DESIGN A SYSTEM FOR BOOKING CABS WITHIN LPU USING PYTHON

Dissertation submitted in fulfilment of the requirements for the Degree of

"INT213, Python Programming"

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

Submitted by

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Introduction to the Project

The Project is entitled as “Cab Booking System”. Cab booking service is a major transport service provided by the various transport operators in a particular city. Mostly peoples use cab service for their daily transportations need. The company must be a registered and fulfils all the requirements and security standards set by the transport department.

In this project we are going to develop a Cab Management System for LPU which is GUI based using Python programming language.

A Cab Management System Project in Python is a set of innovative technologies that provide cab sector solutions. Any cab management system’s main concept is self-explanatory: it’s a system that assists faculty and students of LPU to provide them cab facility.

This Python Project on cab Management System is mostly concerned with dealing with client parking details such as username and password. The system also allows vehicle owners to enter information such as their name, registration number, hostel/block, contact info, etc.

This system will consist of four parts: - CAbMS, Register, Login Page and Booking Request. User have to choose one option from PMS and fill the next form according to his/her need.

Available Features

- Set up customer data
- Make a reservation
- Total cost tax generated
- Booking Receipt
- Login System

Tools used :-

1. Python 3.10.6:

Python is a general-purpose programming language. Hence, you can use the programming language for developing both desktop and web applications. Also, you can use Python for developing complex scientific and numeric applications.

Python is designed with features to facilitate data analysis and visualization.

2. Tkinter:

Python offers multiple options for developing GUI (Graphical User Interface). Out of all the GUI methods, tkinter is most commonly used method. It is a standard Python interface to the Tk GUI toolkit shipped with Python. Python with tkinter outputs the fastest and easiest way to create the GUI applications. Creating a GUI using tkinter is an easy task

ROLES AND RESPONSIBILITIES

Our project works on the basic rules and synopsis told by Shivani Bhardwaj Ma'am. For the execution of our project with comfort and ease, our group members who are Raushan Kumar, Ritesh Kumar, Gauhar Adeeb have divided our project into 3 subparts which are:-

1. Creating CAbMS and Registration page (by Gauhar Adeeb)
    - Coding of the modules
    - Designing of modules
    - Designing of the homepages

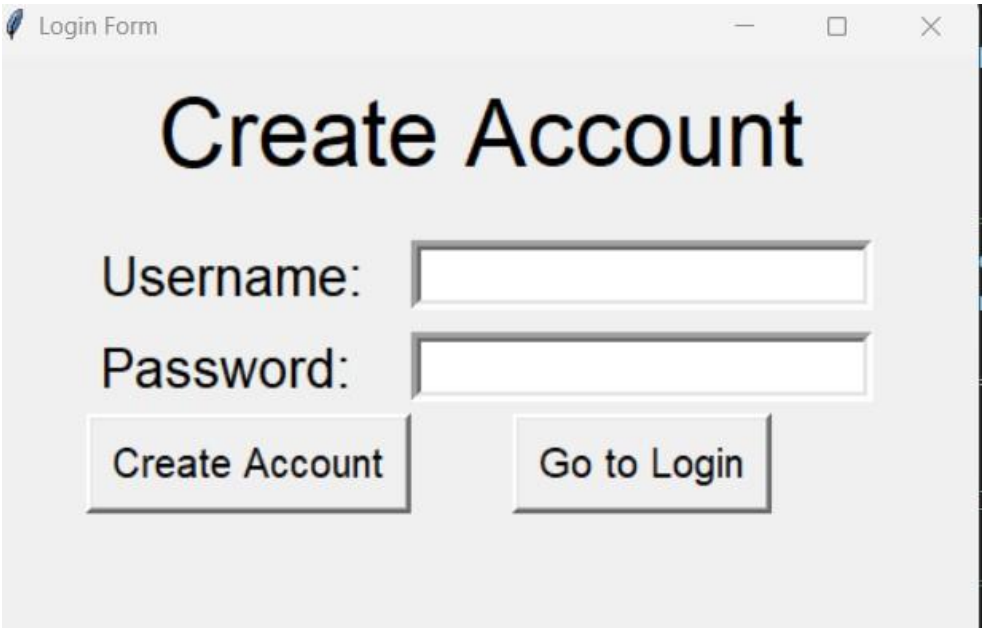
2. Creating the login page (by Raushan Kumar)
    - Coding of operation function
    - Analyzing minor bugs
    - Designing of modules

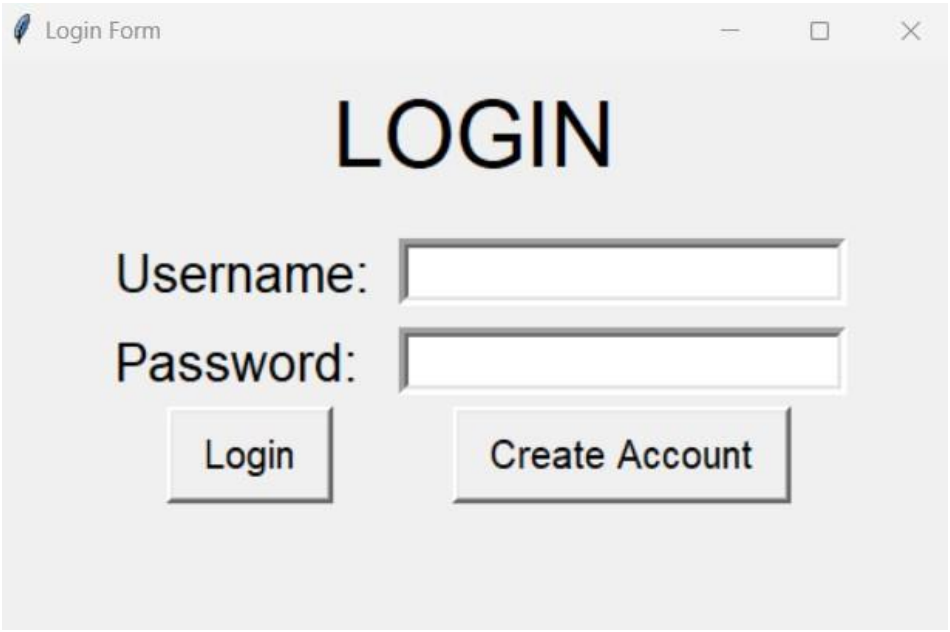
3. Booking request interface (by Ritesh Kumar)
    - Designing of modules
    - Coding of the homepage
    - Designing of the homepage

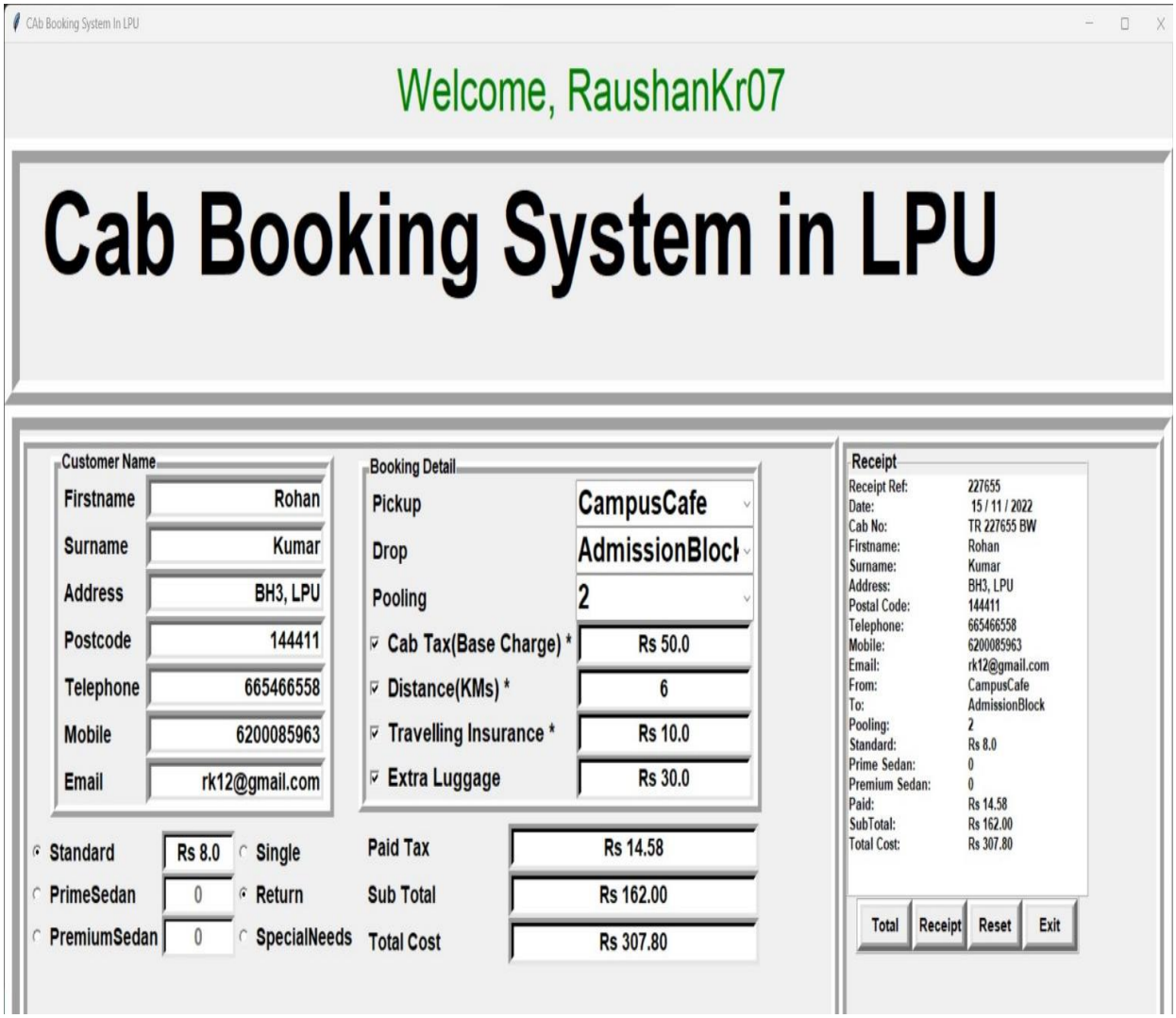
Despite the disparity in the creation of this python code, my fellow mates and I agreed that we will compile and execute the code on the same compiler so there will be fewer changes of error. More tools which will be widely used by us will be :-

1. Tuples
2. List
3. Dictionary
4. Recursion
5. Functions

The main modules to be covered in the program are as shown in the picture:






CAb Booking System In LPU
Welcome, RaushanKr07
Cab Booking System in LPU
Customer Name
Firstname
Rohan
Surname
Kumar
Address
BH3, LPU
Postcode
144411
Telephone
665466558
Mobile
6200085963
Email
rk12@gmail.com
Booking Detail
Pickup
CampusCafe
Drop
AdmissionBlock
Pooling
2
Cab Tax(Base Charge) *
Rs 50.0
Distance(KMs) *
6
Travelling Insurance *
Rs 10.0
Extra Luggage
Rs 30.0
Standard
Rs 8.0
PrimeSedan
0
PremiumSedan
0
Single
Return
SpecialNeeds
Paid Tax
Rs 14.58
Sub Total
Rs 162.00
Total Cost
Rs 307.80
Receipt
Receipt Ref: 227655
Date: 15 / 11 / 2022
Cab No: TR 227655 BW
Firstname: Rohan
Surname: Kumar
Address: BH3, LPU
Postal Code: 144411
Telephone: 665466558
Mobile: 6200085963
Email: rk12@gmail.com
From: CampusCafe
To: AdmissionBlock
Pooling: 2
Standard: Rs 8.0
Prime Sedan: 0
Premium Sedan: 0
Paid: Rs 14.58
SubTotal: Rs 162.00
Total Cost: Rs 307.80
Total
Receipt
Reset
Exit

DISCRIPTION OF MODULES

Modules No.1 (CAbMS):

In this module- User are given three options to select from: First is login through which the user who already have the account can directly access the provided service. Second one is new user through which new user can make their ID and then access the service. Third one is Available Routes which give the info about the cab routes.

Modules No.2 (Register/Create Account):

In this module - The user can register themselves and can see their option. Users must give their information like name, gender, mobile no. and email id.

Modules No.3 (Login Page):

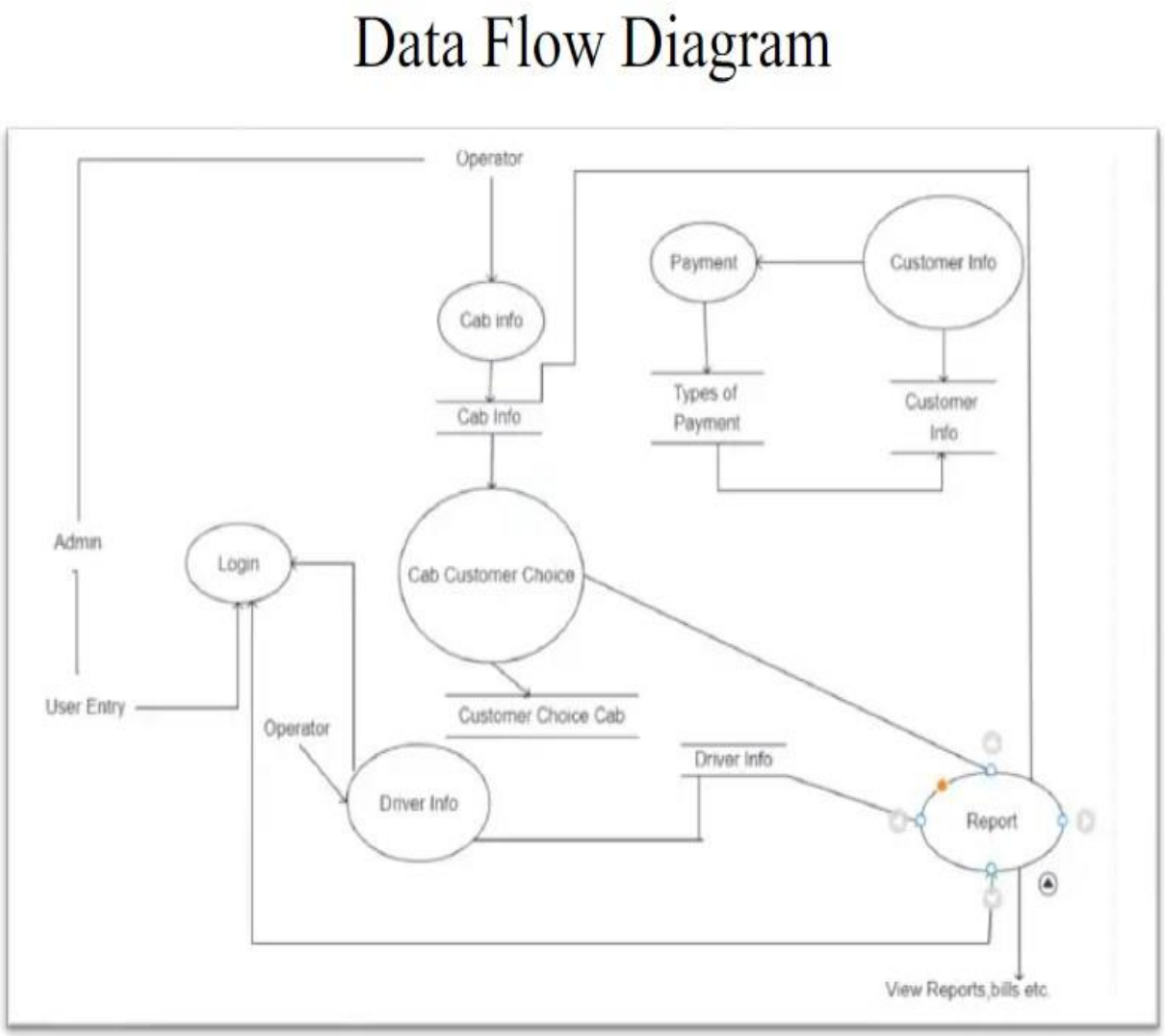
In this module - Users who are already registered have to only enter their Username and password for login in, and the for the users who are not registered can choose new user option for signing and registering themselves.

Modules No.4 (Booking Request):

Through this module - The user can request for the cab and can see for the if any cab is available or not.

DATA – FLOW DIAGRAM

A data – flow diagram is a way of representing a flow of data through a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. The following diagram describes the entities and process defined in our project:-



GANTT CHART

Time Lines (Gantt Chart)

TASKS	1-5 Days	5-15 Days	15-25 Days	25-40 Days	40-50 Days
Requirement Gathering					
Coding					
Bug fixing					
Implementation					
Testing					

REFERENCES

GitHub Link for Project: -

1. Raushan Kumar – https://github.com/raushankr07/INT213-Cab-Booking-System

2. Gauhar Adeeb – https://github.com/Gauharadeeb01/INT213-Cab-Booking-System

3. Ritesh Kumar – https://github.com/ritesh9166/INT213-Cab-Booking-System