# TWO WHEELER SERVICE MANAGEMENT

#### TEAM MEMBERS AND ROLES

HARINI V- TEAM MASTER (DEVELOPMENT TEAM)

HARISH K - DEVELOPMENT TEAM

HARISH RM - DEVELOPMENT TEAM

HARSH BANSAL - SCRUM MASTER, FRONT END

HARSHA NANDHINI K M- TESTER

HARSHINI D - DEVELOPMENT TEAM

#### PROBLEM STATEMENT

A two-wheeler service shop wants to develop a system to regulate the maintenance of their day-to-day services. Every incoming vehicle must be assigned a job card. The card should have various details such as registration number, owner details, engine number, type of service needed, and expected delivery date. Further information to be filled in the job card varies as per the service type (Ex: maintenance, oil service, brake condition etc.). On completing the vehicle service, the job card has to be updated, and the system has to alert the owner automatically. The job's priority is fixed based on specific criteria like delivery date, and a service mechanic gets the list of jobs for the day.

#### Customer can

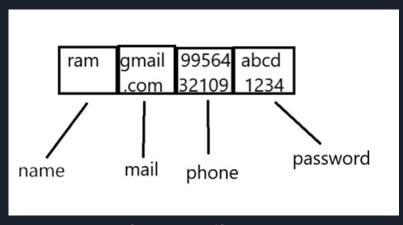
- Register
- Login
- Edit his/her profile
- Book a service
- Access the job card
- Avail an alert sms/mail,once service finished

# Classes and ADTs used

#### **Customer class:**

This class deals with the customer attributes namely

- Name
- •Mail
- Phone
- Password



Class attributes

#### Methods of Customer class:

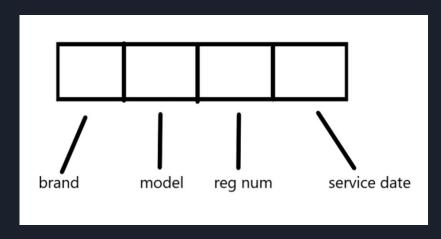
- Change name
- Change mail
- Change pwd
- Change phone
- Get customer details
- Get\_login\_credentials

**Edit Profile** 

#### Service class

This class deals with the customer's vehicle information namely

- Brand
- Model
- Reg Number
- Date of service



Class attributes

## Methods of Service class:

- Assign\_worker
- Servicetype
- Add\_service
- Get\_return\_date
- Price\_details
- Get\_service\_details

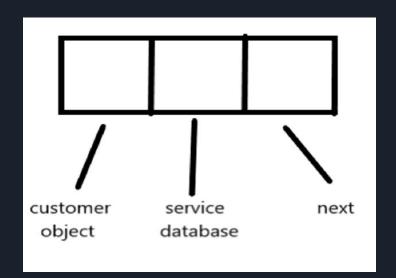
# **Database**

**Storing Customer and Service details** 

A database structure, for storing the customers' data and their respective service details is created similar to and implemented using Linked List Abstract Data Type(ADT).

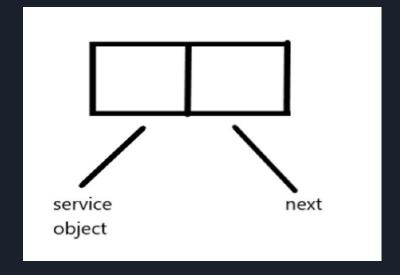
This database class consist of two light weight elements(nodes).

- 1.customer\_node
- 2.service\_node

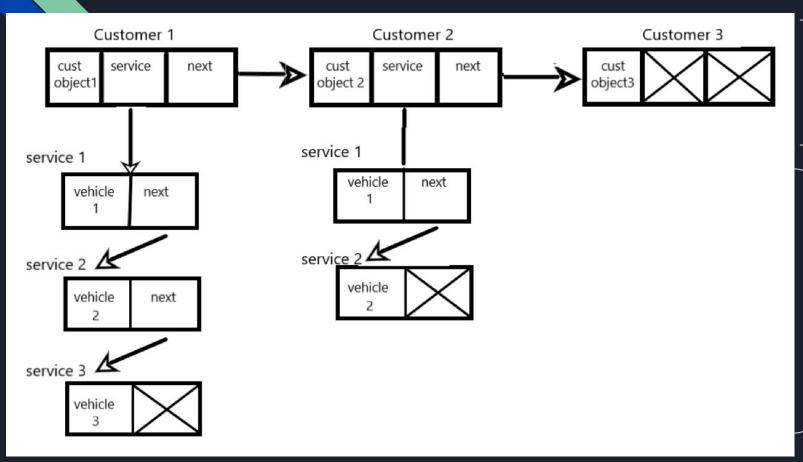


#### Customer\_node

Service\_node



## Database-Structure Diagram



Customer Node

Service node

## **ADMIN CLASS**

#### Admin has the access to

- View the entire details of customer
- The pending services
- The details of services (both finished and pending)
- The details of workers
- Assign the services to respective workers

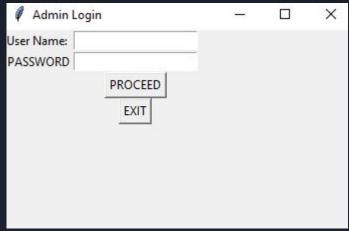
## ADMIN CLASS

#### **METHODS:**

- ADD REPAIR BIKE
- REMOVE FINISHED SERVICE
- VIEW SERVICE DETAILS
- VIEW CUSTOMER DETAILS
- GENERATE REPORTS
- SEND EMAIL NOTIFICATIONS
- ASSIGN WORKS

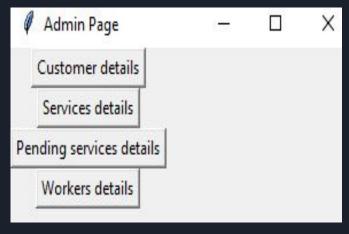
#### ADMIN LOGIN PAGE

- This is the page where the admin
  - has to login using appropriate Username and password.
- It will show the exception if we enter any invalid username or password.



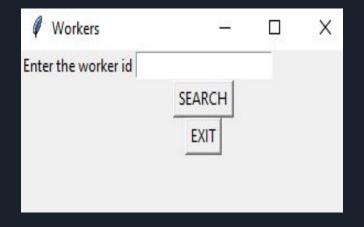
#### ADMIN ACCESS PAGE

- This is the window that will be created after successful login of admin.
- By these options, the admin can have access to various details.



## ADMIN'S ACCESS TO WORKERS

- This page will be created if Admin wants to see details of workers.
- The admin can simply enter
   the id of worker and get the
   details of particular worker.



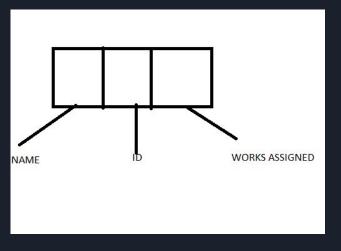
## ADMIN TO DO

- The admin has to store the collection of customers added to the data as a linked list structure.
- The admin has to enqueue the services newly booked to the worker's linked queue of services to be done.
- The admin has to add the newly booked services to the list of entire services.

# WORKER CLASS

#### FIELDS:

- NAME
- ID
- WORKS ASSIGNED



#### METHODS OF WORKER CLASS

- 1. ADD SERVICE
- 2. REMOVE SERVICE

THE DATA OF WORKERS ARE STORED IN LINKED LIST STRUCTURE.

THE SERVICES ARE IN LINKED QUEUE STRUCTURE.

EACH WORKER HAS A SPECIFIC USERNAME AND ID.

#### **WORKER CLASS:**

#### **WORKER LOGIN PAGE:**

User Name:		
PASSWORD		
	PROCEED	
	EXIT	

# WORKER CLASS

After login in workers will be able to see their assigned services.

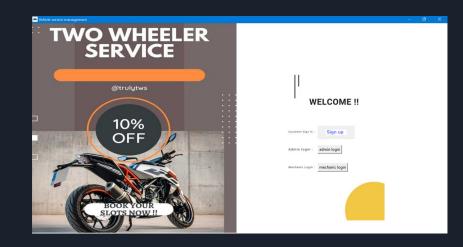
Services are assigned to each worker based on first in first out condition.

Date of completion of their work will be given.

After the date of completion, the services will be dequeued from queue of works.

# CUSTOMER LOGIN: PAGE 1:

- •This is the first page which has the buttons customer sign in for customer to login to their account.
- •There is a button admin login in which the admin can login in and manage the tasks
- •There is a button mechanic login in which the mechanic can login and see the tasks assigned to them



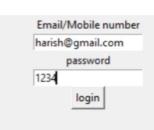
#### PAGE 2:

•This is second page where the customer has to enter their first name, last name, email, mobile number, and will be able to set their password. After that they will be able to sign up



#### PAGE 3:

•If the customer already has a account they can login into their account by entering their email/mobile number and their password



#### PAGE 4:

- •This is the third page where the customer has to enter the vehicle details like, vehicle brand and model, reg.no.
- •The customer will be able to select the services they want.

welcome Harish enter your vehicle details and pick the services you want

Vehicle Brand and Model

TVS apache

Vehicle Reg no.

T1238

✓ general service

✓ oil service

✓ engine maintanance

✓ oil service

submit

#### PAGE 5:

•After clicking submit the customer will be redirected to this page where they can able to see the services they

selected

The services are genaral services, oil service, break system maintanance, engine maintanance, oil service

# THANKYOU