Moffat Bay

Technical Design Document

Group B

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Module 2.1 Assignment

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# Introduction

## 1.1 Purpose

The purpose of this TDD is to outline the users, requirements, and delivery of the Moffat Bay Lodge website project, along with all of the features that it entails.

## 1.2 Terminology

* **TDD:** TDD stands for Technical Design Document. This document can be considered as the blueprint for a new feature or project.
* **Prototype:** A Prototype is a rough simulation of how a product might look and feel. This effort is usually a quickly put together item for how the page layout will be and where certain actions might take a user.
* **User Personas:** User Personas are fictional characters that are representative of real-life users of an application or website.
* **User Stories:** User stories embody a piece of work taken up for development and describe the why and the what behind that piece of work. They can be estimated in story points or work hours and represent the desired functionality of a unit of work for a particular user.
* **MySQL:** MySQL is an open-source relational database. MySQL will be used as the backend of this project to store and query data as needed.
* **Responsive Design:** A software design approach to address the difference screen and device sizes. This design approach allows for seamless transition between device sizes.
* **Bootstrap:** A CSS Design Library that allows for user focused responsive design.
* **MVC Architecture:** Stands for Model, View, Controller. It is a software design pattern used to divide the business logic from the User Interface while being able to connect them through controllers.
* **Cycle Time:** Represents the time it takes to complete a task from start to finish. In software development, cycle time estimates development speed in agile methodologies.

## 1.3 User Personas

|  |  |
| --- | --- |
| **Katrina Pollard (Marketing Manager)** | |
|  | Age: 52  Place of Birth: Richmond, Virginia  Place of Residence: Rochester, New York  Education: Master of Science in Marketing Management  Occupation: Marketing Manager  Relationship Status: Married  Computer Skill Level: Proficient |
| Goals: Wants to increase Moffat Bay’s Lodge customer retention by promoting exclusive deals and targeted campaigns.  Most Used Features: Marketing and database tools (such as querying, filtering, and generating reports).  Unused Features: Reservation page and registration/login functionalities.  Needs to Meet: Needs the ability to monitor the Lodges customer retention, guest attributes, and promote marketing campaigns. | |

|  |  |
| --- | --- |
| **Rebecca Dawson (Guest Services Representative)** | |
|  | Age: 24  Place of Birth: Ann Arbor, Michigan  Place of Residence: Moffat Bay, Joviedsa Island  Education: Associate of Hospitality Managment  Occupation: Guest Services Representative  Relationship Status: Single  Computer Skill Level: Foundational |
| Goals: Wants to increase their network of trusted clients by providing excellent client services and a smooth booking process with clear communication between the client and Lodge.  Most Used Features: Ability to alter appointments (change room type, date, and time of check in, and make cancellations), and the ability to contact customers for changes in room availability through email or text notification,  Unused Features: Employee account customization and report generation.  Needs to Meet: Needs to be able to fully access guest reservations and needs to increase the ease of communicating between customers and employees. | |

|  |  |
| --- | --- |
| **Jim Pryor (Customer)** | |
|  | Age: 38  Place of Birth: Cape Canaveral, Florida  Place of Residence: Jefferson, South Carolina  Education: Bachelor Mechanical Engineering  Occupation: Mechanical Engineer  Relationship Status: Married with Children  Computer Skill Level: Intermediate |
| Goals: Wants to find a getaway that offers a variety of activities for their guests to participate in during their stay.  Most Used Features: User account, lodge reservation page, loge activities page.  Unused Features: Chat bots and testimonials/guest reviews.  Needs to Meet: Ability to easily make reservations and navigate important information regarding accommodations and activities. | |

## 1.4 User Stories

|  |  |  |
| --- | --- | --- |
| **User Stories** | | **Story Points** |
| Marketing Manager | As a marketing manager, I want to be able to view the original geographical location of the guests that have made reservations over different time periods so that I know what markets I need to target in order to attract more customers. | 5 |
| As a marketing manager, I want to be able to easily alter the media on our web pages so that I can promote our lodge to increase the number of visitors. | 3 |
| As a marketing manager, I want to be able to send out notifications for deals and packages to registered users so that I can increase bookings and promote customer retention. | 3 |
| Guest Services Representative | As a front guest service representative, I want to look up reservations by customer name, date, and room type so that I can easily view bookings and ensure that the appropriate accommodations are available when providing assistance to customers during the booking process. | 2 |
| As a guest service representative, I want to be able to look up language preference so that I can provide better, more personalized customer service to them. | 2 |
| As a guest service representative, I want to be able to view and edit guest preferences so that I can ensure any necessary accommodations are being made. | 3 |
| Customer | As a customer, I want a user-friendly design so I can easily navigate the website so I can view all the accommodations, activities, and amenities that the lodge offers. | 8 |
| As a customer, I want the website to be able to look up past reservations easily so that I can save time rebooking accommodations that I make frequently. | 2 |
| As a customer, I want a straightforward way to cancel reservations so that I do not have to waste time online or call the lodge to make a cancellation. | 2 |

## 1.5 Work Estimation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Feature** | **Summary** | **Tasks** | **Work Hours** | **Story Points** |
| TDD Document | Provide TDD document to outline project, goals, user personas, stories, and timelines of work efforts | Create Purpose | 3 | 2 |
| Create Terminology | 3 | 2 |
| Create User Personas | 3 | 2 |
| Create User Stories | 3 | 2 |
| Create Work Estimates | 3 | 2 |
| *Totals* | | | *15* | *10* |
| Create Protype and Mockups | Create Functional Prototypes and Mockups of application to provide initial design | Create Landing Page Mockup | 5 | 3 |
| Create Login page prototype | 5 | 3 |
| Create About us Page prototype | 5 | 3 |
| Create Contact Page prototype | 5 | 3 |
| Create Attractions Page prototype | 5 | 3 |
| Create Registration Page prototype | 5 | 3 |
| Create Lodge Reservation page prototype | 5 | 3 |
| Create reservation summary prototype | 5 | 3 |
| Create reservation lookup page prototype | 5 | 3 |
| *Totals* | | | *45* | *27* |
| Create ERD Diagram for Database | Create ERD diagram that displays the relationships between database entities and their attributes | Design ERD with tables, attributes, and keys | 9 | 5 |
| *Totals* | | | *9* | *5* |
| Create MySQL Database | Create MySQL Database. Create tables in new database and user access roles | Create tables in database | 5 | 3 |
| Insert 3 entitles into each table | 5 | 3 |
| Run SELECT query for results | 3 | 2 |
| *Totals* | | | *13* | *8* |
| Landing Page | Develop Landing page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 2 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| Login Page | Develop Login page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 2 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| User Registration Page | Develop User Registration page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 2 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| Room Reservation  Page | Develop Room Reservation page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 4 Functional Tests | 3 | 2 |
| *Totals* | | | 22 | 13 |
| About Us Page | Develop About Us page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 4 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| Reservation Summary Page | Develop Reservation Summary page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 4 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| Contact Page | Develop Contact page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 4 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| Look Up Reservation Page | Develop Lookup Reservations page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 4 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| Attractions Page | Develop Attractions page, including UI design, database work, backend code, and testing | UI Design | 5 | 3 |
| Populating Database | 5 | 3 |
| Backend Code | 9 | 5 |
| 4 Functional Tests | 3 | 2 |
| *Totals* | | | *22* | *13* |
| Create Slideshow Presentation with Screen Capture | Create a slideshow presentation of project and provide screen capture of the functionality of each page in web application | Slide for intro of team | 2 | 1 |
| Slide for sample prototypes | 2 | 1 |
| Slide for ERD | 2 | 1 |
| Slide for description of 5 tests and results | 2 | 1 |
| Slide for lessons learned | 2 | 1 |
| Screen capture of site | 3 | 2 |
| *Totals* | | | 13 | 7 |
| Updates to Project Site from critiques | Provide updates to project site based on critiques from cohort | Updates to site from critiques | 7 | 4 |
| List out modifications | 5 | 3 |
| *Totals* | | | *2* | *1* |

# Design

## 2.1 Prototypes

## 2.2 ERD

# QA Testing

## 3.1 QA Test Plan