**Team #10 – Hotel Wizard**

**ITSC 3155 Final Project Report**

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**Date: \*\*\*\*/\*\*/\*\***

**Table of Contents**

[1.1 Product Vision](#_ova1gj2748zx) 3

[1.3 Project Scope and Objectives](#_2ihdctnr7fya) 3

[1.4 Ethical concerns](#_yui013y1lios) 3

[**2 Project Resources**](#_65yptmxaeu7k) **3**

[2.1 Group Members](#_t573t3bo6mb9) 3

[2.2 Data](#_gzfbjzatnx08) 3

[2.3 Hardware and Software Resources](#_z6e4767m456l) 3

[2.4 Special Resources](#_gmdpdebdle47) 3

[**3 Plan**](#_1gajp5neupqq) **3**

[3.1 Timeline Chart](#_lpne3s8r1dm6) 3

[3.2 Task/Milestone Descriptions](#_ewie3ioeq4su) 4

[3.3 2.3 Resource Table](#_61mtx5qdwvbn) 4

[**4 System Design**](#_avthgezfs476) **4**

[4.1 Use Case Diagram](#_ohi1avqbzh6k) 4

[4.2 DFD diagram](#_bc3djev6d7ia) 4

[4.3 User Stories](#_jr8oq17frw2c) 4

[4.4 Feature List](#_d788oibdz88n) 4

[4.5 Storyboard](#_8y184bnk67l7) 4

[**5 User Tests**](#_ausmgh6j22zd) **4**

[5.1 Test procedure](#_fnv18nleyk5w) 4

[5.2 User Test and Results](#_1jl0xjy1owmu) 4

[5.3 Conclusion](#_60vlc3t7s09q) 5

[**6 Lessons Learned**](#_7eqbx6vck6z9) **5**

[**7 Future work**](#_humg5e8jv4sv) **5**

[**8 Appendices**](#_4pfv62doiotn) **5**

[8.1 Sketches](#_dvytkhz9p19q) 5

[8.2 Software Repository](#_n82trfuk53o3) 5

1 Introduction

The idea of targeting our data visualization project on hotels and resort owners was from reflecting back on the struggles we have as customers booking hotel rooms. From there, we asked each other when was the best time to book a hotel room? How long do people usually book their rooms for? We thought about the owners and or managers perspective on how they maintain profits when there aren't a lot of bookings. For example during the times of the year when a lot of families and students are still in class and are not looking to travel out of town.

As a hotel and or resort owner, you would want to efficiently maintain its services from managing the front desk, cleaning, dinner, and etc. You want to hire enough people to manage an establishment and also enough to where you are maximizing labor and labor costs. Thus, we came up with an idea of gathering data that displays when a hotel and resort have the highest and lowest amount of bookings.

## Product Vision

Hotel and resort owners will be the target of the data visualization. They will be able to use our product to determine the amount of labor needed during the different seasons of the year. PRODUCT NAME is a business management application. They will be able to optimize their workers schedules along with

optimizing their finances for who they should hire. Hotel and resort owners would want to use this product because they want to be able to know when and where to invest their money. Unlike our competitors like getsling, our product will optimize labor on a season by season basis. This product will allow hotels and resorts to always be prepared no matter what time of the year it is.

* 1. Customer Description

The customers for this visualization is aimed towards hotel and resorts owners mainly as they will be the ones to oversee the establishment. However we are also aiming for people that are in charge of hiring the labor that runs their establishment and the people in charge of managing the establishment's finances.

## 1.3 Project Scope and Objectives

Define the scope of the project and the objectives (features) to be satisfied by this project.

## 1.4 Ethical concerns

# 2 Project Resources

## 2.1 Group Members

1. Brevory Foster

2. Christine Chee

3. Siijan Wu

4. Calvin Hathcock

## 2.2 Data

Data Source: <https://www.kaggle.com/jessemostipak/hotel-booking-demand>

The data we chose is a .csv (comma separated values) file. It contains various information about two hotels. A city hotel and a resort hotel. It includes information about specific times of the year that individual customers booked and the different details about their stay such as if they brought children, what country they are from, if they’re a repeat customer, reservation status and more. We think this data will be perfect for analyzing rates of travel at different points in the year and even creating a predictive model for upcoming years.

## 2.3 Hardware and Software Resources

Indicate the anticipated software and hardware resources required to complete the project.

## 2.4 Special Resources

List any special resources needed to complete the project.

# 3 Plan

This section contains is a list of tasks and deliverables associated with the project, a Gantt chart

depicting task durations, dependencies and completion dates, and a summary of resource

requirements and assignments for each task.

## **3.1** Timeline Chart

Gantt Chart (with dates). [Video on Gantt charts in excel](https://www.youtube.com/watch?v=xsxi4qaEnOg)

Consider the following milestones:

- Milestone 0

- Milestone 1

- Milestone 2

- Milestone 3

- Milestone 4

- Milestone 6

## **3.2** Task/Milestone Descriptions

Milestone 1 - …

Milestone 2 - …

## 3.3 2.3 Resource Table

|  |  |
| --- | --- |
| **Task** | **People** |
|  |  |
|  |  |

# 4 System Design

## 4.1 Use Case Diagram

## 4.2 DFD diagram

## 4.3 User Stories

## 4.4 Feature List

## 4.5 Storyboard

# 5 User Tests

## 5.1 Test procedure

## 5.2 User Test and Results

## 5.3 Conclusion

# 6 Lessons Learned

# 7 Future work

# 8 Appendices

## 8.1 Sketches

## 8.2 Software Repository

8.3 WBS tool

## 

This section contains any additional information that you would like to include in the project proposal and plan.