

**T.C.**

**MARMARA UNIVERSITY**

**FACULTY of ENGINEERING**

**COMPUTER ENGINEERING DEPARTMENT**

CSE4074 Computer Networks

Socket Programming Assignment

Report

Group Members

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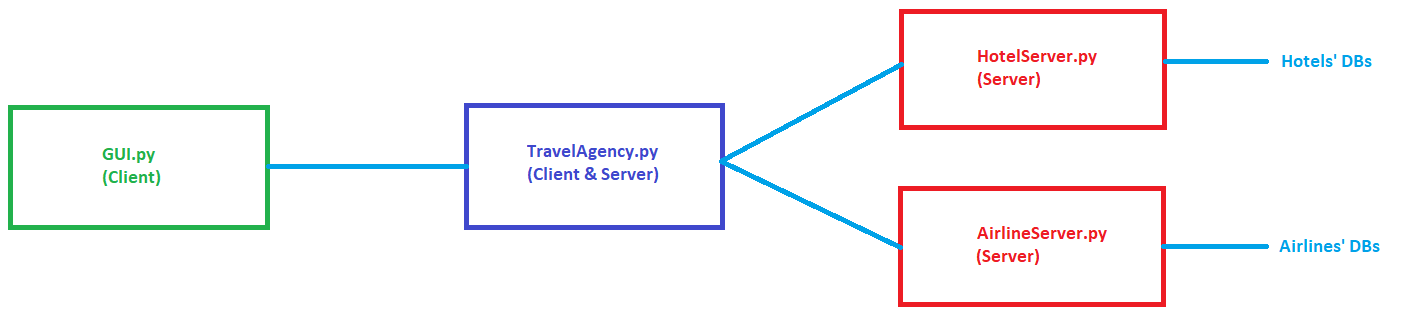
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Deadline

22.12.2019

In this assignment, we have implemented a trip reservation system. Customer opens program’s GUI, types arrival and departure dates and number of travelers, selects preferred hotel and airline and finally clicks to reserve button. If preferred hotel and airline are available for given inputs, reservation completed successfully and corresponding databases are updated. Any of preferred hotel and airline is not available for given inputs, alternative hotels or airlines are listed to the customer and prompted to select one of them. If customer does not select one of them, reservation process terminated.

Program has been coded with Python and GUI has been created with Tkinter library. There are 4 main Python files and JSON files for airlines’ and hotels’ databases.



**GUI.py**

This file includes graphical user interface and client implementation.

**TravelAgency.py**

**HotelServer.py**

**AirlineServer.py**

**Database Files**

Database files for all hotels and airlines are in JSON format. Names of airline files start with a\_ prefix and hotel files start with h\_ prefix. Each hotel and airline has its own DB file. In the file, max capacity of daily customer and up-to-date daily customer counts are specified. The availability for each hotel or airline on any given day is calculated by subtracting the number of customers available on that day from the maximum capacity. When a new database file added to the directory, GUI automatically finds it on next startup.

