

QA

Private Driving Accompany

Python App

Hua Hui Wang
09/12/2022

Contents

Background.....	2
Project management.....	2
User Story	2
1. Customer	3
2. Instructor	3
3. Admin	4
Workflow	4
ERD Diagram.....	4
Use Case Diagram.....	5
WireFrame Diagram	6
1. Lessons Page.....	6
2. Review Page.....	7
3. Sign Up Page	7
Infrastructure Diagram	8
CICD Diagram.....	8
Component Diagram	9
Python Flask	9
Functions	9
Validation	10
Testing	10
CICD	10
Docker	11
Bibliography.....	11

Background

Project management

User Story

The user story is used to generate the system requirement for design the basic system features and functions.

1. Customer

- 1) As customer, I want to keep my account safe, so I need a login page to keep all my information.**
- 2) As customer, I want to view the private instructor or deals, so that I can choose which lesson I would like to attend.**
- 3) As customer, I want to create, update, and delete a request for a lesson, so that I can make extra fees to take my time off on lesson searching.**
- 4) As customer, I want to view the review of driver, so that I can choose the reliable and skilful instructor.**
- 5) As customer, I want to write, update and delete the review of driver, so that driver's performance can be develop and hold accountable.**
- 6) As customer, I want to become instructor, so I can offer driving accompany to make revenue.**

2. Instructor

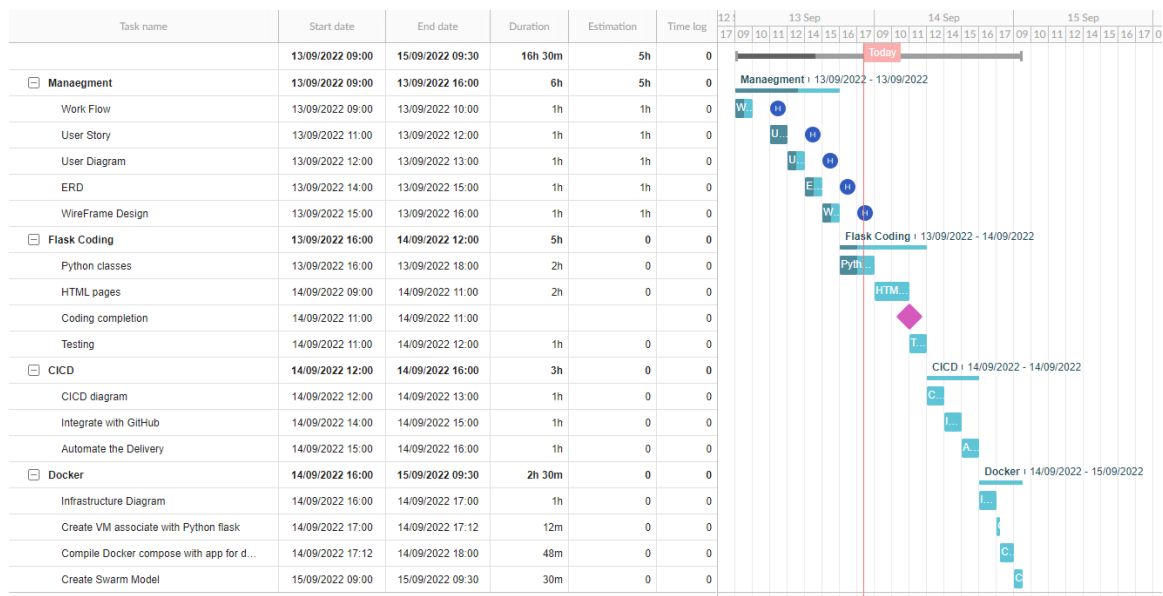
- 1) As instructor, I want to view the request in my area, so that I can provide service to the pupil I want.**
- 2) As instructor, I want to create, update and delete my lesson in the area, so that pupil can follow my schedule.**

3. Admin

- 1) As Admin, I want to approve the driver who is qualified for the instructor in different level, so that pupil is in good hand.
- 2) As Admin, I want to approve the pupil is covered with proper insurance before the lesson started, so that regulation and law is followed.
- 3) As admin, I want to solve the dispute in the driving lesson, so that fair and justice can be reserved.

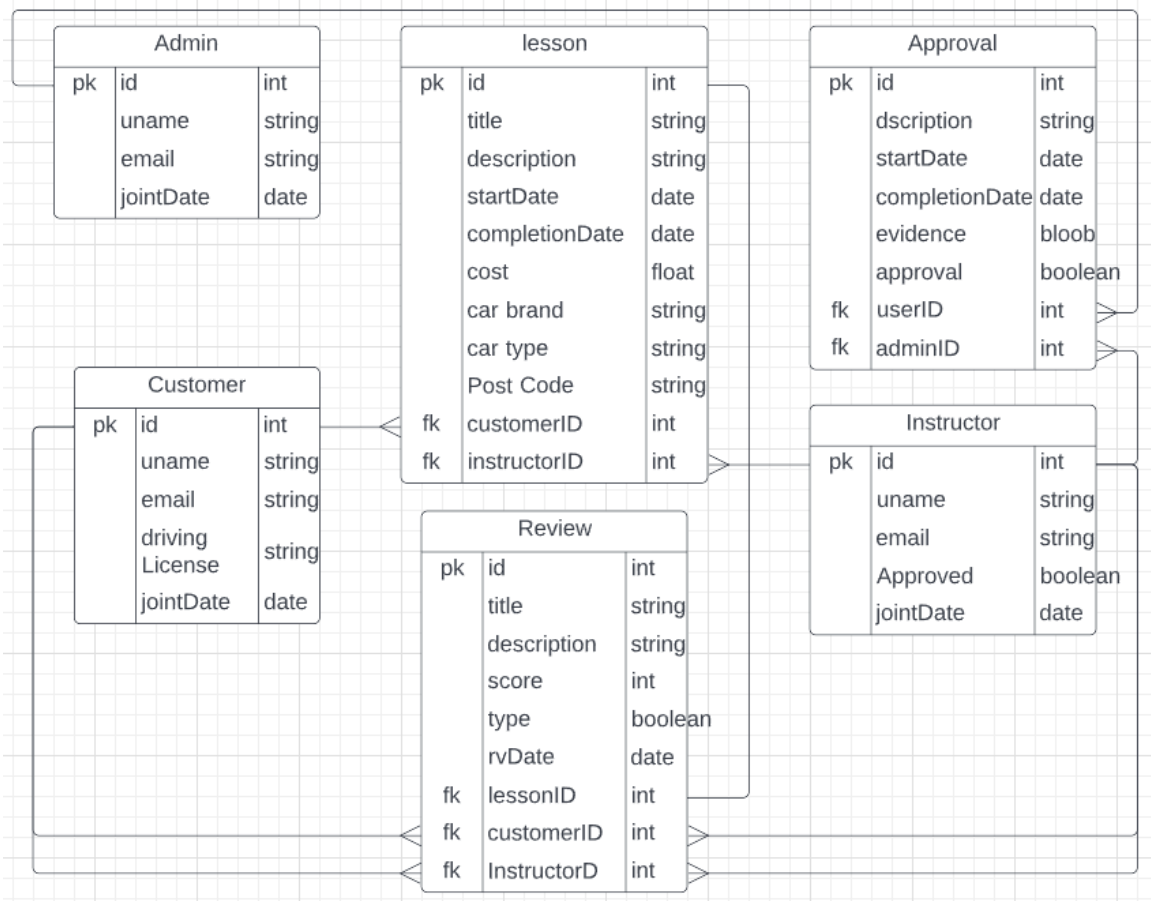
Workflow

This section shows the planning of whole project to meet limit time. The [URL](#) included.



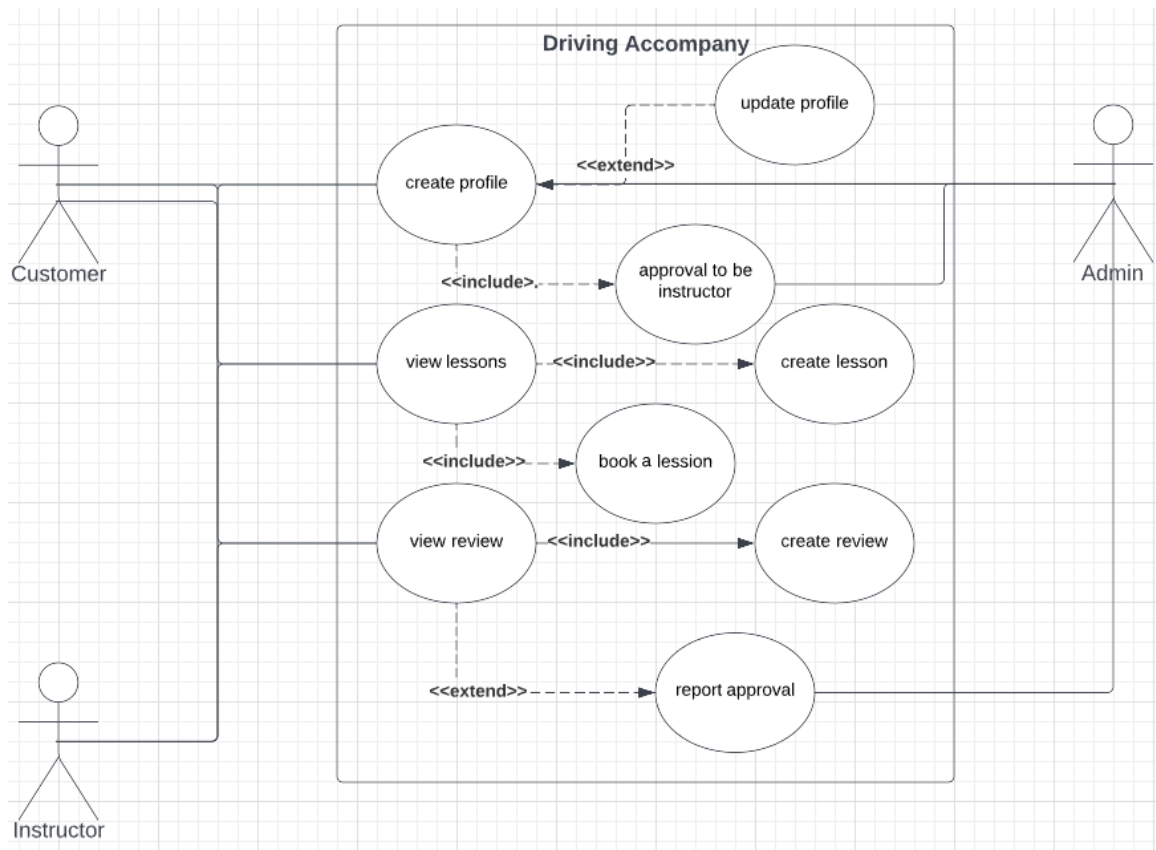
ERD Diagram

This section shows the entity relationship diagram of project which allows the customer to check the lessons online, and to be approved for a new instructor base the evidence provided. Moreover, be able to write the interview about the driver.



Use Case Diagram

The following image show how users interact within the system in a basic level.



WireFrame Diagram

1. Lessons Page

Frame 1

[Home](#) | [Profile](#) | [Reviews](#) | [Lesson](#) | [Approval/Hide](#)

Sign Up/Login/Logout

Title	
Instructor Name	Instructor Review
Area	
Car Brand	
Car Type	Start Date
Cost	End Date

2. Review Page

Frame 1

Home | Profile | **Reviews** | Lesson | Approval/Hide

Sign Up/Login/Logout

User Score: ♥♥♥

Reviewer	Description
<input type="text"/>	
Review date	

3. Sign Up Page

Frame 1

[Home](#) | Profile | Reviews | Lesson | Approval/Hide

Sign Up/Login/Logout

Register

User Name: _____

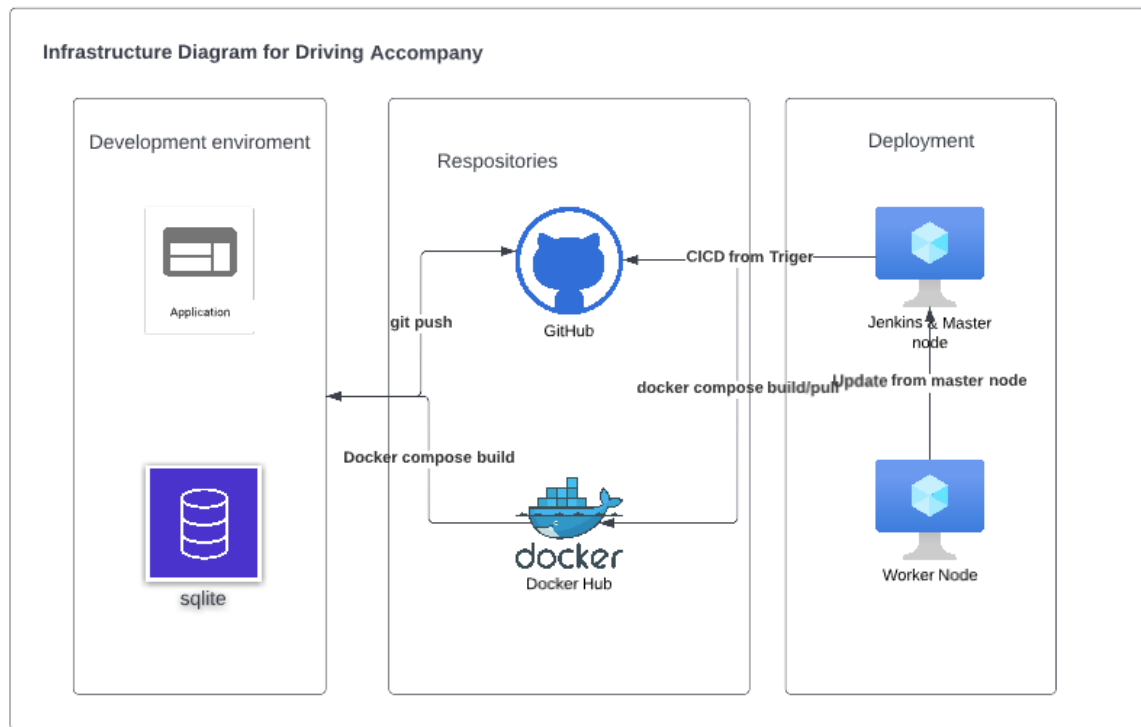
Password: _____

Confirm Password: _____

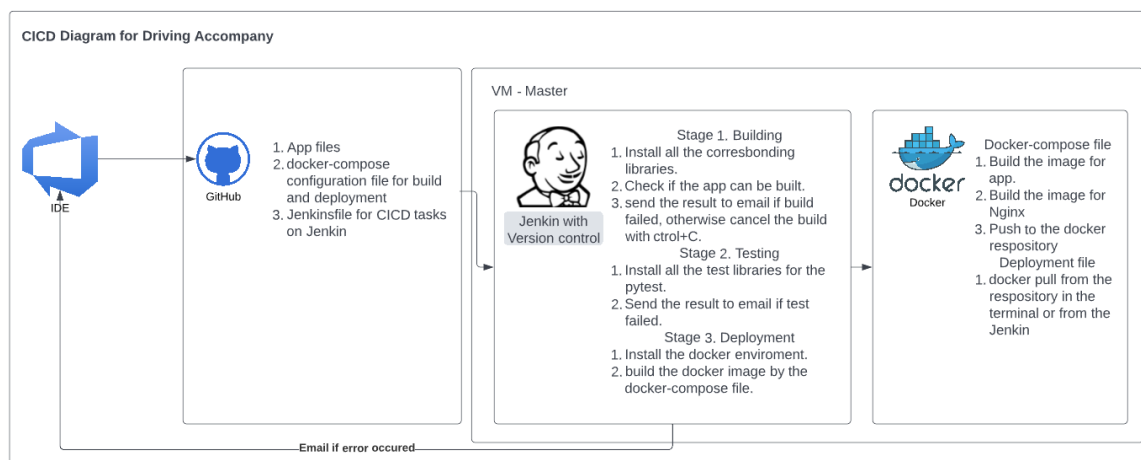
Email: _____

Driving License: _____

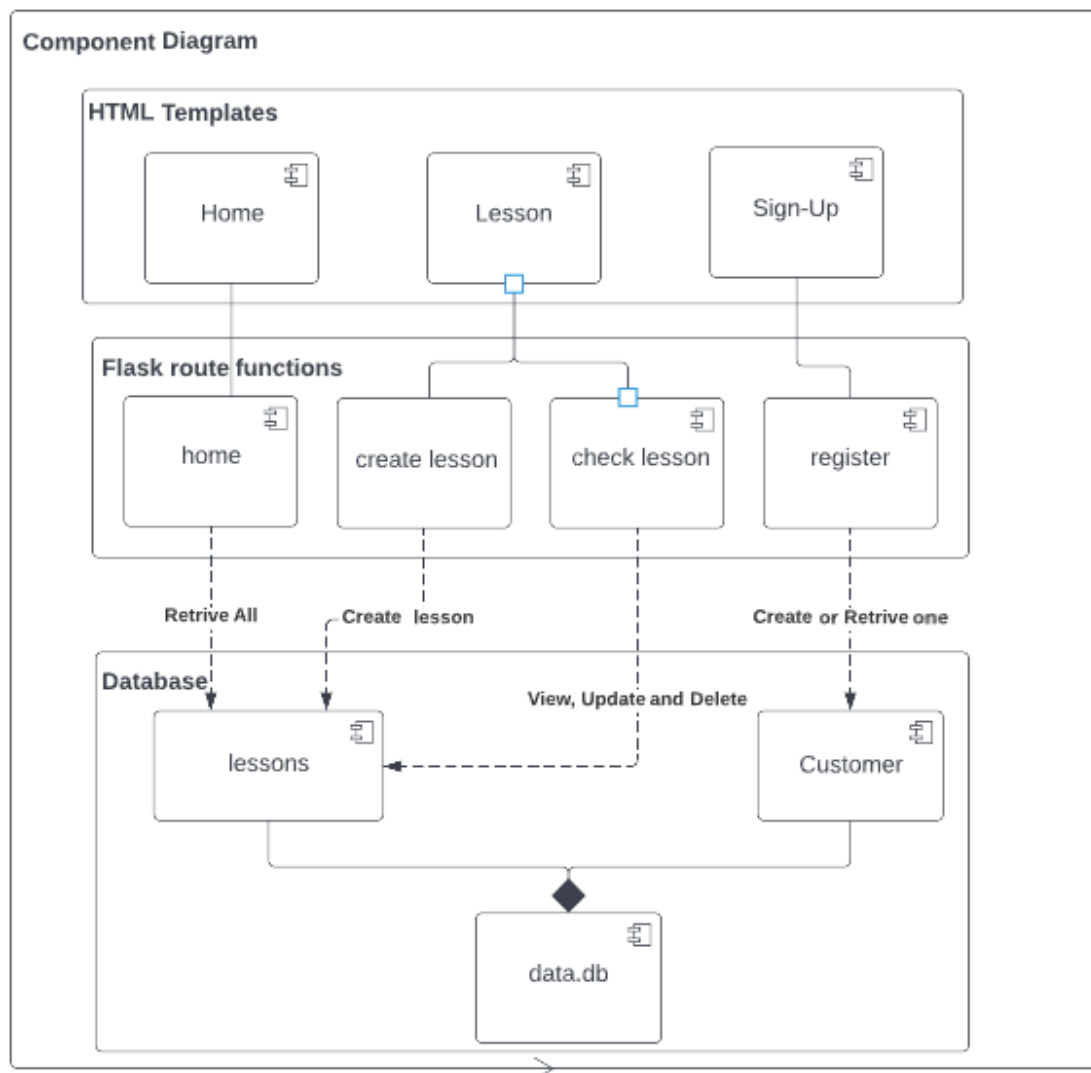
Infrastructure Diagram



CICD Diagram



Component Diagram



Python Flask

Functions

Input Validation

1. Client-side validation

```
docker-compose.yml  docker-compose_build.yml  Dockerfile  Jenkinsfile  app.py  lesson.html  main.py
2  {% block title %}HOME{% endblock %}
3
4  {% block content %}
5
6      <body>
7      <br />
8      <form method="post">
9          <h3 align="center" id="page">Create you lesson</h3>
10         <div class="form-group">
11             <label for="title">Title</label>
12             <input type="text" class="form-control" id="uname" name="title" placeholder="Enter title" required>
13             <label for="description">Description</label>
14             <input type="text" class="form-control" id="description" name="description" placeholder="Enter description">
15             <label for="startDate">Start Date</label>
16             <input type="date" class="form-control" id="startDate" name="startDate" placeholder="Enter start date" required>
17             <label for="endDate">Completion Date</label>
18             <input type="date" class="form-control" id="endDate" name="endDate" placeholder="Enter completion date" required>
19             <label for="cost">Cost</label>
20             <input type="number" step="0.01" class="form-control" id="cost" name="cost" placeholder="Enter your cost" required>
21             <label for="car">Car</label>
22             <input type="text" class="form-control" id="car" name="car" placeholder="Enter car you have" required> <br>
23             <label for="carType">Car Type</label>
24             <select name="carType" id="carType">
25                 <option value="Manual">Manual</option>
26                 <option value="Automatic">Automatic</option>
```

Testing

CICD

Pytest with Jenkins

```
azureuser@driving-accompany:~$ service jenkins start
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to start 'jenkins.service'.
Authenticating as: Ubuntu (azureuser)
Password: Failed to start jenkins.service: Method call timed out
See system logs and 'systemctl status jenkins.service' for details.
azureuser@driving-accompany:~$ polkit-agent-helper-1: pam_authenticate failed: Authentication failure
azureuser@driving-accompany:~$ service jenkins restart
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to restart 'jenkins.service'.
Authenticating as: Ubuntu (azureuser)
Password: 
```

Build Steps

Execute shell ?

Command

See the list of available environment variables

cd /home/azureuser/Driving_accompany

pip install -r requirements.txt
python3 -m pytest

Docker

```
PS C:\Users\vb1\docker\driving_acccompany> docker build -t driving_acccompany .
[+] Building 90.1s (5/9)
-> [1/4] FROM docker.io/library/python:3.9.13@sha256:a1f8d5969489f5af381e68482bf97424bfb1eef41361a95497c8d5514dfc 85.8s
-> sha256:a1f8d5969489f5af381e68482bf97424bfb1eef41361a95497c8d5514dfc 2.35kB / 2.35kB 0.8s
-> sha256:d8228a84aed58a528d1dc5d38aae226d666889bd2c3816592823cd73bf4ad9 2.22kB / 2.22kB 0.8s
-> sha256:b6be79db3b12498f278ce0fd154a99b8a84b10093117d6b4e3dc7c846d2b183f 8.51kB / 8.51kB 0.8s
-> sha256:1671565cc89f8c365c9b661d3fbc164e73d81f1b8438c6179588428f99a4da2e 55.81MB / 55.81MB 33.6s
-> sha256:2ae4d13e5507ade17f21376f57fb9507e1706931f3704aa992696d801f6e4 5.10kB / 5.10kB 4.0s
-> sha256:fa0c7528c685216129a8e67bf362a7782e7b1daa585ab85546a4158883865706 10.89kB / 10.89kB 6.7s
-> sha256:53ad072f9cd16fc8eb93b182b28e758e11accdef60abef6bf1843c88de1901a 54.58MB / 54.58MB 37.5s
-> sha256:d6983117533b718374f1701ef593dd2afa6613c7908c6553be8e2a158e6448a 196.79MB / 196.79MB 77.8s
-> sha256:d8892d56ded5476fe7c302256eb4dc6ff495aefb4d3228aa18d0cd7581e24a6c 6.29kB / 6.29kB 38.1s
```

Bibliography

shubham, n.d. *How to give Jenkins super user permission*. [Online]

Available at: <https://www.edureka.co/community/39390/how-to-give-jenkins-super-user-permission>

[Accessed 18 09 2022].