**Functional Design**

**Version 1.0**

**Table of Contents**

[**1. Preface 3**](#_Toc39067713)

[**2. Functionalities 3**](#_Toc39067714)

[**3. Sitemap 4**](#_Toc39067715)

[**4. Navigation Structure 4**](#_Toc39067716)

[**5. User Interface 4**](#_Toc39067717)

[**6. Design 5**](#_Toc39067718)

[**7. Use Case 5**](#_Toc39067719)

[**8. Data Model 5**](#_Toc39067720)

[**9. Security and Maintenance 5**](#_Toc39067721)

[**10. Summary 5**](#_Toc39067722)

[**11. Sources 5**](#_Toc39067723)

# **1. Preface**

**1.1 Introduction**

You are working for the application and media development department of an IT company. This company is hired to develop a reservation website for **Hotel California**. The website will replace the full paper administration of the reservation desk.

**1.2 Hotel California**

The company is **Hotel California**. They are a Dutch hotel company that wants to improve their quality and make their customers leave with a big smile. Since they are still using full paper administration for reservations, they wanted to make it faster and easier for both customers and the hotel itself. The hotel keeper has been in the hotel business for 20 years and seen many hotels switch over to an automatic reserving method which has been a success most times.

**1.3 Target Audience**

The website will be primarily used for customers who want to stay at Hotel California for the night. Everyone above 18 years old is allowed to book and reserve a room to stay for the night.

# **2. Functionalities**

**2.1 Must have functionalities**

There are a couple of functionalities that **MUST** function correctly if the reservation website is going live, they are as followed:

1. The hotelkeeper **must** be able to see a room plan with the location of the rooms.
2. The hotelkeeper **must** be able to add the category of rooms available in the system.
3. The hotelkeeper **must** be able to print a list of rooms and the category they belong to.
4. In the room plan, the hotelkeeper **must** be able to assign the category that the room belongs to.
5. The reservation desk **must** be able to assign a room price for one of the 3 categories of rooms for a certain day of the year. The pricing system **must** be filled in, at least 3 months in advance.
6. The reservation desk **must** be able to retrieve a list of room prices per day. They also **must** be able to print this list.
7. Web visitors **must** be able to see the available categories of rooms and prices for those categories from a certain start-to an end date.
8. The web visitor **must** be able to make a reservation.
9. The hotelkeeper **must** be able to see and print a list of occupied and reserved rooms within a certain period.
10. The front desk **must** be able to print a list of room prices for a week.
11. The front desk **must** be able to see all unoccupied and the amount of not reserved (vacant) rooms on a certain day per category.
12. The front desk **must** be able to register a guest as an occupant of a room.
13. The front desk **must** be able to see if the room is prepaid or post-paid.
14. In the case of a post-paid rooms, the front desk **must** be able to print an invoice for the room rent (free) that is due.

**2.2 Should have functionalities**

Besides having functionalities that are a must there are functionalities that **SHOULD** function correctly, this can be for the user experience or something else, they are as followed:

1. The reservation website **should** have a login system. This will be for both customers and administrators (staffs).
2. The reservation website **should** have a calendar.
3. The reservation website **should** have an admin panel for the administrators (staffs) to make changes or view reservations.

**2.3 Could have functionalities**

Here is a list of functionalities that **COULD** be a part of the reservation website, they are as followed:

1. There **could** be an invoicing system for the minibar usage during a stay.
2. There **could** be a ticket system for room service (chef and waiter).
3. There **could** be a room service tickets that connect to the invoicing system.
4. There **could** be a cleaning alert on the floor map at checkout.
5. There **could** be a cleaning roster with the most efficient route.

**2.4 Won’t have functionalities**

Here is a list of functionalities that **WON’T** be a part of the reservation website, they are as followed:

1. The reservation website **won’t** be available in mutiple languages. It will only be available in English.
2. The reservation website **won’t** have a “chat with staff member” on the website. However you can read FAQ.
3. The reservation website **won’t** make use of discount codes.

# **3. Sitemap**

**3.1 What is a sitemap? [1]**

A sitemap is a file where you provide information about the pages, videos, and other files on your site, and the relationships between them. Search engines like Google read this file to more intelligently crawl your site. A sitemap tells Google which pages and files you think are important in your site and provides valuable information about these files: for example, for pages, when the page was last updated, how often the page is changed, and any alternate language versions of a page.

**3.2 The website sitemap**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **4. Navigation Structure**

**4.1 Lorem**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **5. User Interface**

**5.1 Lorem**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **6. Design**

**6.1 Design, font, colour scheme, etc.**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **7. Use Case**

**7.1 Use case diagram**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **8. Data Model**

**8.1 Data model table**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **9. Security and Maintenance**

**9.1 Security**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

**9.2 Maintenance**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **10. Summary**

**10.1 The summary**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

**10.2 The distribution list**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

**10.3 The version management**

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

# **11. Sources**

**11.1 Original source link**

* Sitemap [1]: <https://support.google.com/webmasters/answer/156184?hl=en>

**11.2 Copyright**

All content is owned by Jun Yi Xie, this is for educational purpose only.

**Functional Design created by Jun Yi Xie.**

**Version 1.0**