1.

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2.

Im programming a Reservation System. I'm planning to implement the program at an Easy or Medium level, but mostly the Easy level parts.

Create a reservation system for an imaginary company. The system contains information on scheduling, customers, and the company's resources.

The company has a limited amount of resources. These resources can be, for example, maintenance areas and mechanicians in a car repair shop, chairs in a barbershop, or hotel rooms. The information on the resources has been added into the program.

The program saves information about reservations into a calendar and marks the chosen resources as reserved for that time. When making a reservation causes a conflict (the resource has already been reserved), the reservation doesn't go through. The program adds relevant information on the customer to each reservation.

The program can be used to check the reservations on a given point of time and to print out information on reservations within a time interval determined by the user.

3.

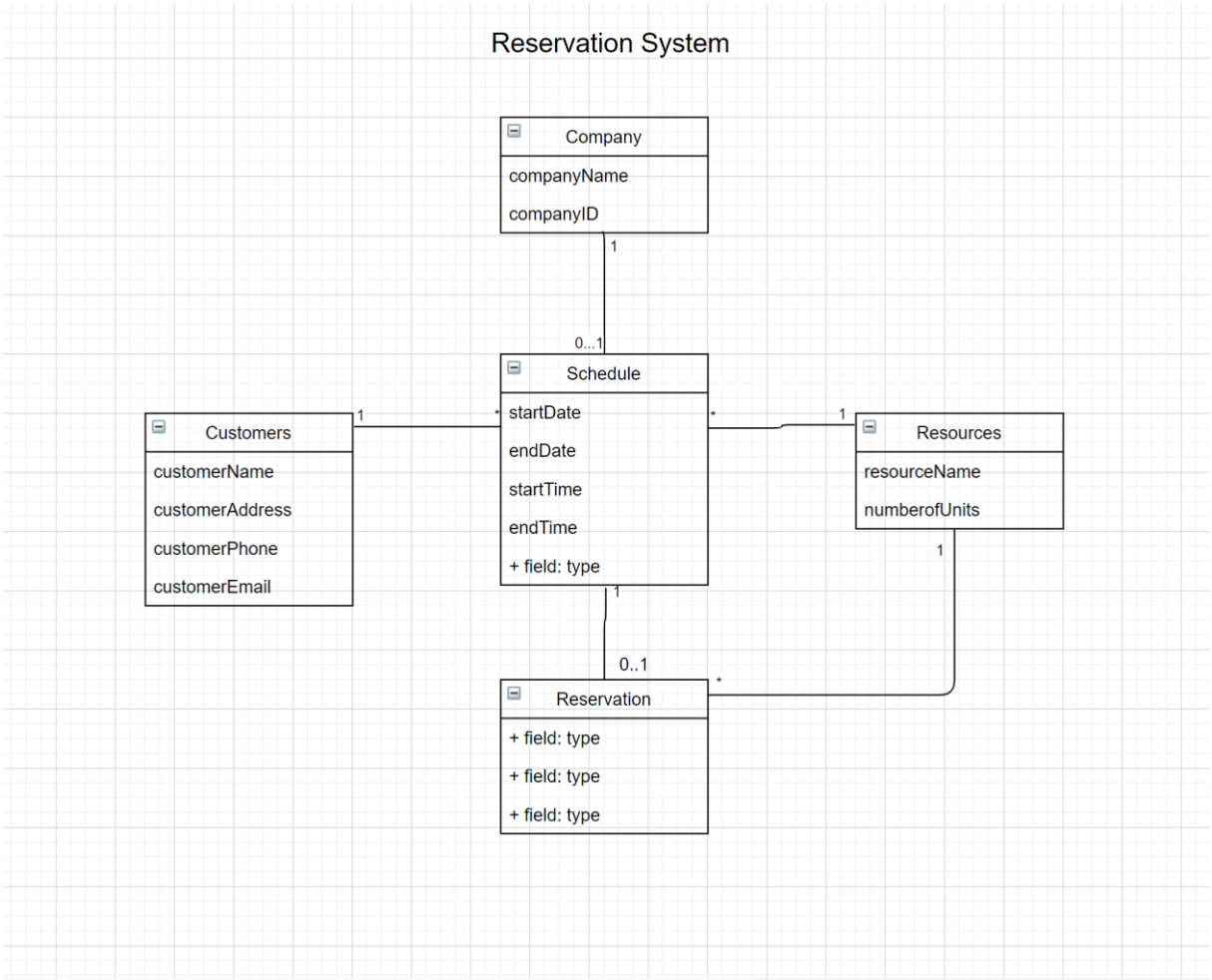
When opening the program the user is faced with a menu. The user can choose from different options, for example "Make a reservation" "Reservations" "Resources Available". After choosing an option from the menu, the user gets either more options, or is asked to input a date, time, and what they want to reserve. The program gets input in the menu and after choosing an action it gets an input. If the user wants to print all reservations it can be done from the menu. The print is always printed to the console.

4.

My Classes are planned to be: Schedule, Company, Resources, Reservation and Customers.

The most of the code in the program will be in class Schedule. Here the menu will be implemented and this class will use the other classes to implement a schedule. The Customer class creates new customers and stores them. The Company and Resources classes are much like Customers. Reservation Class is able to make the reservation and reserve an available unit from Resources.

Because of the program having a text based user interface and not graphic, there is no need for a separate UI class I believe.



5.

I am planning on using objects as data structures for classes Resources, Customers and Company and Schedule. I will need dynamic structures(lists), I think the implementation then will be better than with using arrays for example for Schedule. I will be using pythons predefined structures.

6.

This program will be using text files to store data. The data will be presented either in a long string or each data will have a separate line. The separate line is the most likely.

7.

The program will use simple algorithms. It will use other classes to retrieve data or save data. No advanced algorithms is needed.

8.

The program will be tested with different reservation systems and it should work for every system that follows the projects structure. Will first put in data for a reservation system and then test that it can be added more, It can print data and data for a specific time.

9.

The Python Built-in functions should be enough to use in my program.

10.

Build classes- 10h

Testing- 2h

Fix faults in program – 3h

Testing – 2h

Fix faults in program- 2h

This is my idea of the schedule in hours.

I plan to first build Customers, Company, Resources, Reservation Classes, and after they are built the Schedule class.

11.

I will use Google a lot. The Python base class libraries' API descriptions will also be used.

12. -

Cancel- not few hours before

Base schedule and updated schedule

1 week future

Dictionary for times in weekdays

Customer reservations sparas