Team name: jigsaw

Uni:

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### Introduction:

Hotel management is a critical part of the hotel operation chain. Our goal is to create an efficient, secure, and user-friendly hotel management system to provide excellent service to the customers while maximizing the profit for the hotel. Our hotel management system is an all-in-one application, which is designed to accommodate the needs of different staff members in the hotel. Front desk staffs are able to make the most suitable room arrangement for the customers. Accountants are able to view and analyze the profit and loss over a certain period of time. We believe that our hotel management is capable of facilitating the service and helping the hotel to develop at a fast pace.

# **User Story:**

## Manager:

<0> : As a manager, I want to know how many rooms are empty, so that I can arrange customers to their desired rooms. My condition of satisfaction is that the number of available rooms is always updating and if desired rooms of customers are occupied, then I can arrange and recommend similar rooms to customers.

<1> : As a manager, I want to be able to see our hotel occupancy rate so that I can evaluate how the hotel is running and making further plans. My condition of satisfaction is that the exact number of occupied rooms including history data are recorded. If a customer made a reservation and never shows up, that does not count.

#### Front desk:

<1> : As front desk, I want to be able to help customer check in and check out so that we have the right information. My condition of satisfaction is that I can check in and check out our customers on our software interface and the availability status of the room will be changed accordingly.

<4> : As front desk, I want to be able to tell the customer our available rooms and the prices. If the room is reserved or occupied, it will not appear. My condition of satisfaction is that the information about our available rooms is correct and can be shown on our software interface.

<5> : As front desk, I want to be able to record requirements of customers and add other room service fees for our customers. My condition of satisfaction is that the information can be recorded on the interface and additional fees will be added to the total charge.

# Technology

Language:Java Platform: Mac

Interface: This is a desktop application and we will have a GUI which is demoable.

Data Storage: SQL (MySQL)

Framework: JavaFX

External API / Framework:

Google timeline api :

https://developers.google.com/chart/interactive/docs/gallery/timeline

Google calender api:

https://developers.google.com/chart/interactive/docs/gallery/calendar

Tableau JavaScript api:

https://onlinehelp.tableau.com/current/api/js api/en-us/JavaScriptAPI/js api.htm

Tool: Github

Google map api

Travel api

Flight api

Booking api, yelp api, tripadvisor api to make suggestions

Store suggestions in database

Input, expected output; Fail/ Success, what would user see