

EasyWay

Sprint 5

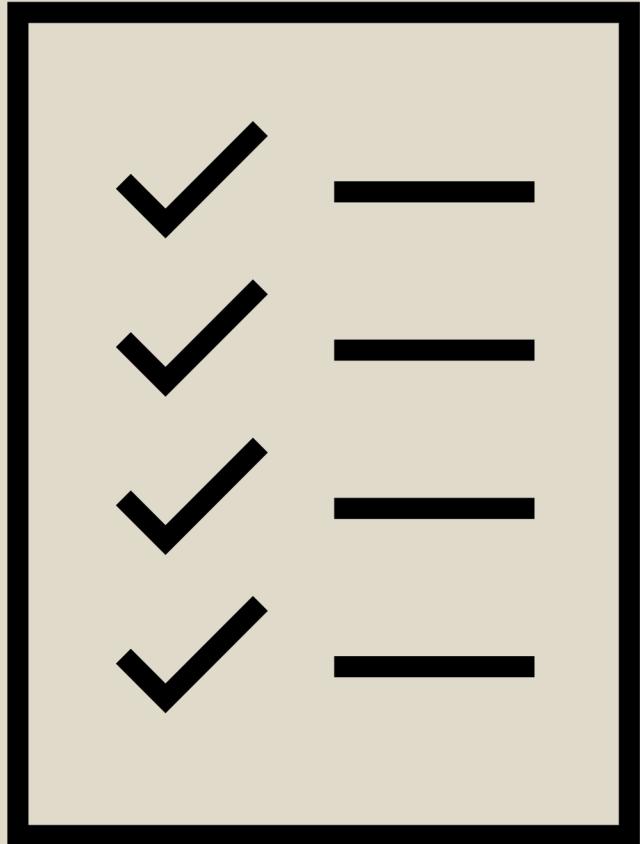
Subject: CS692

Computer Science Project 2

Designed By:

Vidisha Vijay Sawant





Agenda

Agenda

Team members roles and responsibilities	Improvements made from professor feedback	Project description	Team working agreement	Personas	MVP
Technologies	Algorithm	Diagrams	Sprint 4 Recap	Product Backlog	Sprint 5 Backlog
Metrics	Retrospective	Sprint 6	Project Demo	Github link	Live application Demo

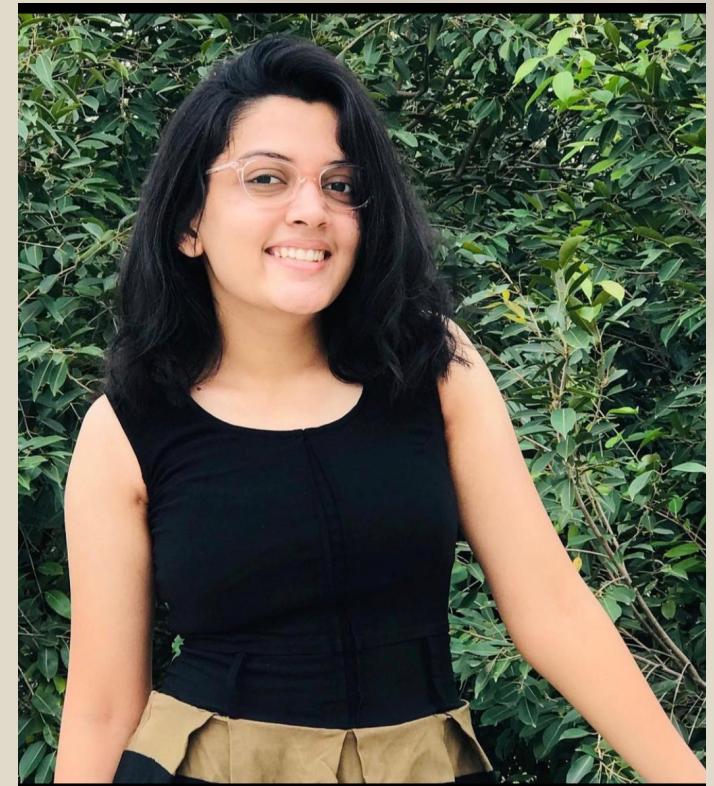
Team Member Roles



Vidisha Vijay Sawant
Developer



Kshitij Sharma
Developer



Femina Baldha
Developer

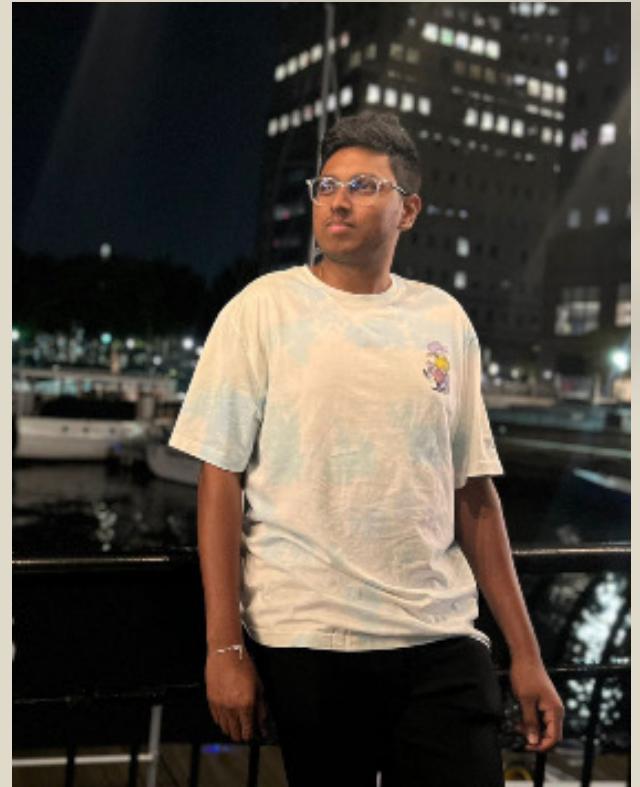
Team Member Roles



Aditya Kadarla
Project Manager
Quality Analyst & Tester



Shubham Sawant
Business Analyst &
Developer



Ravi Kumar Dabbada
Database Administrator

Improvements made from Professor Feedback

No Feedback



Project Description

Project Description	
Project Name:	EasyWay
Team Name:	D-Coders
Project Description:	<p>Get instant access to reliable, certified, and affordable on-demand home services.</p> <p>For customers who want to book on-demand home services, the EasyWay is a web app that provides a hassle-less booking of a home service, unlike the traditional way where we had to call or text and ask for any professional's availability our solution provides the availability of any professional online with booking service.</p>
Benefit Outcomes:	<ul style="list-style-type: none">• Users can book services according to their preferred date and time.• Users can see the services categories and can click on them to see the booking screen.
GitHub Wiki:	https://github.com/ksharma67/EasyWay/wiki

Team Working Agreement

Team Agreement

Participation :

- All the team members are expected to attend the meetings promptly.
- Absence during multiple meetings will affect the team's performance and efficiency. The team member can discuss beforehand with the team leader if he/she is going to miss the meeting or make it up for it before the next meeting is scheduled.

Communication :

- The team will communicate with each other through a variety of channels. For weekly meetings for meaningful team discussions, zoom meetings will be used. All the team members are highly encouraged to keep their cameras on, which will be able to build trust between the team members and reflect transparency.
- To discussion regarding minute details and doubts or anything urgent, a Whatsapp messenger group will be used.
- To share the final deliverables, Google docs will be used where all the team members can edit the document.
- A common platform called Slack has been set up for all team members, where designated groups have been created, such as Developers,
- Database management, bugs, attendance, weekly -plan, and meeting minutes. This manages all the bits and pieces of the project and makes the project management efficient.

Work Division :

- The entire project work should be divided into equal parts, and equal responsibilities should be given to all the team members.
- Each team member should complete their division of work before the deadline. If they are unable to complete the work on time, that hinders the performance of the entire team. If in case a team member is facing trouble and issues at some point, they can share it with others so that they can help each other and complete the work before the deadline.

Meetings :

- All the team members will meet on zoom virtually every Tuesday and Friday. All the team members have to be present, as attendance is mandatory unless there is an exceptional case.
- The team leader would be responsible for sending meeting details and conducting the meeting.
- A meeting track or meeting minutes report would be listed after every meeting to keep track of the project and its progress.
- Every team member is expected to come up with ideas, participate in the discussion, and give an update on their progress for their part of the work.

Team Members:

Kshitij Sharma - KS81104N
Vidisha Vijay Sawant - VS10015N
Shubham Pravin Sawant - SS97349N
Femina Baldha - FB59536N
Ravi Kumar Dabbada - RD83159N
Aditya Kadarla - U01821934

Personas

Persona 1



Demographics

Name: Prathna De

Age: 28

Location: Jersey City, NJ

Job: Graphic designer

Salary: \$90000-\$95000/year

Family: Mom-Dad, elder brother

Profile

Prathna holds a Bachelor of Visual Communication (Graphic Design Major) from The University of Newcastle, Sydney, Australia with a Dean's Recommendation of Honours, and has over 5 years of experience in the field with multiple awards, including the 'Best of Brand Design' awarded by LinkedIn. She's a digital nomad and travels the world while freelancing & blogging.

Interests

- Blogging
- Traveling across the world
- Exploring new places
- Photography, Videography
- Designing on Adobe Illustrator
- Freelancing
- Playing music

Frustration

- Sometimes she couldn't take luggage with her while traveling and needs assistance to transfer/deliver her luggage or camera stuff safely to some location.

Goals

- Needs assistance with her accessories or luggage to deliver at the place where she has traveled.
- Safety assurance with the luggage as it can carry delicate stuff like cameras.

Persona 2



Demographics

Name: Angela Mathew

Age: 55

Location: Ontario, Ca

Job: Entrepreneur

Salary: Ca\$50000-Ca\$60000/year

Family: Two children and husband

Profile

Hospitality-focused, dedicated to excellence, and highly knowledgeable are just a few terms most often used to describe Angela. This Ontario native was immersed in her family's hospitality and the food service industry from an early age. Her father was an energetic and successful restaurateur in Ontario who kept her engaged in the business throughout her youth.

Interests

- Trying new food menu at home
- Attending food fairs
- Taking part in a food contest
- Conducting food competitions
- Preparing different cuisines for children
- Reviewing various restaurants

Frustration

- Finds difficulty in maintaining health
- Feels obesity
- Can't keep herself fit
- Disturbed mind due to obesity

Goals

- Needs fitness tips to remain fit
- Need a health instructor who can guide her after eating a variety of food
- Needs meditation and yoga tips

Persona 3



Demographics

Name: Victor Carlos

Age: 35

Location: Alabama, Ga

Job: Marketing Analyst

Salary: \$70000-\$85000/year

Family: Lives with his girlfriend

Profile

As a seasoned marketing analyst, Victor has spent the past 5 years working with companies to bring their products to the national stage. He owns a massive house in the City of Georgia; living with his girlfriend Lucy and a pet dog named Bruno. He is very self-groomed and tidy. He ensures that each project is well-researched with good examples.

Interests

- Reading novels
- Stay up-to-date with daily stock updates
- Loves animals, especially dogs
- Attending business fairs and workshops
- Loves to be fastidious

Frustration

- Owns a big house and finds it difficult to maintain it.
- Take care of his pet dog, Bruno, when he and his girlfriend Lucy are out for work tours.

Goals

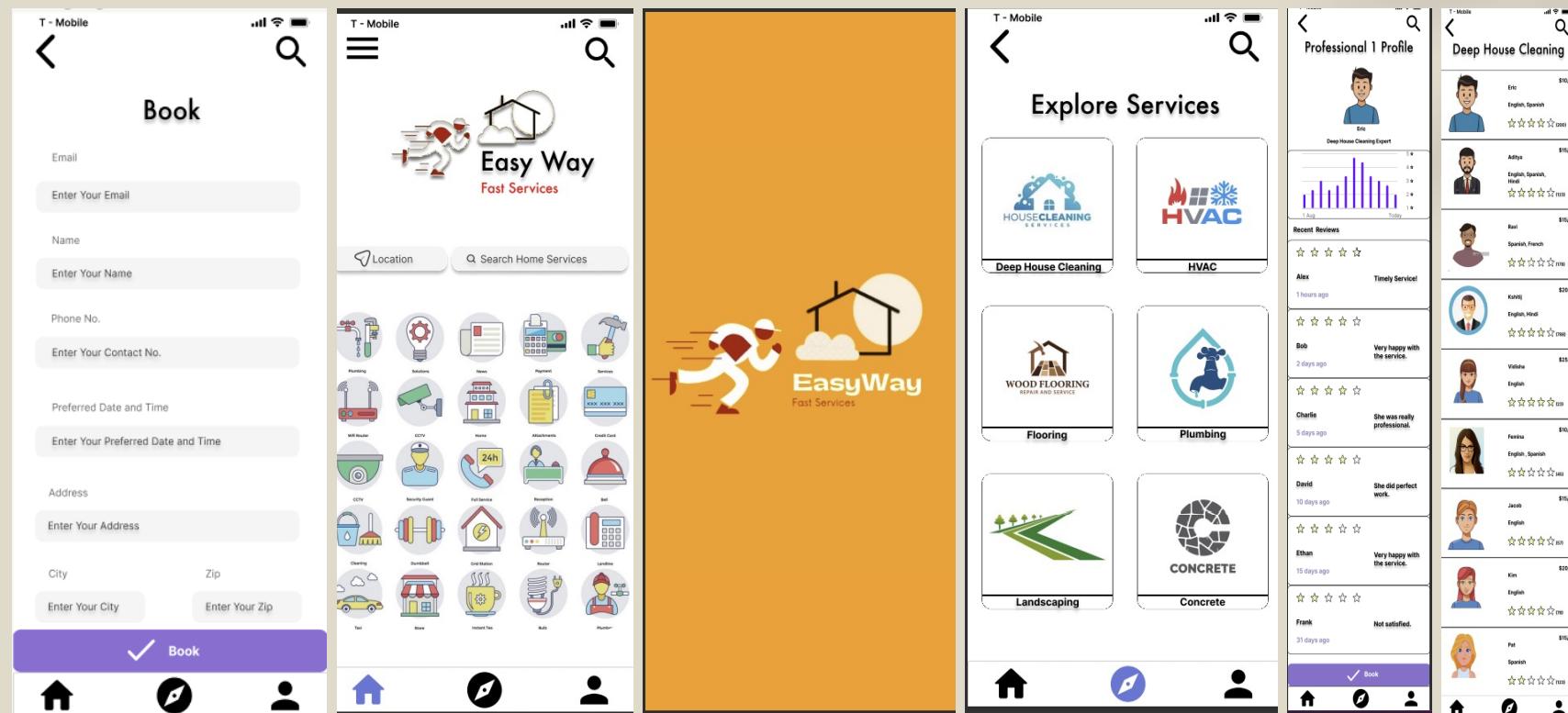
- Need house cleaning services
- Need service to look after his pet dog
- Need a secure person to take care of his house when he is out on a work tour

Minimal Viable Product (MVP)

1. Homepage
2. Service Catalog
3. Cancel Booking
4. Registration - Customer and Professional
5. Login - Customer and Professional
6. Book - Calendar and Time
7. Booking Confirmation via email or in-app



Minimal Viable Product (MVP)



Front End



Back End / Server



Golang



Database



Testing



API



POSTMAN



SWAGGER



Golang

Tools



Visual Studio Code



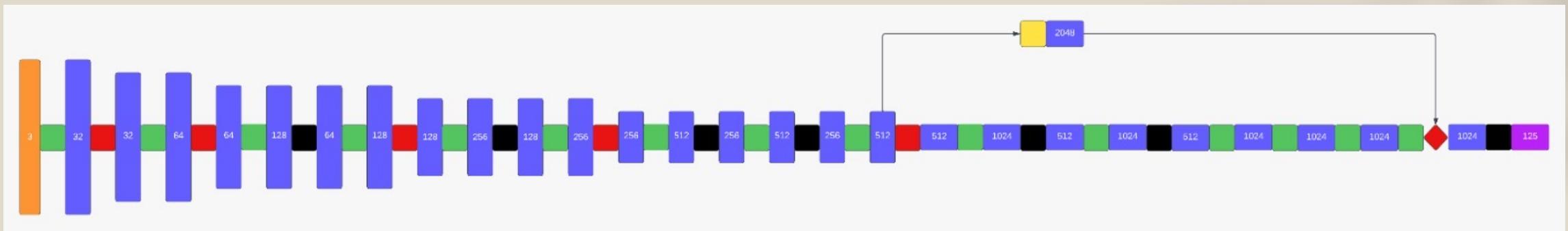
Figma

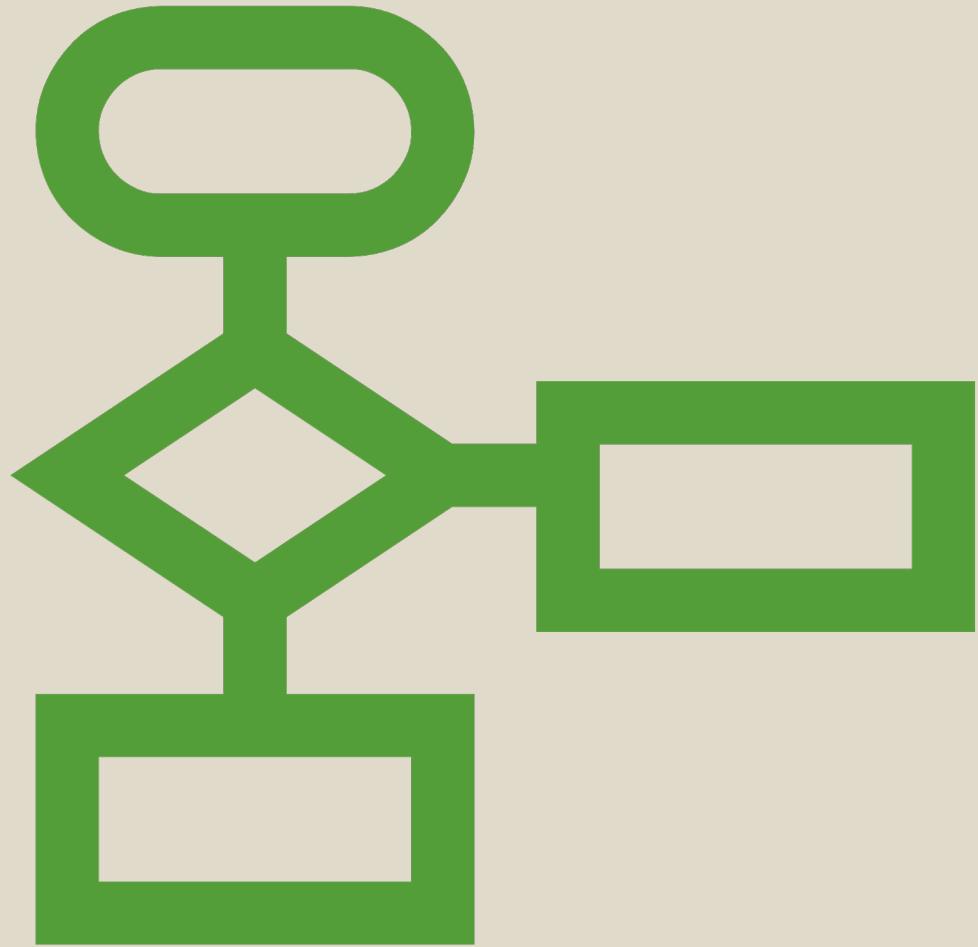


Jira

Technologies

Algorithms





Diagrams

Conceptual Architecture Diagram

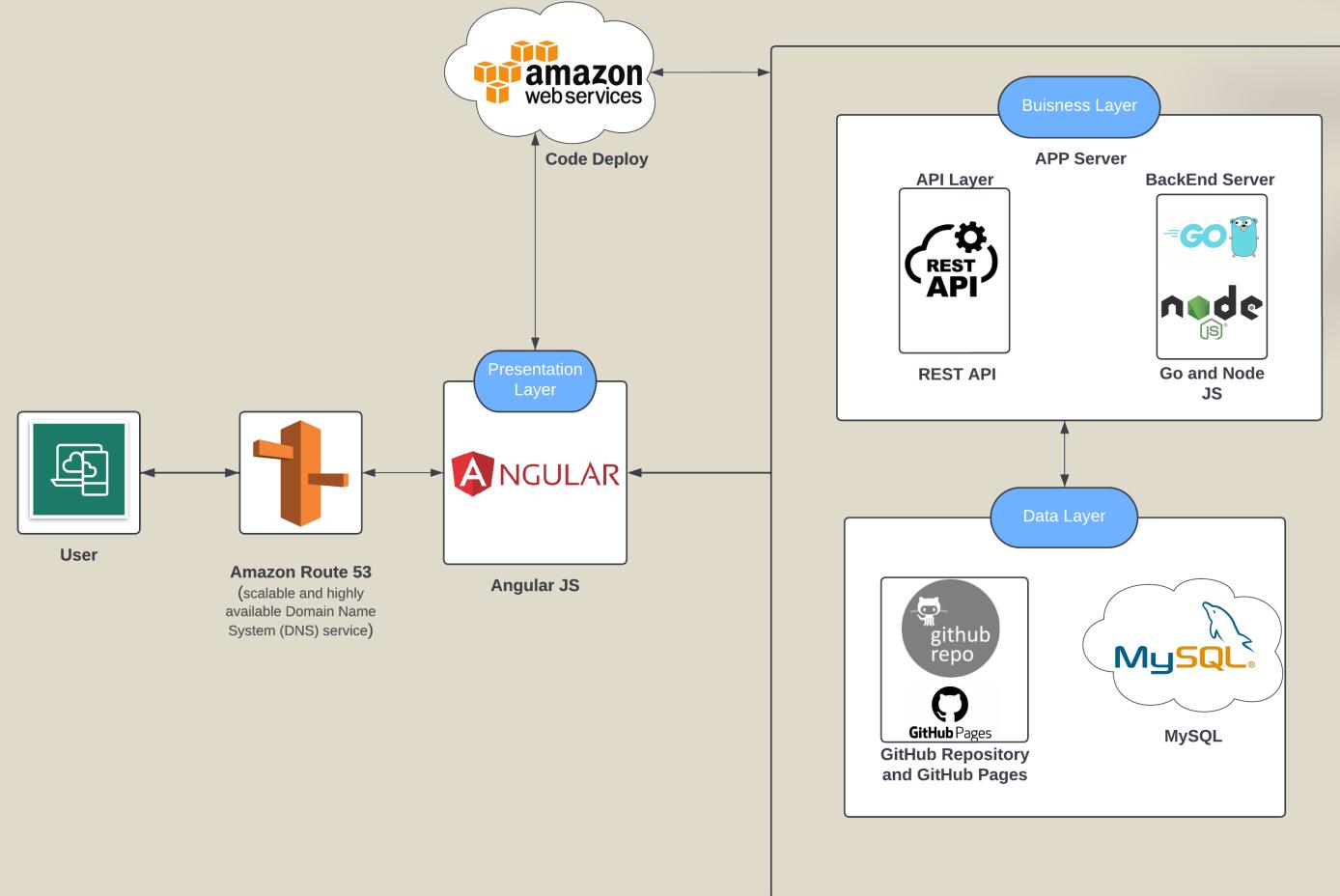
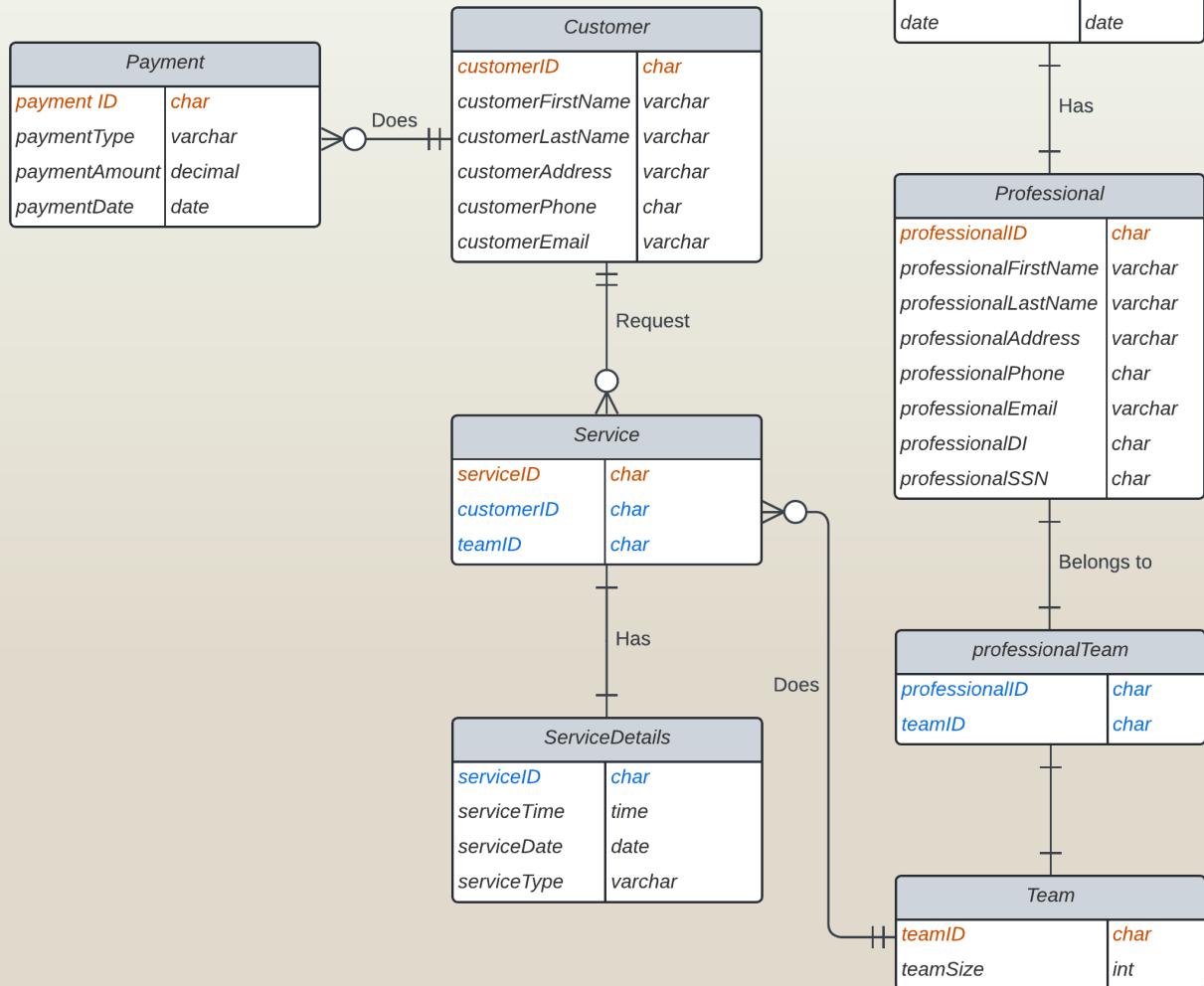


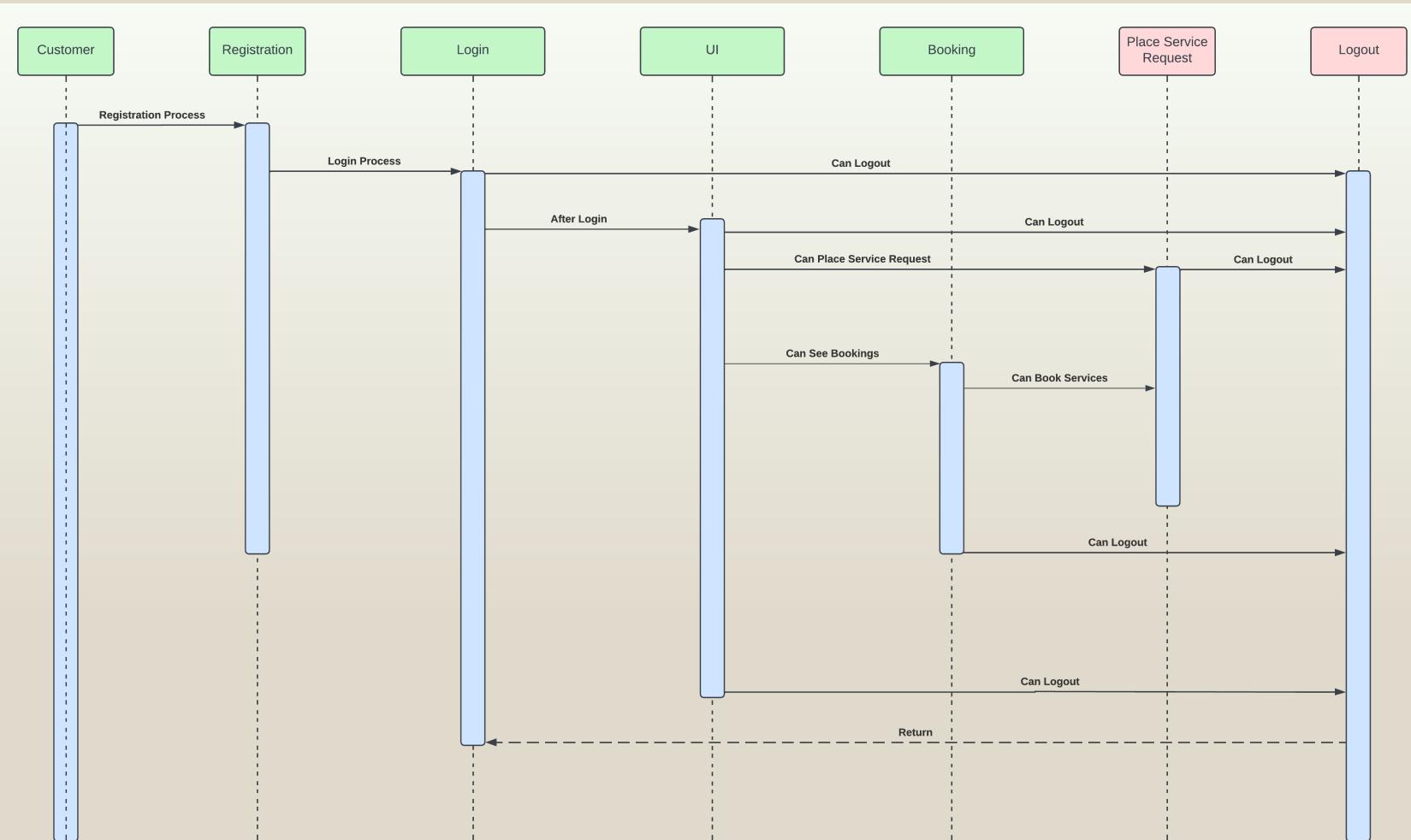
Diagram Key

- Primary Key
- Foreign key

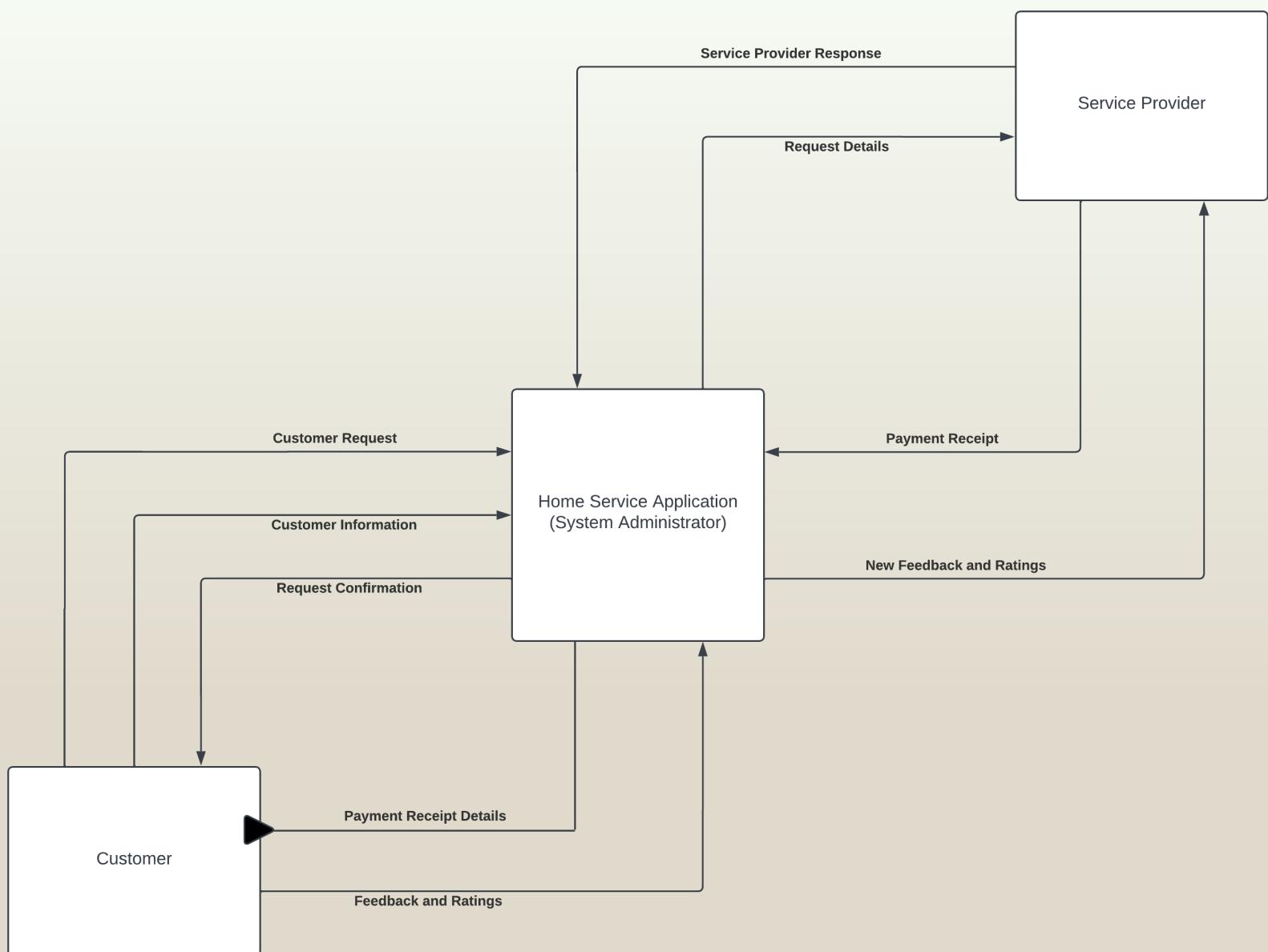


ERD Diagram

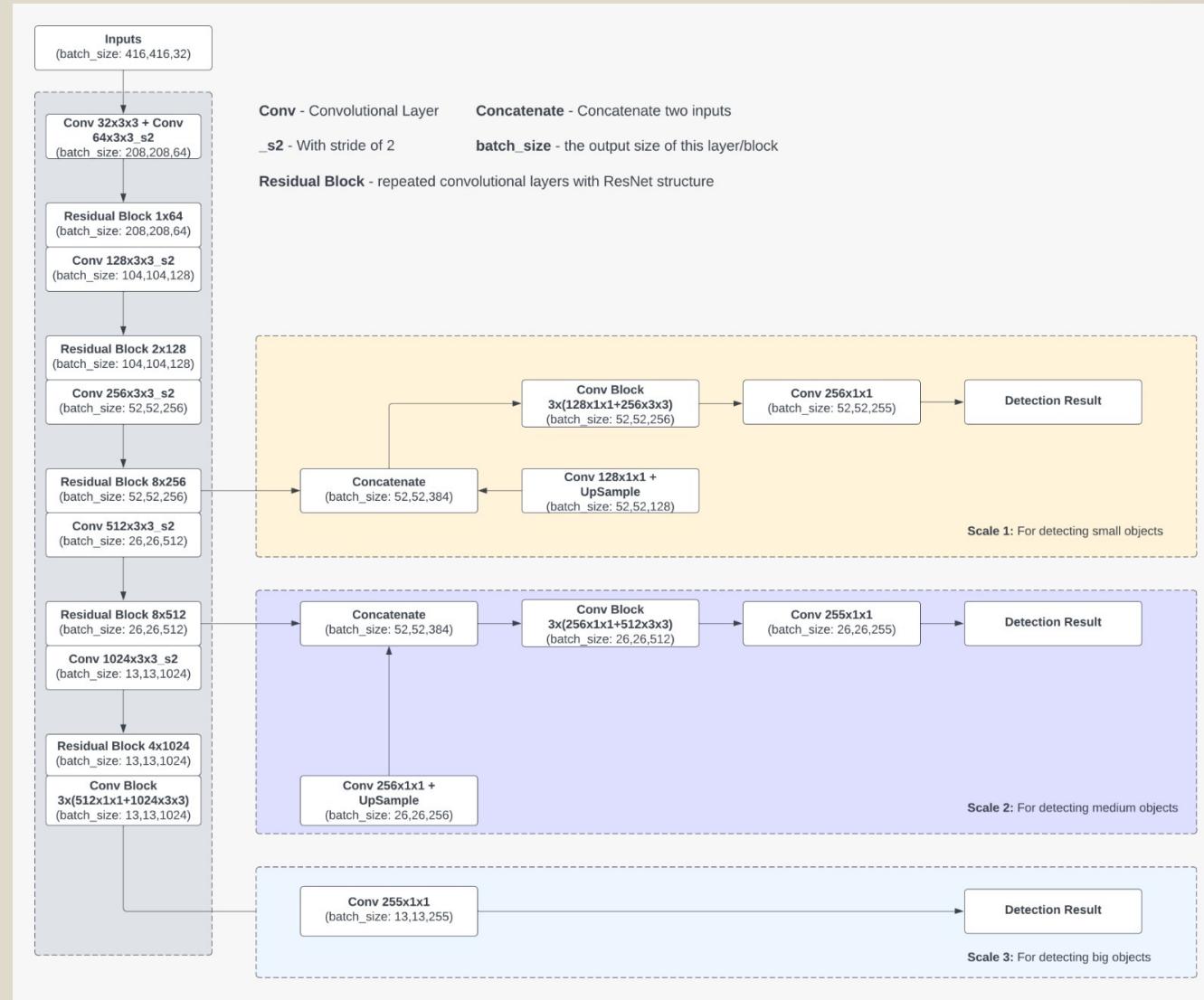
User Sequence Diagram



Data Flow Diagram Level 0

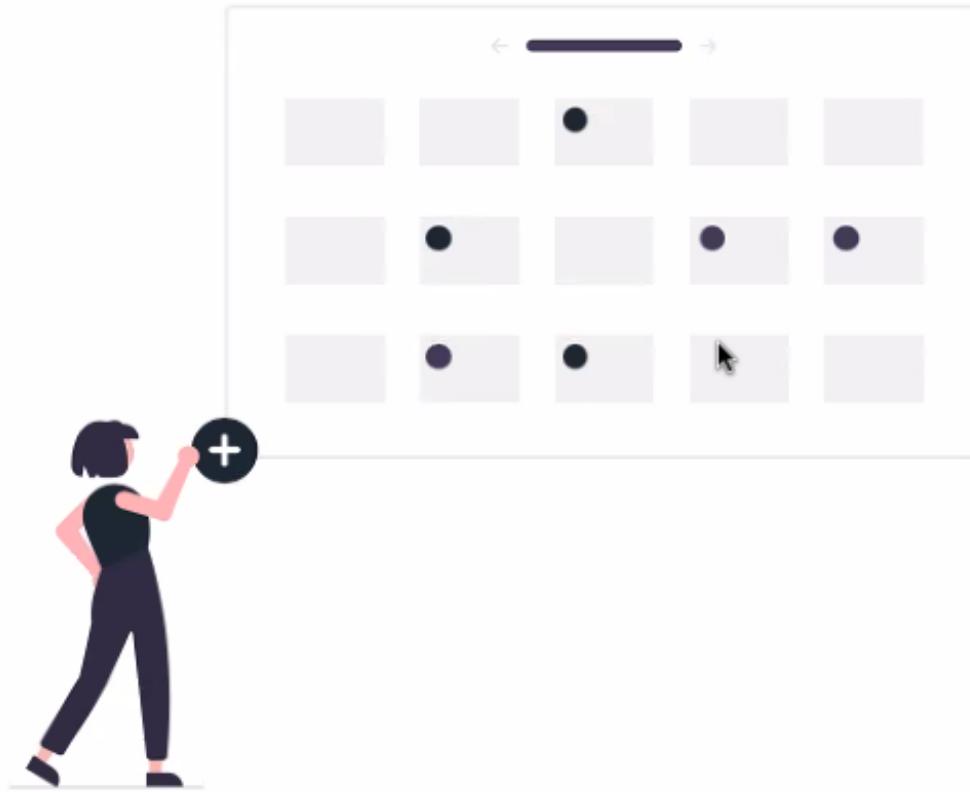


Algorithm Network Architecture



Sprint 4 Recap





AC Maintanence

Price: \$80

Enter date for service

12/19/2022

Enter time for service

12:30 PM

Book

Booking Page

My Booking Page

EasyWay

Home Book a Service My Bookings Profile Logout

My Bookings

Active Bookings	
<p>Plumbing</p> <p>Sanitary and household plumbing. No sewage service.</p> <p>2022-02-15 12:30 to 13:30</p> <p>Cancel</p>	<p>AC Maintanence</p> <p>Any type of AC maintanence such as filter cleaning, part replacement, etc.</p> <p>2022-02-15 16:30 to 17:30</p> <p>Cancel</p>
<p>Cancelled bookings</p> <p>Book a Service</p>	

Cancel Booking

Active Bookings

AC Maintanence

Any type of AC maintanence such as filter cleaning, part replacement, etc.

2022-02-15 12:30 to 13:30

Cancel

Cancelled bookings

Plumbing

Sanitary and household plumbing. No sewage service.

2022-02-15 16:30 to 17:30



Book a Service

Navigation Bar

EasyWay

Home Book a Service My Bookings Profile Logout

Services List



AC Maintenance

Any type of AC maintenance such as filter cleaning, part replacement, etc.

Book Now



Plumbing

Sanitary and household plumbing. No sewage service.

Book Now

Sprint 4 Vs Sprint 5

- Booking Page
- Cancel Booking
- Navigation Bar
- Initial implementation of the object detection algorithm
- New Backend Libraries

Product Backlog

Issue Type	Key	Name
Task	DCS-65	Improving Object Detection Model Accuracy
Story	DCS-64	As a customer, I want to be able to search on the webpage, So that I can find necessary information
Story	DCS-63	As a customer I want to be able to recover my account customer ID/Name So that I will be able to access my account in case i forgot the account.
Story	DCS-62	As a customer I want to be able to recover the passwords to my account So that I will be able to access my account in case i forgot password.
Story	DCS-61	As a customer, I want to email customer service So that I can get my issue resolved
Story	DCS-45	As a customer I want to browse all the professional home services provided. So that I have a list to select the service I want.
Story	DCS-41	As a customer I want to be able to submit feedback So that the website owners can consider my opinion or concern during future website updates
Story	DCS-40	As a customer, I want to be able to access quick services near me So that I will be able to book an urgent situation at my house.
Story	DCS-39	As a customer I want to be able to access the services according to categories such as water, furniture, beauty, etc So that I will be able to access the see the services available and who the professionals are
Story	DCS-38	As a customer I want to be directly able to contact the technician via call/text So that I will be able to have a better service

Product Backlog

Issue Type	Key	Name
Story	DCS-37	As a customer, I want to be able to prepone or postpone my booked service So that I can expect the professional on some other date or time.
Story	DCS-35	As a customer, I want to be able to add multiple address So that I can use them to schedule a service for my office.
Story	DCS-33	As a customer, I want to browse the service list So that I can get some information what does this particular service do.
Story	DCS-32	As a signed-in customer I want to able to comment on a blog post So that I can get feedback on issues

Sprint 5 Backlog

Issue Type	Key	Name	Story Points Estimate
Task	DCS-57	Research on image classification ML algorithms	8
Task	DCS-46	Designing an Object Detection Working Architecture Diagram	3
Task	DCS-44	Developing an initial Object Detection Algorithm.	3
Task	DCS-43	Installing Python v3, Numpy, cv2, matplotlib, torch, subprocess, os, time, argparse, time, and Tensorflow libraries in Backend.	5
Task	DCS-42	Designing an Object Detection Network Architecture Diagram	5

Stories and Acceptance criteria

User Stories And Acceptance Criteria		
User Story ID	Summary	Status
DCS-24	<p>As a customer, I want to be able to cancel my booked service So that I can not expect the professional to reach my home.</p> <p>Scenario: customer want to cancel a booking Given I'm in a role of logged-in customer When I open the Booking History page Then the system shows me the confirmation tab for cancelling And when I click on Yes it should cancel my booked service.</p>	Done
DCS-50	<p>As a customer, I want to see the services booked by me So that I can track it.</p> <p>Scenario: Customer wants to track the appointment Given I'm a logged-in customer When already scheduled an appointment Then I would be able to track the appointment date and time of the booking along with details of the technician.</p>	Done
DCS-52	<p>As a customer, I want a navigation bar to go between pages, login and out, and search for specific events So that I may use the app more efficiently</p> <p>Scenario: Customer wants to navigate between pages Given I'm in the role of a guest customer When I click on any tab on the header of the Landing Page Then the system should redirect me toward the clicked tab And the redirect page should be loaded.</p>	Done
DCS-23	<p>As a customer, I want to choose the date and time of the service So that it is available at my convenience</p> <p>Scenario: Customer wants to see the available date and time Given I'm in the role of guest customer When I open the services catalog page Then I click on one of the services it redirects me to the booking page And I should be able to see the available dates and times to book.</p>	Done

Test Cases

User Story ID	Unit to test	Assumptions	Test data	Steps to be executed	Expected Results
DCS - 12	Login	Login should be successful	Email - test@easyway.com, Password - test123	Homepage -> Login	Check results on entering valid User Id & Password
DCS - 12	Login	It should show an error as "Invalid Username or Password"	Email - test@easyway.com, Password - test	Homepage -> Login	Check results on entering Invalid User ID & Password
DCS - 12	Login	It should show an error as "Invalid Username or Password"	Email - easy@easyway.com, Password - test	Homepage -> Login	Check response when a User ID is Empty & Login Button is pressed
DCS - 13	Sign Up	Sign Up should be successful	Email - any, Password - anything in between 8 to 16 char	Homepage -> Sign Up	Check results on entering valid User Id & Password
DCS - 13	Sign Up	It should show an error as "Username already in use"	Email - test@easyway.com, Password - test123	Homepage -> Sign Up	Check results on entering Already in Used User ID
DCS - 13	Sign Up	It should show an error as "Enter the Password with given parameters"	Email - test@easyway.com, Password - test	Homepage -> Sign Up	Check response when a Password is containing all the given parameters
DCS - 49	Profile	Profile creation should be successful	Email - test@easyway.com, Password - test	Homepage-> Login-> Profile	Check all the details filled with valid zip codes and phone numbers.
DCS - 49	Profile	Show an error with missing fields	Email - , Password - test	Homepage-> Login-> Profile	Check to missing/mandatory fields*
DCS - 18	Homepage	Services should be categorize and listed	localhost:4000/services	Homepage	Check if the categories are correct
DCS - 48	Services	Display service catalog	db.getCollection("catalog").find({});	MongoDB -> use Easyway	
DCS - 51	Professionals	Display list of professional	db.getCollection("professional").find({});	MongoDB -> use Easyway	
DCS - 49	Customer	Insert a customer	db.customer.insert({name:"customerName",customerEmail:customer@test.com, customerPassword:12345678, customerPassword2:12345678})	MongoDB -> use Easyway	Create a new user in customer database
DCS - 49	Customer	Display all the customers	db.getCollection("customers").find({});	MongoDB -> use Easyway	
DCS - 18	Homepage	Customers should be able to access the homepage	localhost:8080	Homepage	Once directed with url, you will be first redirected to homepage.
DCS - 0	Dummy Data	Display all collections	show collections	MongoDB -> use Easyway	All tables should be listed
DCS - 43	Forgot password	Should direct to the email to reset the password		Homepage-> Login -> Forgot Password	Password Reset and directed to login page again
DCS - 24	Homepage	Customer should be able to search the desired services on search box		Homepage-> Search box	Homepage must provide the search box for user to search for desired services.
DCS	Chatbot	Customer can interact and receive a response.		Homepage-> Login-> Book an Appointment-> Chat	One the chat started both customers and professional can chat in it.
DCS	Chatbot	Customer should be able to book appointment just by interaction and chatting with the chatbot		Homepage-> Chatbot	Homepage must provide the chatbot to clear all queries
DCS	Homepage	History displayed in search field should be relevant to logged in user only		Homepage-> Search box	Search box on Homepage must display relevant information previously searched by the user.
DCS	Service Page	Services should have filter option based on reviews and time arrive		Homepage ->Services -> Filter	Check if the results after correctly filtered

Stories \ Task Completed and Not Completed

Issue Type	Key	Name	Status
Task	DCS-57	Research on image classification ML algorithms	Done
Task	DCS-46	Designing an Object Detection Working Architecture Diagram	Done
Task	DCS-44	Developing an initial Object Detection Algorithm.	Done
Task	DCS-43	Installing Python v3, Numpy, cv2, matplotlib, torch, subprocess, os, time, argparse, time, and Tensorflow libraries in Backend.	Done
Task	DCS-42	Designing an Object Detection Network Architecture Diagram	Done

Metrics



Team Velocity Chart

Projects / D-Coders Sprints / Reports

Velocity report

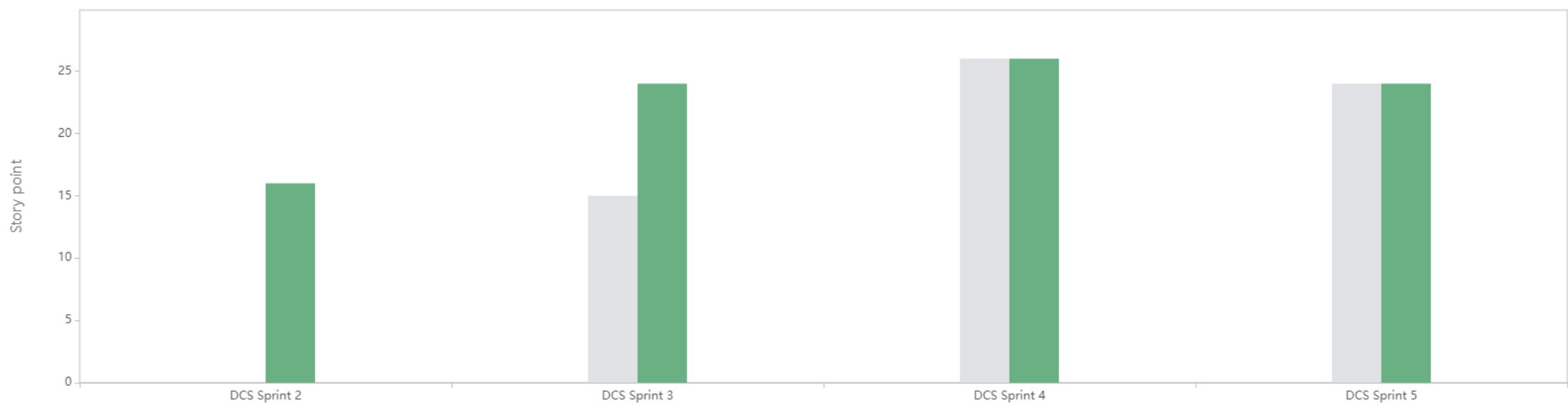
[How to read this report](#)

Commitment

The amount of work in the sprint when it began.

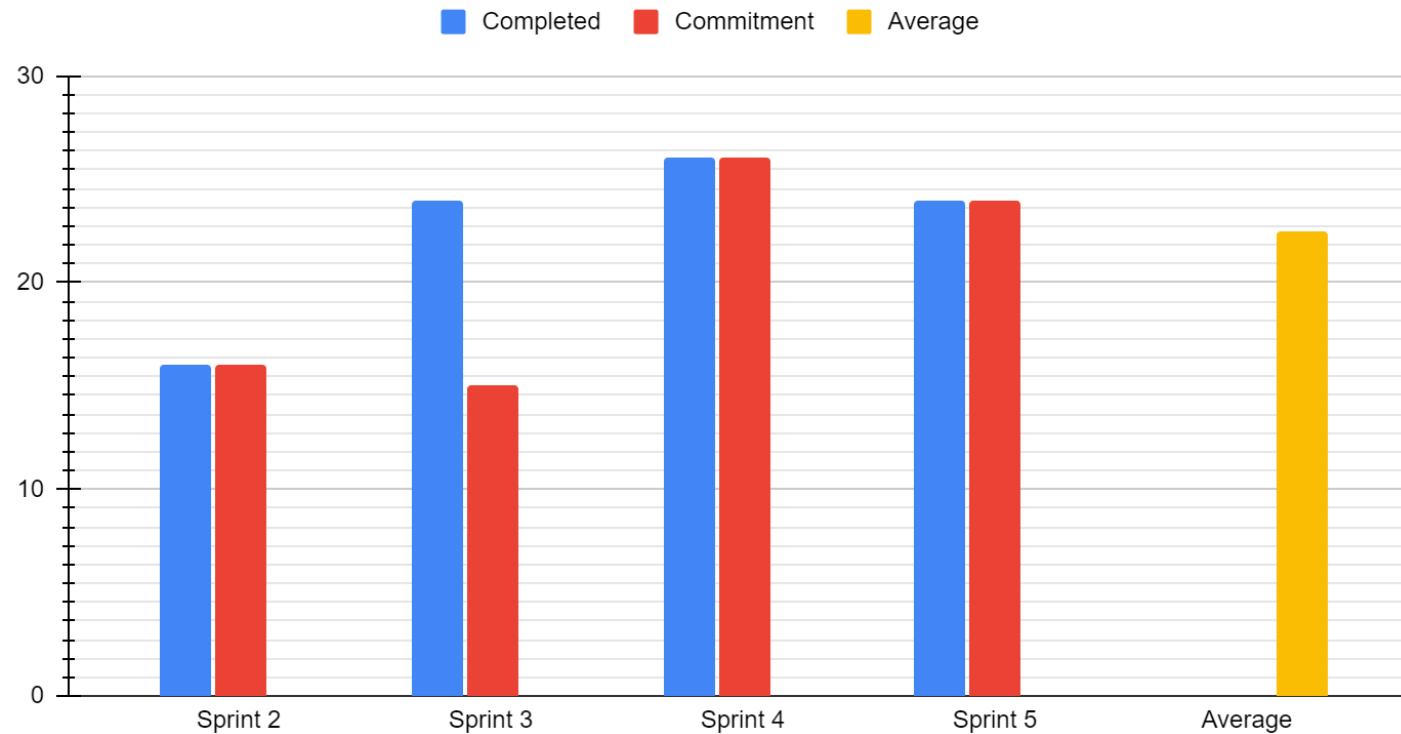
Completed

The amount of work done during the sprint.

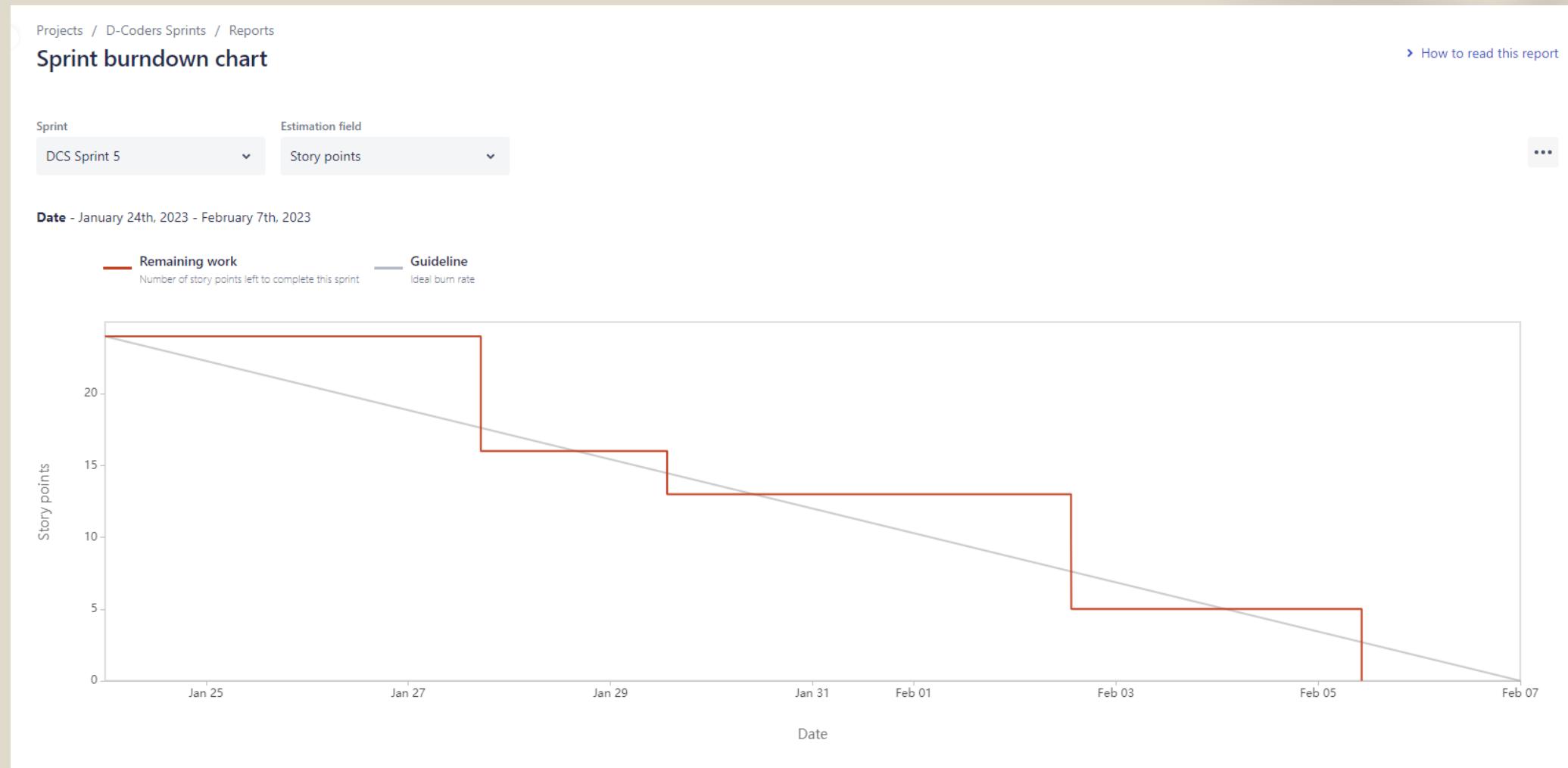


Team Historical Velocity (Average)

Sprint 2, Sprint 3, Sprint 4, Sprint 5 and Average Velocity

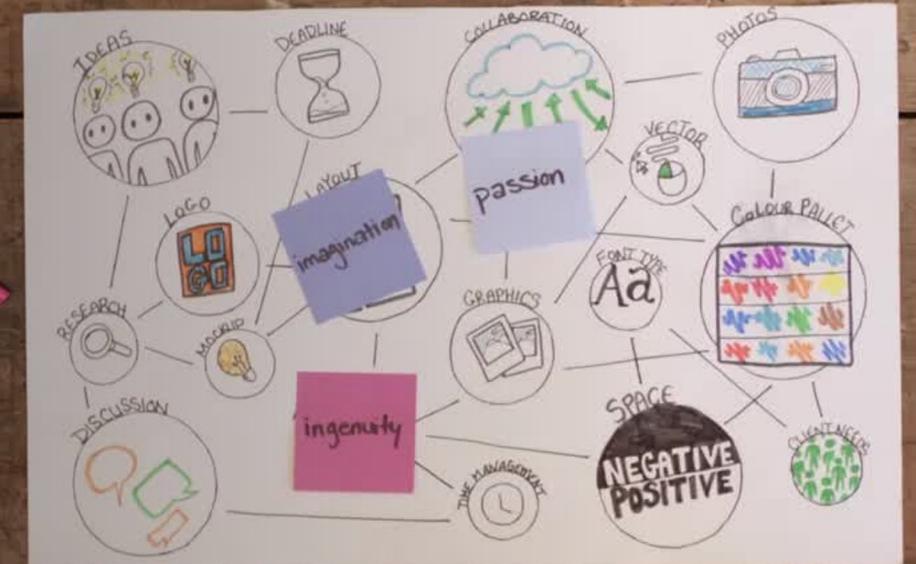


Burndown Charts



Completed / Committed Ratio





Retrospective

What Went Well



Team meetings helped one another out with tasks.



Tasks were clearly defined and assigned on the first day of starting the sprints



We found best fitting libraries to work on for object detection



We finished the presentation on time.

What Needs Improvement



Due to the difference in time zone, we were lacking communication often. Most of our tasks got delayed because of it.



A deadline on when things need to be completed and getting updates on it in every meeting was not met.

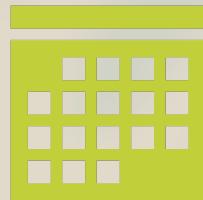


Not staying on schedule. Some of the members of the team are still procrastinating.

Next Steps



Team members need to take more self-initiative.



We should split the deadlines into 2 different dates for drafts and final drafts.



Have everyone bring up at least one idea/item issue in weekly planned meetings.



Stories planned and committed for Sprint 6

Issue Type	Key	Name	Status	Story Point Estimate
Task	DCS-65	Improving Object Detection Model Accuracy	To Do	8
Story	DCS-64	As a customer, I want to able to search on the webpage, So that I can find necessary information	To Do	5
Story	DCS-63	As a customer I want to be able to recover my account customer ID/Name So that I will be able to access my account in case i forgot the account.	To Do	5
Story	DCS-62	As a customer I want to able to recover the passwords to my account So that I will be able to access my account in case i forgot password.	To Do	3
Story	DCS-61	As a customer, I want to email customer service So that I can get my issue resolved	To Do	3

Project Demo

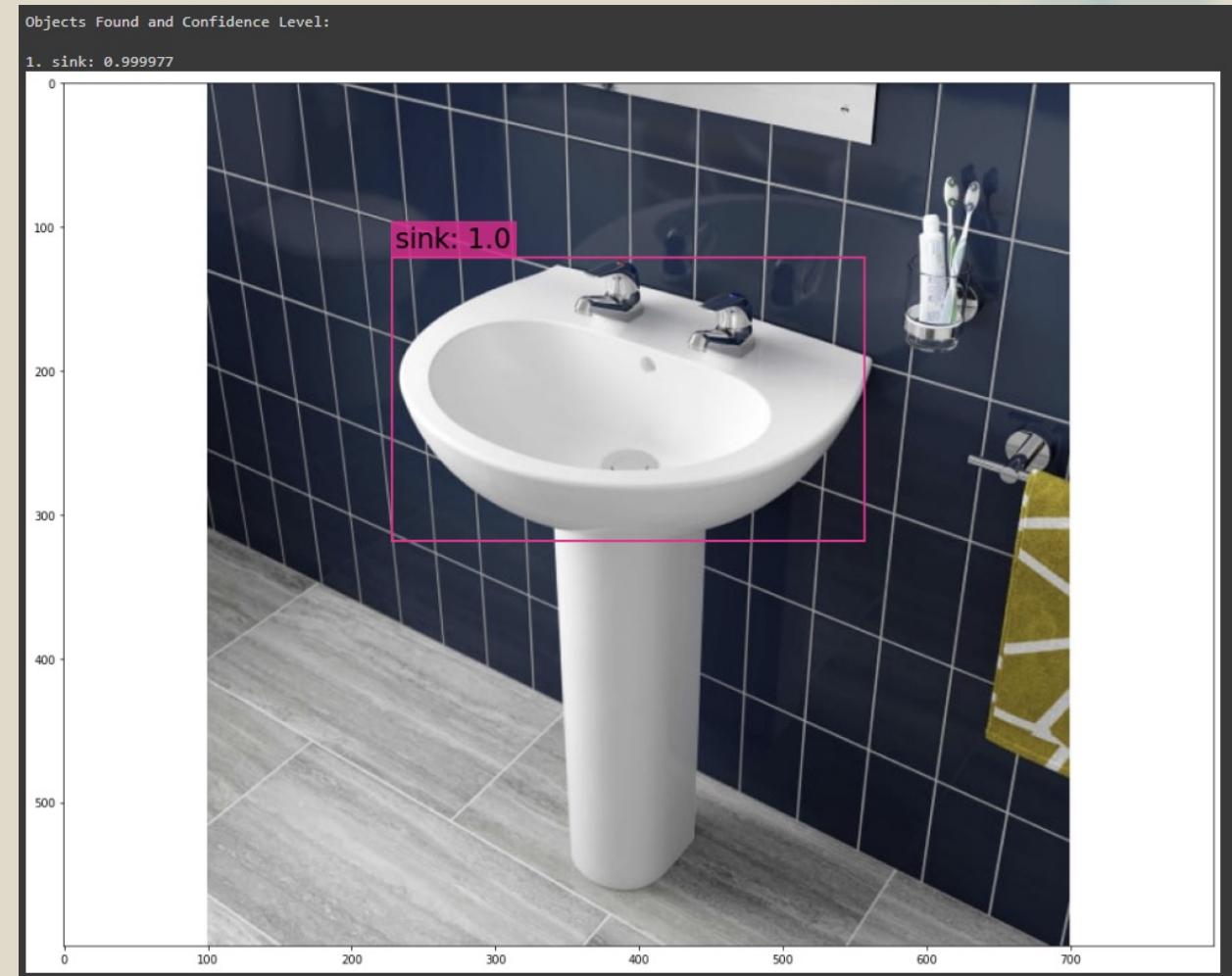
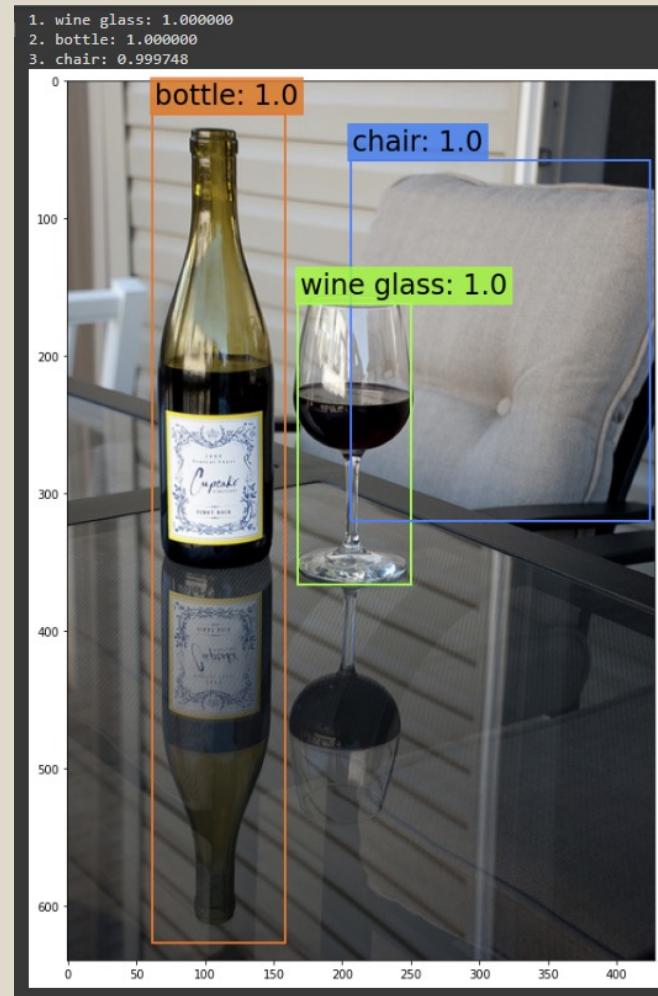


Slides App Screenshot

The image displays six screenshots of the EasyWay mobile application interface:

- Home Screen:** Shows the main landing page with a blurred background image of a kitchen, a title "EasyWay", and a subtitle "One Click Booking for your home services, On-Demand". It includes a "Login" button and a "Forgot password" link.
- Services List:** A dark-themed screen titled "Services List" featuring two service cards: "AC Maintenance" (illustrated with two workers near an AC unit) and "Plumbing" (illustrated with workers near a sink).
- Booking Process:** A screen for booking "AC Maintenance" with a price of \$80. It asks for "Enter date for service" (12/19/2022) and "Enter time for service" (12:30 PM). A "Book" button is at the bottom.
- My Bookings:** A screen titled "My Bookings" showing "Active Bookings" for "Plumbing" (Sanitary and household plumbing, No sewage service, 2022-03-16 12:00 to 13:00) and "AC Maintenance" (Any type of AC maintenance such as filter cleaning, part replacement, etc., 2022-03-16 11:00 to 12:00), each with a "Cancel" button. It also shows a "Cancelled bookings" section for "Plumbing" (Sanitary and household plumbing, No sewage service, 2022-03-15 10:00 to 11:00) with a "Book a Service" button.

Slides App Screenshot



Slides for API

The screenshot shows a Swagger UI interface for a GET request to the endpoint `/user/{username}`. The request is described as "Get user by user name".
Parameters:
The parameter `username` is required and described as "The name that needs to be fetched. Use user1 for testing.". It has a type of `string` and is defined as a path parameter.
Responses:
The response content type is set to `application/json`.
Code:
200: successful operation. Example value (Model):

```
{  "id": 0,  "username": "string",  "firstName": "string",  "lastName": "string",  "email": "string",  "password": "string",  "phone": "string",  "userStatus": 0}
```

400: Invalid username supplied
404: User not found

The screenshot shows a Swagger EasyWay interface for version 1.0.0, running at `http://localhost:3002/swagger.json`.
Schemes: HTTPS
user Operations about user
Find out more about our store ▾
A list of operations:

- POST** `/user/createWithArray` Creates list of users with given input array
- POST** `/user/createWithList` Creates list of users with given input array
- GET** `/user/{username}` Get user by user name
- PUT** `/user/{username}` Updated user
- DELETE** `/user/{username}` Delete user
- GET** `/user/login` Logs user into the system

GitHub Link

HOME · KSHARMA67/EASYWAY WIKI
(GITHUB.COM)

Technical Paper Link

EASYWAY TECHNICAL PAPER (GITHUB.COM)

Installation Manual Link

EasyWay/Installation Manual.pdf at main ·
ksharma67/EasyWay (github.com)

API Documentation

EasyWay/API Documentation.pdf at main ·
ksharma67/EasyWay (github.com)

Live Application Demo

The screenshot shows a Google Colab notebook titled "image.ipynb". The notebook interface includes a toolbar at the top with file operations like "File", "Edit", "View", "Insert", "Runtime", "Tools", and "Help". On the right side, there are "Comment", "Share", and "Edit" buttons, along with status indicators for "RAM" and "Disk".

The main content area contains the following sections:

- Object Detection**:
An object detector that uses features learned by a deep convolutional neural network to detect an object.
This Algo is trained on the COCO dataset. The dataset consists of 80 labels, including, but not limited to: People, Bicycles, Cars and trucks, Airplanes, Stop signs and fire hydrants, Animals, including cats, dogs, birds, horses, cows, and sheep, and Kitchen and dining objects, such as wine glasses, cups, forks, knives, spoons, etc. ...and much more!
- Importing Resources**:
A code cell showing:

```
from google.colab import drive
drive.mount('/content/drive')
```
- Setting Up The Neural Network**:
A code cell showing:

```
!cd /content/drive/My\ Drive/Algo
# List files to make sure we're in the expected directory.
!ls
```



```
import cv2 #load our images
import matplotlib.pyplot as plt #plot them,
from utils import * #module that contains some helper functions
from darknet import Darknet #modified version of "Darknet". A uses "Darknet", an open source, deep neural network framework.
```

The bottom of the screen shows a taskbar with various application icons, the date and time (12:25 AM, 2/7/2023), and a weather widget indicating 7°C and "Mostly cloudy".

Thank You
From D-Coders

