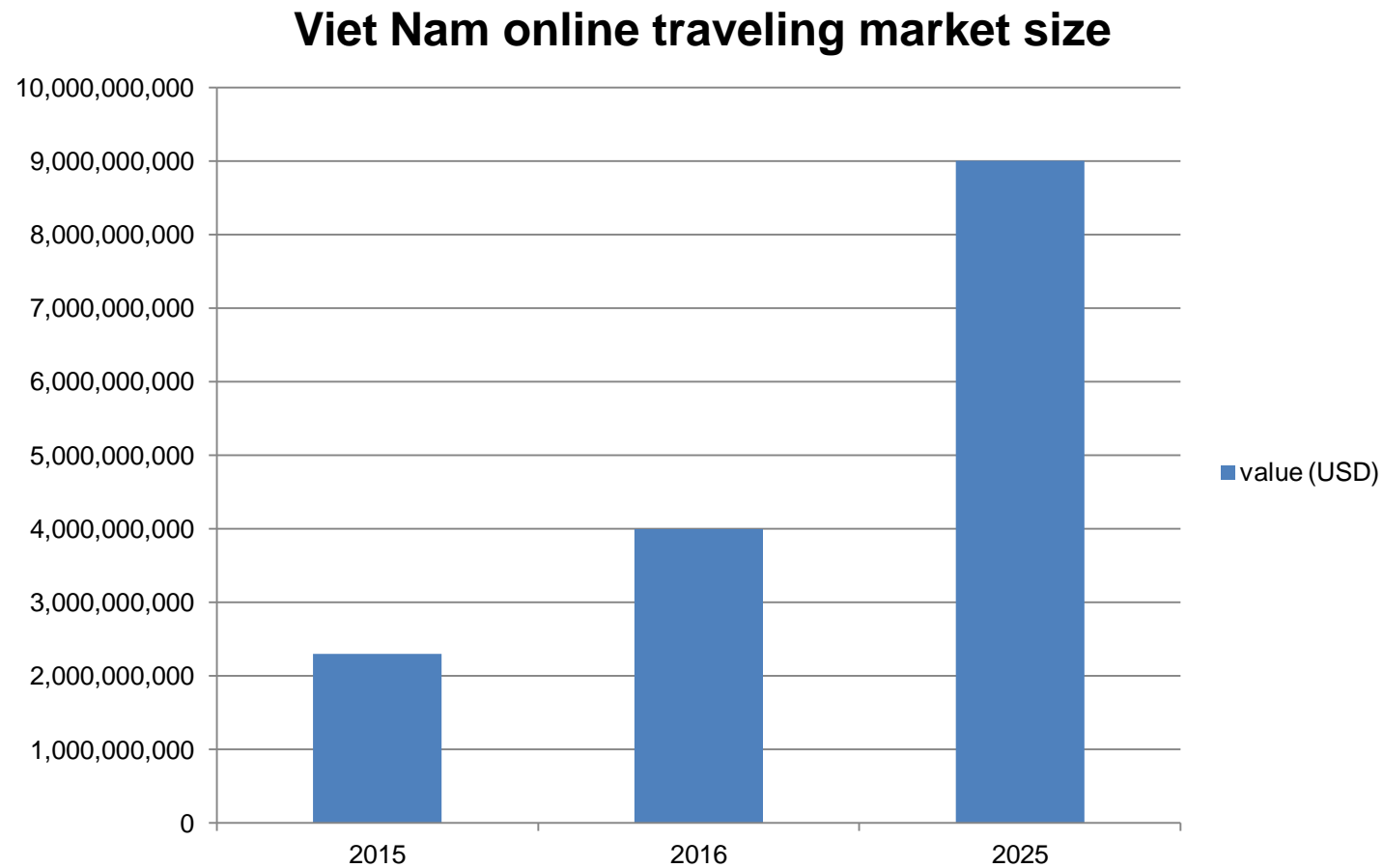Team member

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Project Overview

Background

International visitors to Viet Nam
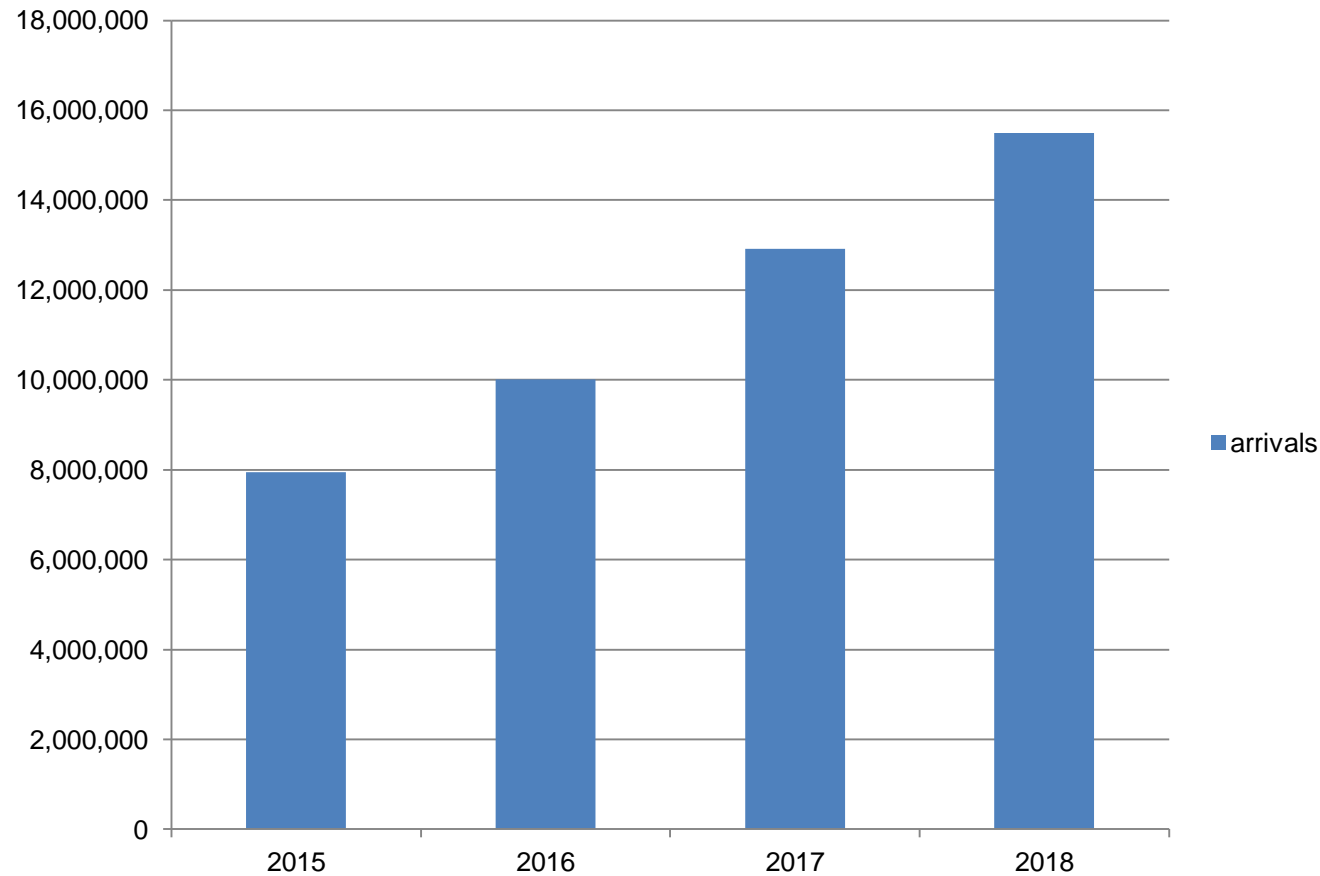
- The number of International visitors to Viet Nam .

Background

Viet Nam online traveling market size

- Viet Nam online traveling market size.
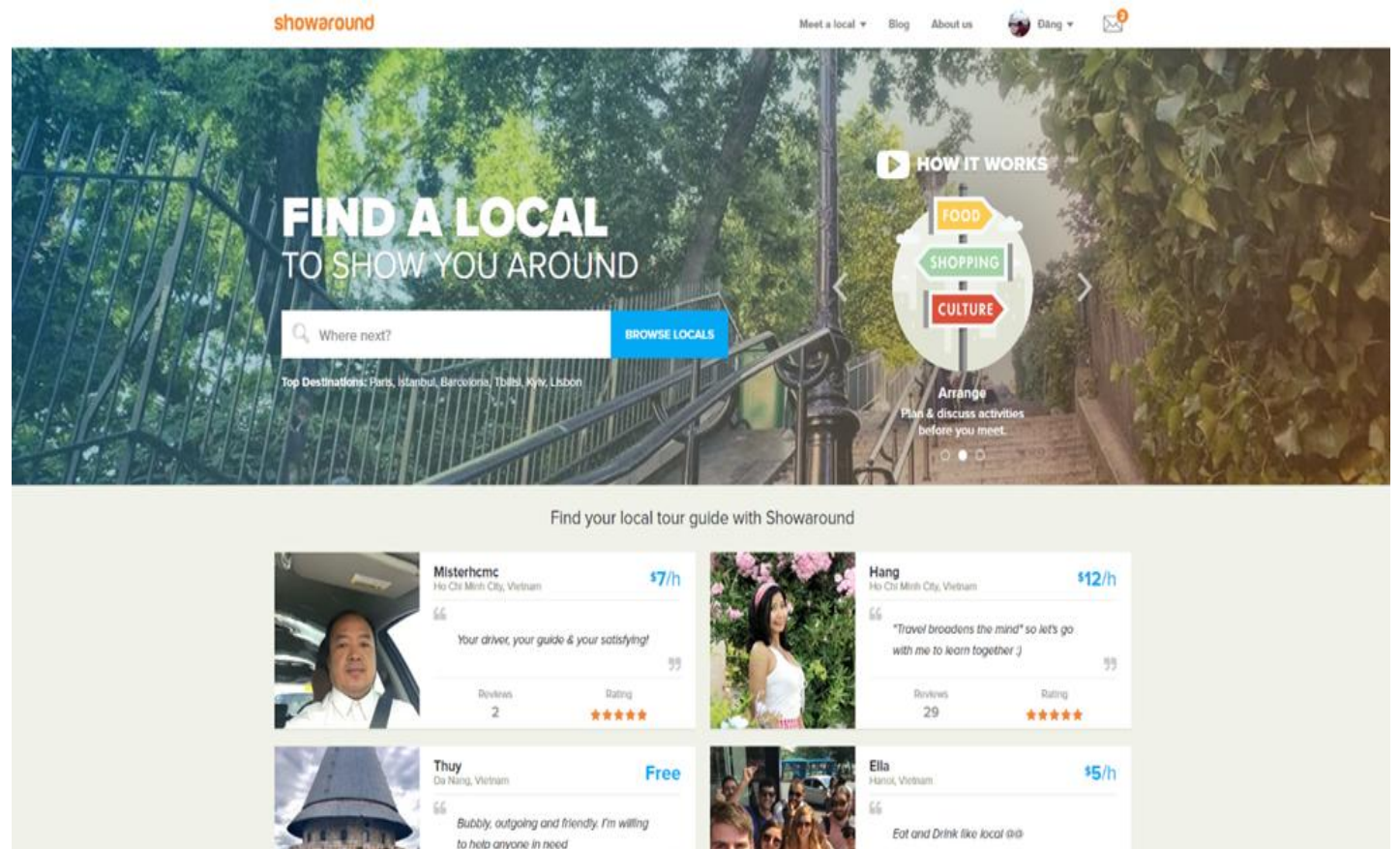
Existing Systems

Showaround.com

- Advantages
  - Large network of guider, easy to become a guider.
  - Function and interface focus on guider.

- Disadvantages
  - Not provide clear about what traveler would take.
  - Guider verification is not carefully in term of legal and identification.

Existing Systems

Withlocals.com

- Advantages

  - Trips are attached with guider, transparent information and process.

  - Be able to customize trip.

  - Mobile app supported.

- Disadvantages

  - No direct contact with guiders before payment.
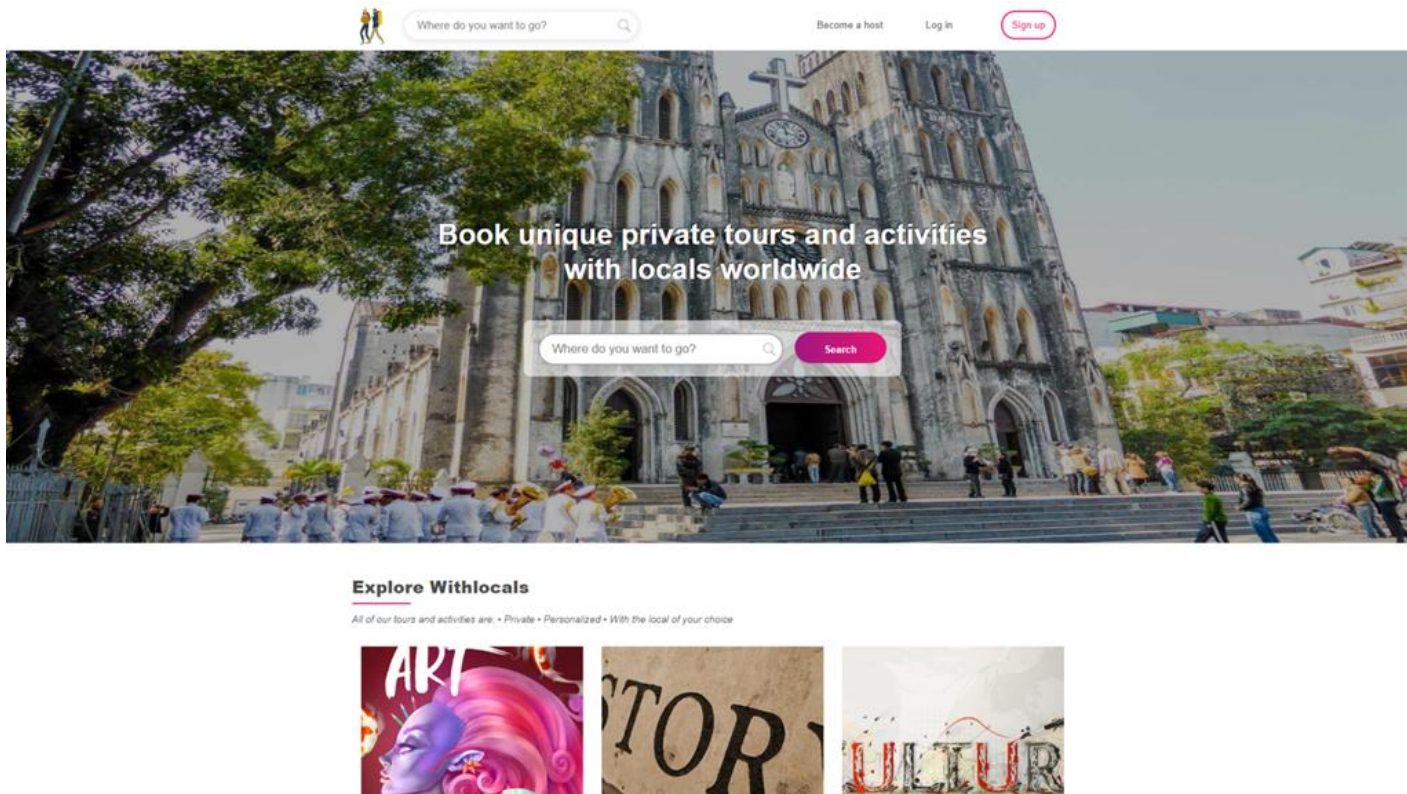
  - Not target on Viet Nam market.
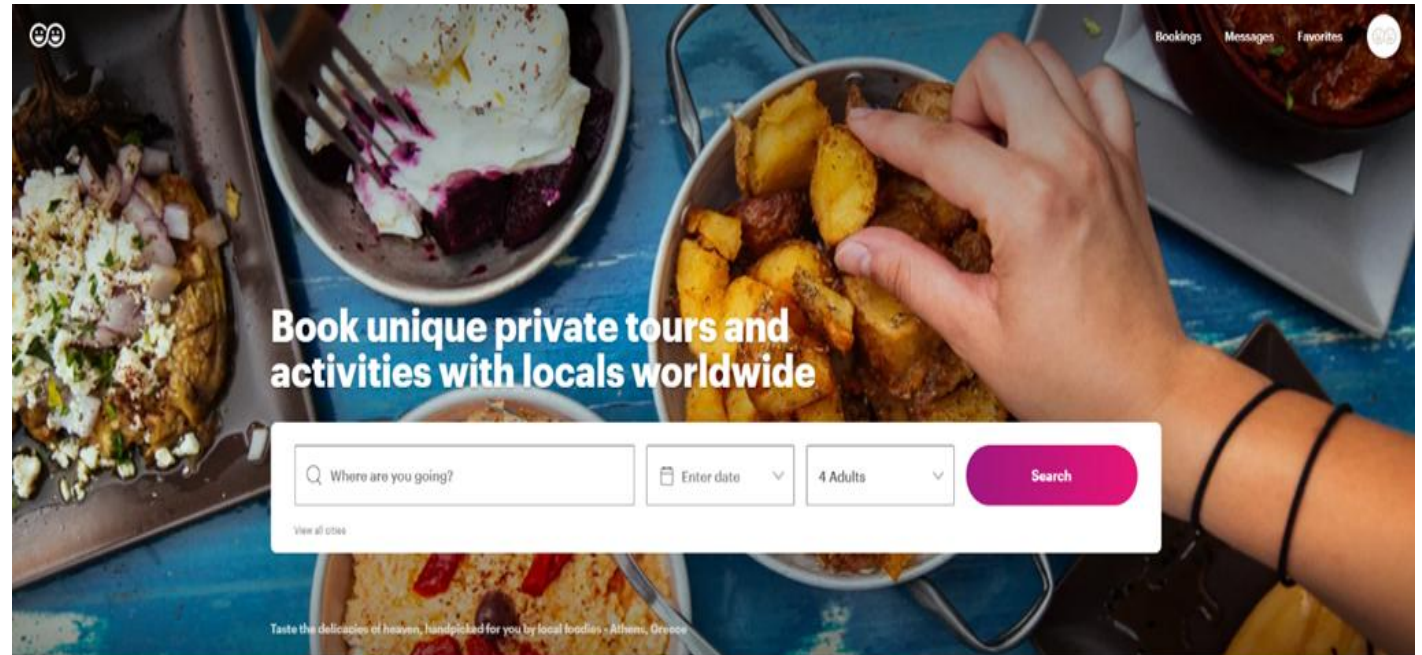
Proposed System

TWL website support travelers to find appropriate local guiders who they think would satisfy their exploration spirit . Travelers will easily find, communicate and find out whether a guider qualified as they like. It is important that Travelers can trust our verified Guiders. Specially, our Guides are recruited to serve foreign who travel in Viet Nam.
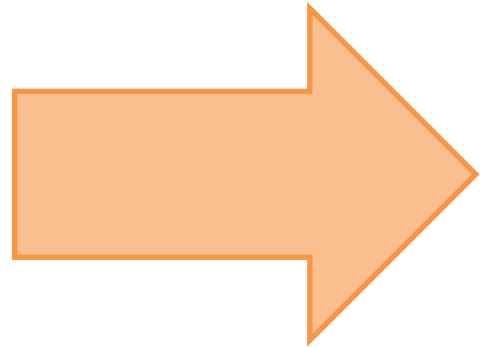
Main Features
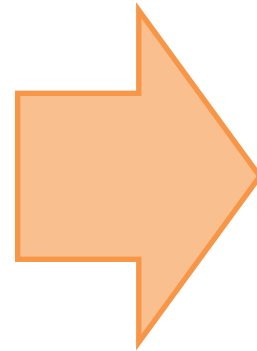
Main Features

Guider

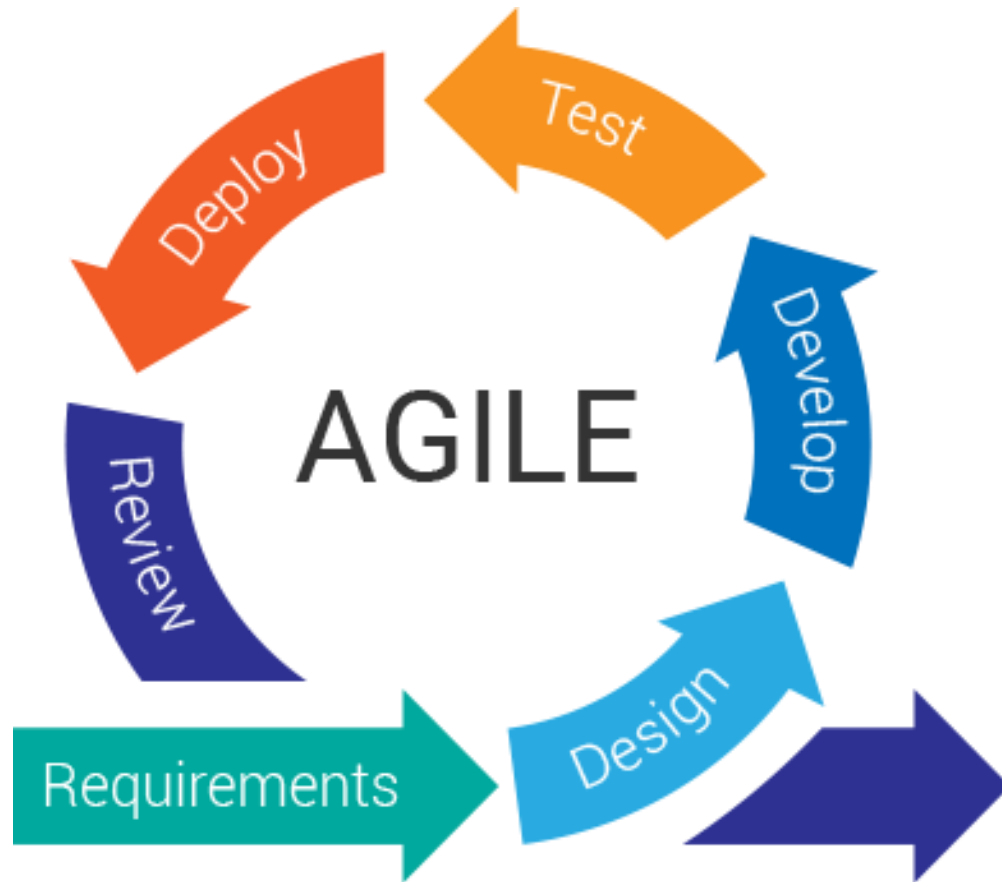Manage post

Manage trips

Out of Scope

- – Pay for guiders: TWL system does not take responsibility to make payment for guiders.
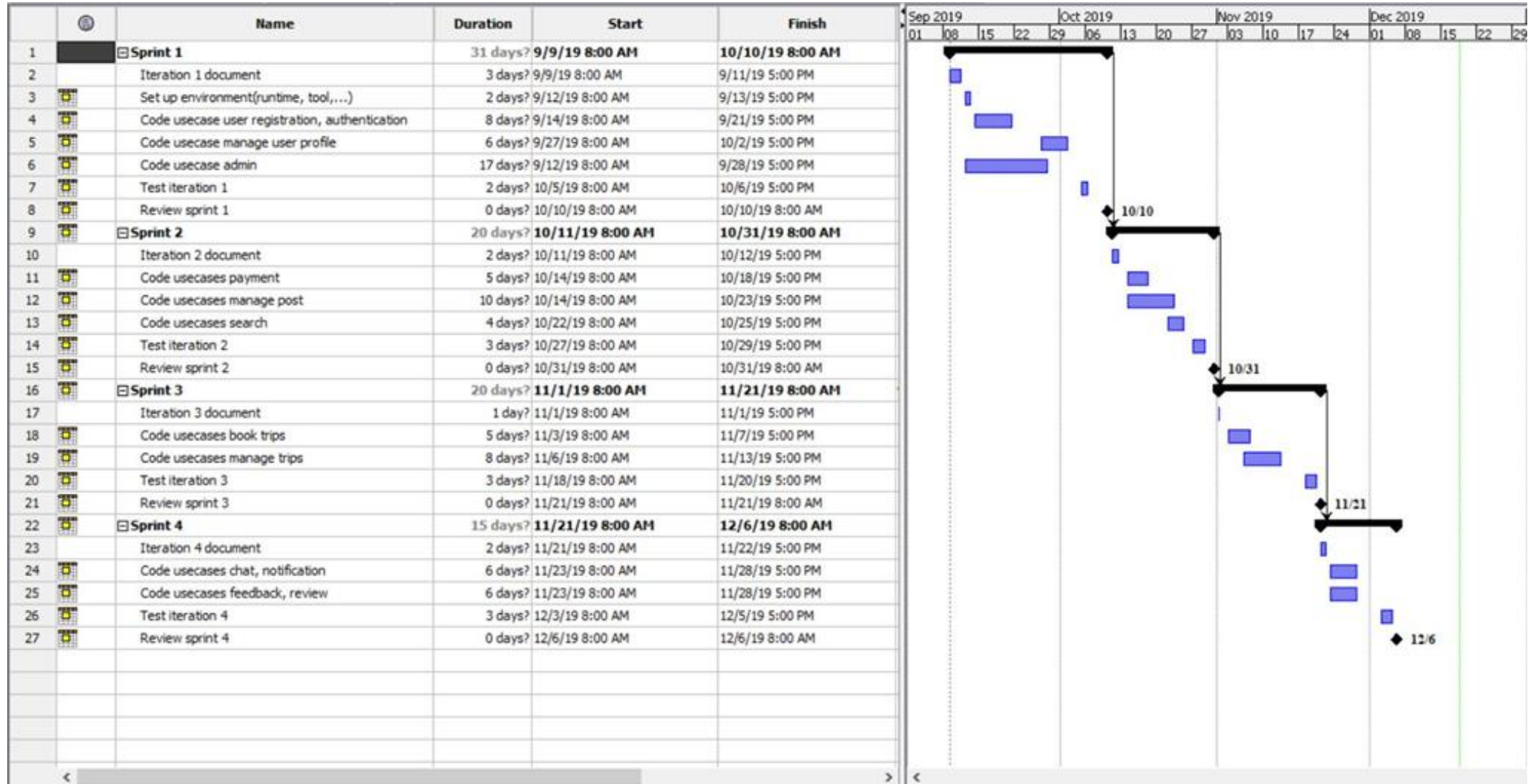
Project Managerment

Software Development Process

Task management

Gantt chart

	⊙	Name	Duration	Start	Finish
1		⊟ Sprint 1	31 days?	9/9/19 8:00 AM	10/10/19 8:00 AM
2		Iteration 1 document	3 days?	9/9/19 8:00 AM	9/11/19 5:00 PM
3	🖳	Set up environment(runtime, tool,...)	2 days?	9/12/19 8:00 AM	9/13/19 5:00 PM
4	🖳	Code usecase user registration, authentication	8 days?	9/14/19 8:00 AM	9/21/19 5:00 PM
5	🖳	Code usecase manage user profile	6 days?	9/27/19 8:00 AM	10/2/19 5:00 PM
6	🖳	Code usecase admin	17 days?	9/12/19 8:00 AM	9/28/19 5:00 PM
7	🖳	Test iteration 1	2 days?	10/5/19 8:00 AM	10/6/19 5:00 PM
8	🖳	Review sprint 1	0 days?	10/10/19 8:00 AM	10/10/19 8:00 AM
9	🖳	⊟ Sprint 2	20 days?	10/11/19 8:00 AM	10/31/19 8:00 AM
10		Iteration 2 document	2 days?	10/11/19 8:00 AM	10/12/19 5:00 PM
11	🖳	Code usecases payment	5 days?	10/14/19 8:00 AM	10/18/19 5:00 PM
12	🖳	Code usecases manage post	10 days?	10/14/19 8:00 AM	10/23/19 5:00 PM
13	🖳	Code usecases search	4 days?	10/22/19 8:00 AM	10/25/19 5:00 PM
14	🖳	Test iteration 2	3 days?	10/27/19 8:00 AM	10/29/19 5:00 PM
15	🖳	Review sprint 2	0 days?	10/31/19 8:00 AM	10/31/19 8:00 AM
16	🖳	⊟ Sprint 3	20 days?	11/1/19 8:00 AM	11/21/19 8:00 AM
17		Iteration 3 document	1 day?	11/1/19 8:00 AM	11/1/19 5:00 PM
18	🖳	Code usecases book trips	5 days?	11/3/19 8:00 AM	11/7/19 5:00 PM
19	🖳	Code usecases manage trips	8 days?	11/6/19 8:00 AM	11/13/19 5:00 PM
20	🖳	Test iteration 3	3 days?	11/18/19 8:00 AM	11/20/19 5:00 PM
21	🖳	Review sprint 3	0 days?	11/21/19 8:00 AM	11/21/19 8:00 AM
22	🖳	⊟ Sprint 4	15 days?	11/21/19 8:00 AM	12/6/19 8:00 AM
23		Iteration 4 document	2 days?	11/21/19 8:00 AM	11/22/19 5:00 PM
24	🖳	Code usecases chat, notification	6 days?	11/23/19 8:00 AM	11/28/19 5:00 PM
25	🖳	Code usecases feedback, review	6 days?	11/23/19 8:00 AM	11/28/19 5:00 PM
26	🖳	Test iteration 4	3 days?	12/3/19 8:00 AM	12/5/19 5:00 PM
27	🖳	Review sprint 4	0 days?	12/6/19 8:00 AM	12/6/19 8:00 AM

Tools and Techniques

IDEs	Visual Studio Code, Intellij
Project management tools	Asana, ProjectLibre
Document tools	Microsoft Office
UML tools	Draw.io
Design tools	Figma.com
Testing tools	Postman, Swagger
Communication tools	Skype, Facebook, Phone
Deployment server	PostgreSql, MongoDB
Database management tools	pgAdmin4, MongoDB Compass
Source code version control	Github
File management tools	Google Drive

Communication Management

Work together: Every Tuesday and Thursday.

Communication:

Meeting with supervisor: Once a week

Risk Management

Risk register

No	Risk description	Category	Root cause	Avoidance plan	Impact
R1	Poor defining scope, ambiguous definition	Scope	Poor business analysis	Team meeting, consult supervisor, investigate solution of similar system	High
R2	Low motivation among team member	Organizational	Different motivation among member	Create team building activity	High
R3	Have a technical block path or unfixable bug	Technical	Lacking experience of technical.	Consult supervisor, find alternative technology	High
R4	Requirement changed while project is being processed	Scope	Different opinion between team member while implementing	Team meeting and consult supervisor to consider change.	High
R5	Team member misunderstands requirement	Scope	Poor communicate process	discuss with BA, read requirement specification carefully	Low
R6	Fail for estimating iteration time	Time	Lacking of predict work process	Working overtime to keep up work	Medium

Requirement Specification

Use Case Diagram

Number of use cases: 41

Traveler: 19

Guest: 9

Guider: 20

Admin: 10

Function Requirements - Guest

— Registration

— Find Guiders

— Find posts

The travel is most appreciated

Enjoy our Vietnam War: Perspective of communist leader

Enjoy our New Year Firework

Enjoy our A tour in the art museum

Enjoy our Vietnam Greatest Hero

Enjoy our What to know about Vietnam Culture

Enjoy our Tour de Ha Noi

Function Requirements - Traveler

– Communicate with Guider

– Book trips

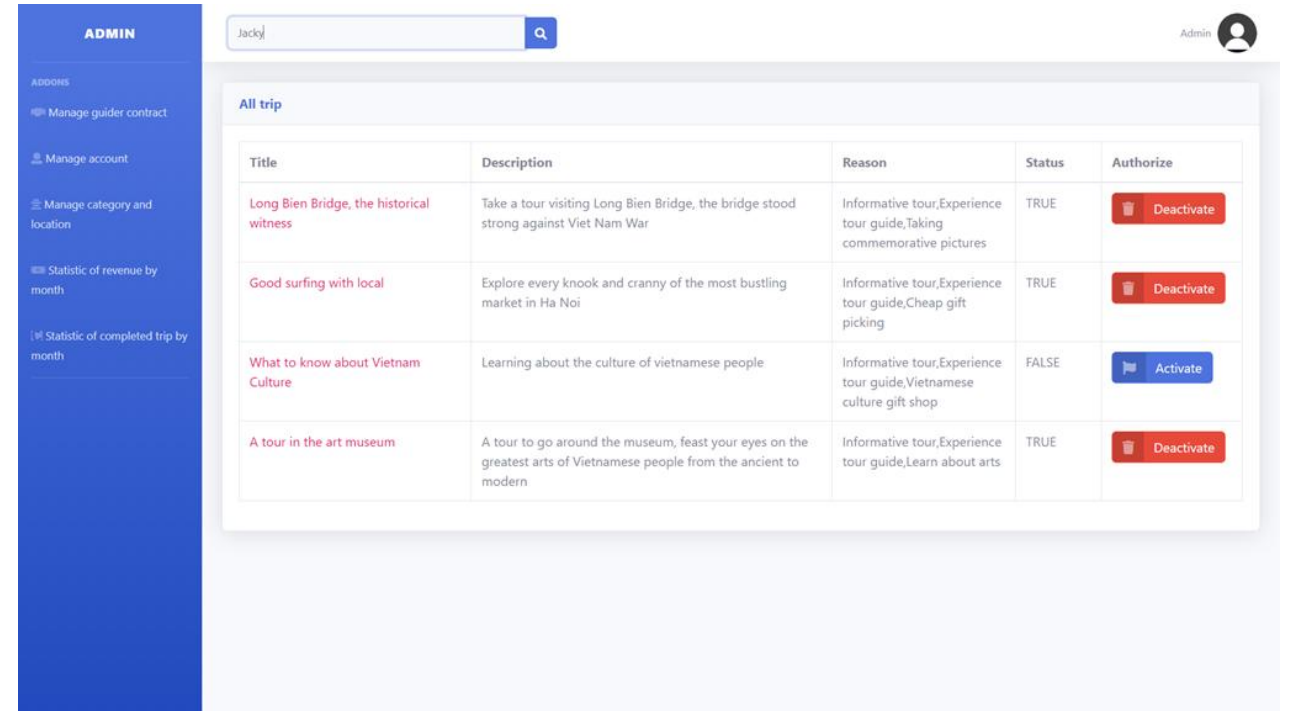– Manage their trips

Function Requirements - Guider

– Manage posts

– Communicate with Travelers.

– Manage trips.
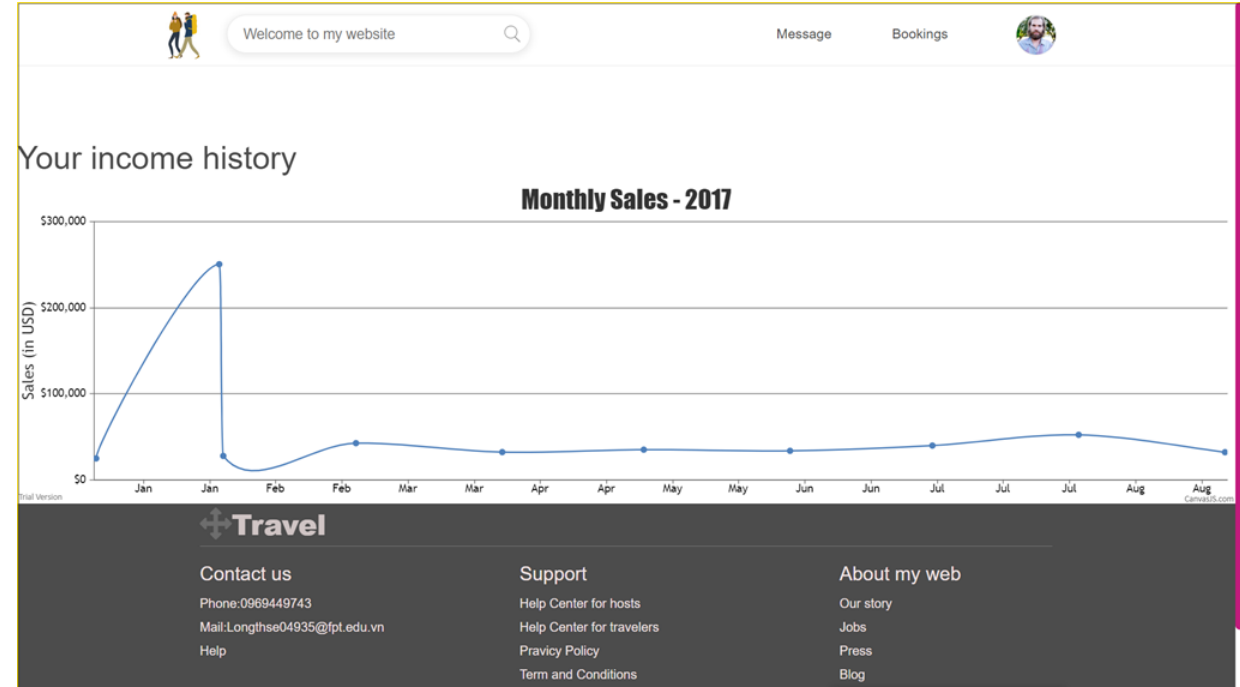
Function Requirements - Admin

— Management account

— View statistics

Non-Functional Requirements

Usability

- TWL web interface is designed clearly, simply, monolithically and easy to get on.

- All the texts and messages are informed friendly and clearly with instruction.

Security

- User account is secured by TWL system.

- User password is encrypted.

- Http request is secured by token.

Non-Functional Requirements

Availability

- The website should be available anytime users want to use it.
- User can access everywhere from their computer with internet connection.
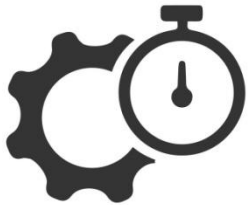
Performance

- TWL website load time is expected to less than 10 seconds in standard network environment.
- Response to user interact is expected to less than 5 seconds in standard network environment.

Non-Functional Requirements

Maintainability

- The application use popular and reliable technology, that keep maintenance cost low.
- The application can be easy to extend new functionality.

Software design

System Architecture
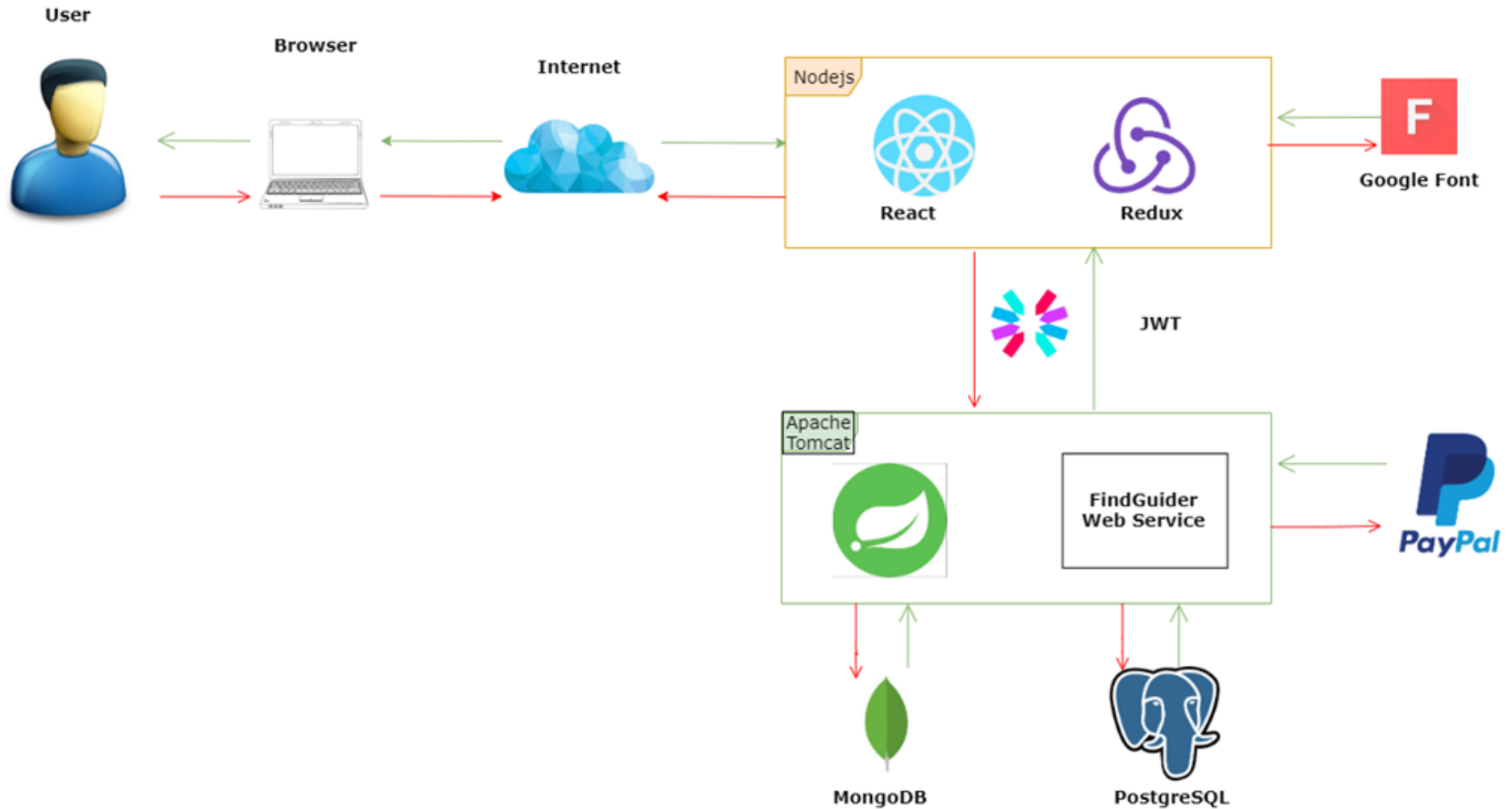
Class Diagram Example

Class diagram for "Sign up a guider account"
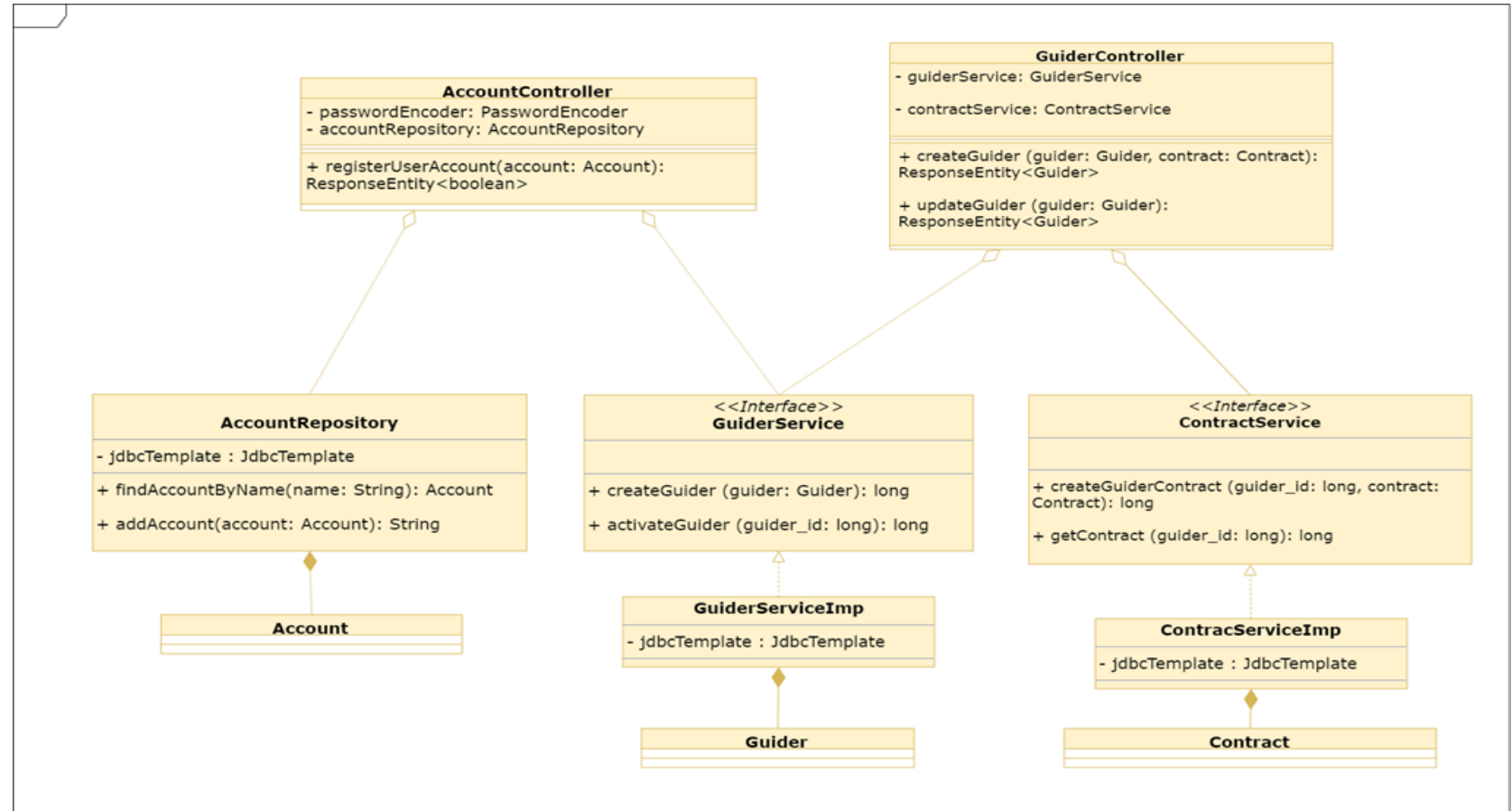
Sequence Diagram Example

Sequence Diagram for
"Sign up a guider account"
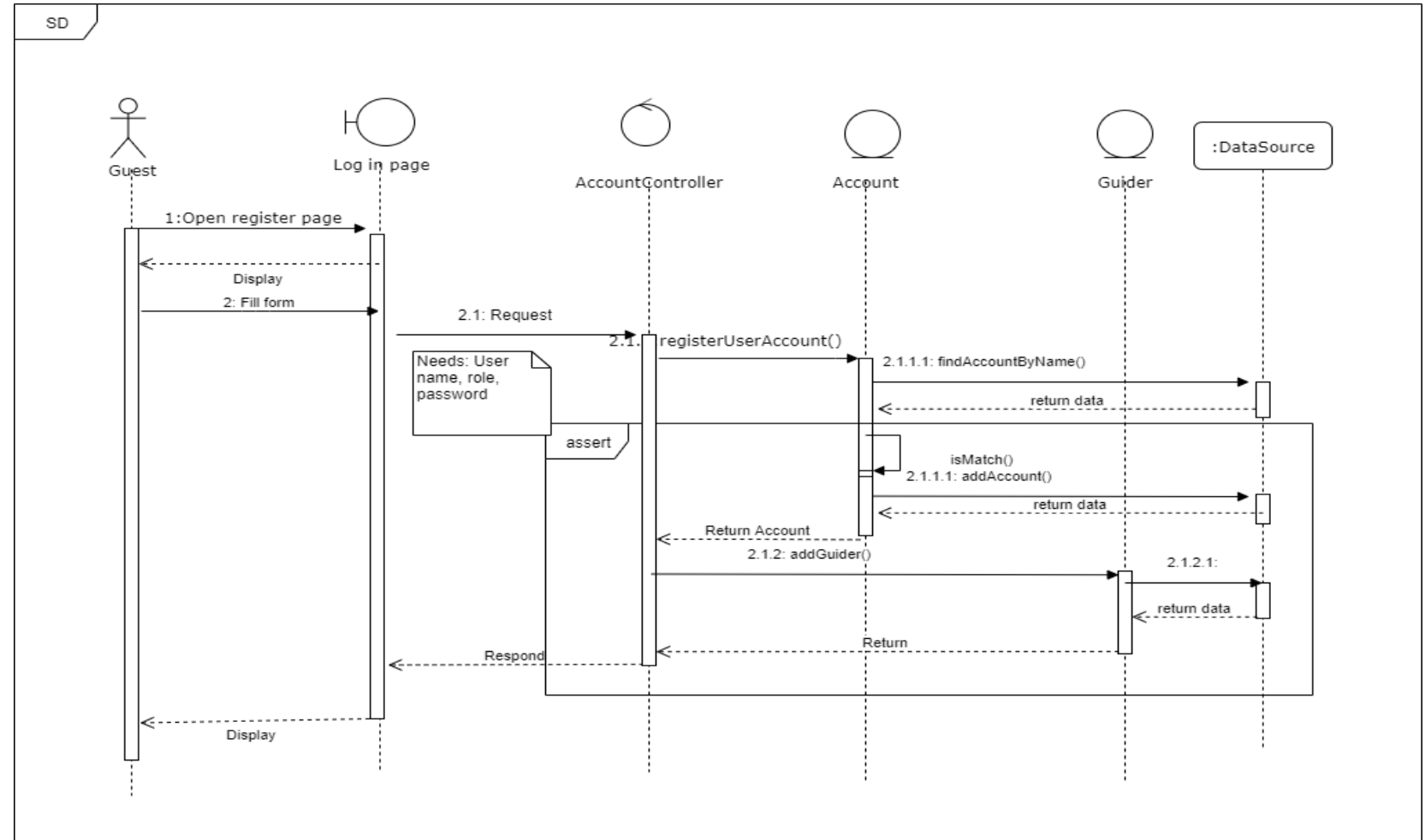
Testing

Testing Tools

Google Sheet
(for log bug)
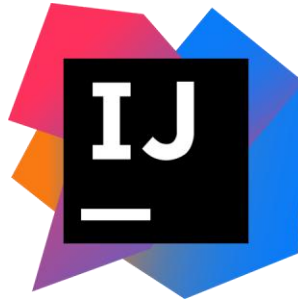
Android Studio
(for Unit test)

Microsoft Excel
(for write test report)

Google Chrome v68

Safari v11

Test Levels

4 Level
Tests
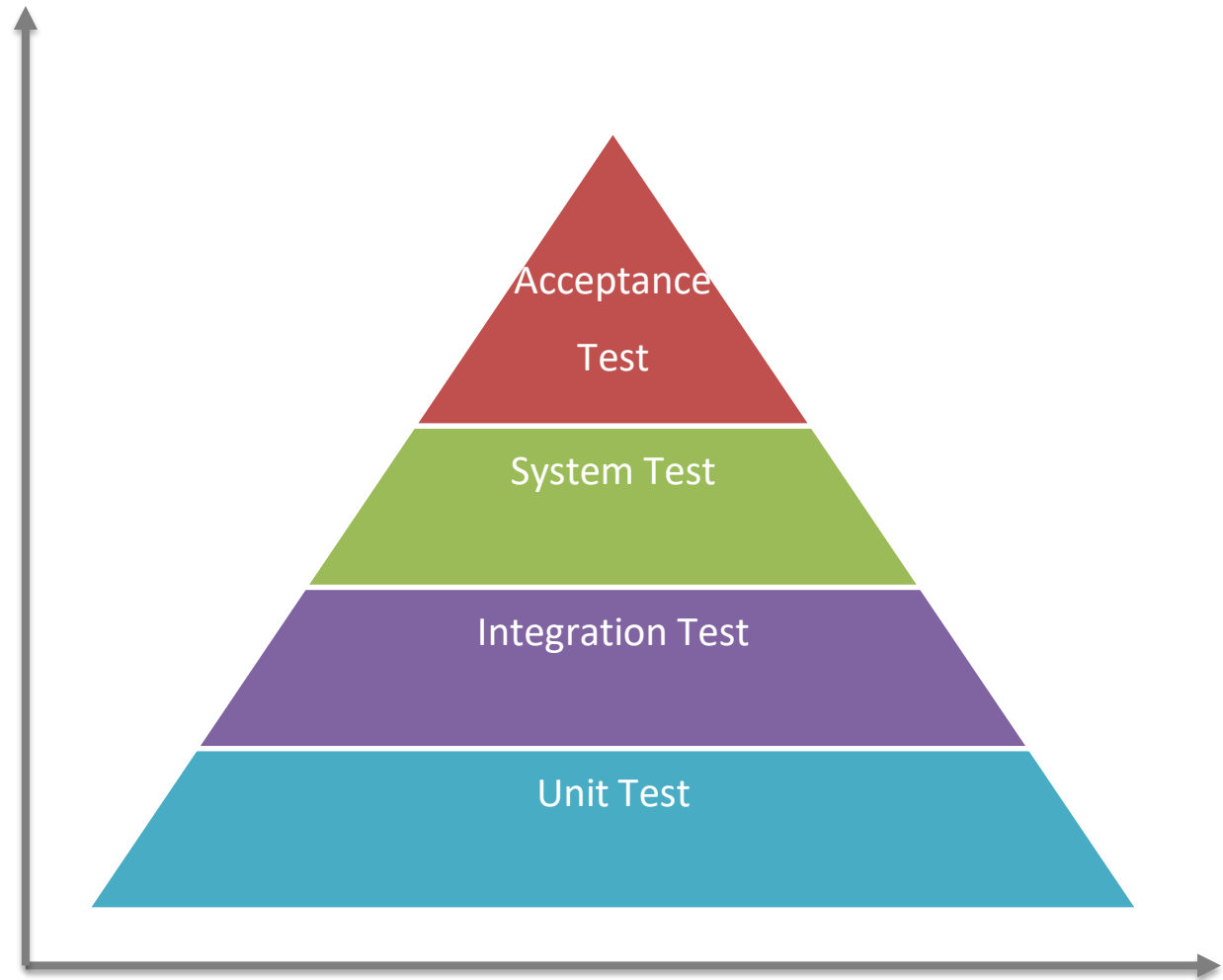
Test Types

Test Type	Test Level			
	Unit Test	**Integration Test**	**System Test**	**User Acceptance Test**
Unit testing	✓	✓	✓	
Regression testing	✓	✓	✓	
Functional testing		✓	✓	✓
GUI testing			✓	✓

Unit Test

Number of Test Cases:
- Controller : 181
- Service : 153

Passed:
- Controller : 181
- Service : 153

Failed:
- Controller : 0
- Service: 0

Cover :
- Controller: 99%
- Service: 94%

Integration Tests

No	Module code	Pass	Fail	Untested	N/A	Number of test cases
1	Guest	83	0	0	0	83
2	Admin	96	0	0	0	96
3	Guider	182	0	0	0	182
4	Traveler	122	0	0	0	122
	Sub total	483	0	0	0	483

Test report

System Tests

No	Module code	Pass	Fail	Untested	N/A	Number of test cases
1	Guest	3	0	0	0	3
2	Admin	14	0	0	0	14
3	Guider	14	0	0	0	14
4	Traveler	8	0	0	0	8
	Sub total	39	0	0	0	39

Test report

Acceptance Test

A	B	C	D
No	Test	Yes	No
1	Can guest sign up as a traveler ?	x	
2	Can guest sign up as a guider ?	x	
3	Can traveler recover forgotten password ?	x	
4	Can guider recover forgotten password ?	x	
5	Can guider login ?	x	
6	Can traveler login ?	x	
7	Can admin login ?	x	
8	Can user search for guiders by name ?	x	
9	Can user search for post by location name ?	x	
10	Can user view list posts of a guider ?	x	
11	Can user view list posts of a category ?	x	
12	Can user view detail of a post ?	x	
13	Can traveler or guider receive notifications ?	x	
14	Can traveler change password ?	x	
15	Can guider change password ?	x	
16	Can traveler logout ?	x	
17	Can guider logout ?	x	
18	Can admin logout ?	x	
19	Can guider add a new post ?	x	
20	Can guider edit a post ?	x	
21	Can guider edit their profile ?	x	
22	Can guider chat with travelers ?	x	
23	Can guider view list of booked trip ?	x	
24	Can guider accept a trip booking ?	x	
25	Can guider refuse a trip booking ?	x	
26	Can guider cancel a trip booking ?	x	
27	Can guider view a traveler's review ?	x	
28	Can guider view their schedule ?	x	
29	Can guider review a traveler ?	x	