**C868 – Software Capstone Project Summary**

**Task 2 – Section A**



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| **Capstone Proposal Project Name:** |  |
| **Student Name:** |  |

**Table of Contents**

*Create a professional looking Table of contents that includes your main and subheadings and the related page numbers. Use the automatic TOC generating function of Word or other word processing packages to make the process easier.*

*The headings that follow are only examples of what might be included. You will need to create headings that are appropriate for your application and process.*

***Remember that this needs to be a professionally formatted document with detailed information about your project that is easily accessible.***

# **Business Problem**

**The Customer**

The (Grooming Company name) is a full services pet grooming business. Currently they provide services in the following counties. The (Grooming) schedules appointments based on the current locations of their mobile vehicles. Upon request, they go to local businesses, events and charities to offer their services.

The company recently purchased a commercial building for the expected growth of the company within the upcoming month. Their current customer base has outgrown the capabilities of the mobile services. The expansion of the company will require a stand-alone application to manage its appointments, both mobile and inhouse, groomers, and the customers information.

The client has requested the application to be robust and easy to use. The mission is to provide exceptional customer service and a profound grooming experience.

## **Business Case**

The grooming company currently schedules all walkins/ appointments with a notebook. All customer data is tracked in a separate notebook which has shown an increase in customers booking and wait times. This method is error prone and a high security risk. Their current system is no longer viable due to the increase of daily customers.

Their staff have average technical skills and will requires a simple application to provide the quick booking time their customers expect. The application will have the functionality to add/ update/ and delete appointments, staff, grooming services, customers and their pets. The user will be able to search for appointments, customers, grooming services and pets associated with their owners. This functionality will decrease wait times and allow the user to quick locate appointments and their customers information.

The application will be secure with data stored in a mySQL database with a required login to access the application. With this robust system, it will allow the grooming business to continue to maintain their exceptional customer service and provide an ease of use system for all staff members so they can focus on what really matters, providing excellent services for all their customers grooming needs.

## **Fulfillment**

The application will be a stand alone java application that uses JavaFX for the creation of the Graphical User Interface. The primary user will be the front desk staff and the mobile crew. The application will use the mySQL database to make updates, deletions, insertions and various other operations.

The user will be present with a log in page upon launching. This page will contain the company’s logo and slogan. The homepage will display an appointment table viewable my weekly/monthly and a reminder of upcoming appointments. The user will have the ability to search on the fly for appointments based on appointment ID, customer ID, and Groomers name. From this page, the user will be able to add, update, delete appointments, view selected customer, grooming services and reports.

The user will have the option to view all customers or to select an appointment to view associated customer. If user chooses to view all customers, they will be navigated to the customer page and will have the option to search for a customer my customer ID and name. From this page, the user can add, update, and delete customer records. If a customer is selected, they will be able to view all associated pets.

If the user clicks view pets, they will be navigated to the customers pets page to view a table of the customers pets. From this page, the user will be able to add, update, and delete pet records.

If the user chooses to click view grooming services from the homepage, they will be navigate to the grooming services page. From here they will be present with a table of all grooming services with the ability to add, update, and delete a service.

Finanaly, if the customer clicks reports….

Provide information about how the software application will fulfill the needs of the client. This should include how the application will appear, what the basic functions are, and how the outcome will be presented. Remember to include what the application will interface with other systems, how its functions will be enabled by the user, and what type of results it will provide.

For example:

A web application will fulfill the needs of Steelworth’s …controls. The system will interface with an equipment SQL … via a similar database, and equipment certification to ensure consistency of tracking. The system will track the usage, current status, and maintenance of equipment …etc…

# **Existing Gaps**

The existing system is a manual and handwritten process using a several notebooks. This method requires exhaustive ready through entries to find appointments and customers information. This process burdens all staff members and their customers. This method was feasible when the business first start, but a more robust method is required to continue providing the customer service they promise.

The existing system also provides a big security risk, the client notebook system is not as secure as the client would like and keeping it secure in cabinets is taken up valuable space in the mobile vehicles.

Real-time access to data is not possible. Currently the staff members have to work overtime to transfer appointment and customer information to multiple notebooks to have current information in each mobile vehicle at the start of the day.

# **SDLC Methodology**

Considering the nature of your project, select a Software Development Life Cycle (SDLC) methodology that will be used to manage the project. Those may include…………. Be sure to describe the process you select first and why it’s a good fit. Then review the methodology phases and what part of the project will align with each.

For example:

The SDLC Methodology utilized in this project is Waterfall because... The requirements are well understood and defined. The customer is located a significant distance … testing is not logistically possible. The system will be implemented fully…The Waterfall methodology chosen will include the following phases…etc…

# **Deliverables**

Provide information about what deliverables are related to your SDLC method. List and describe those deliverables. Also, include examples to help clarify what specific type of artifacts will qualify.

For example:

There are 2 types of deliverables that are associated with the Waterfall SDLC that the customer has requested. They are project and product deliverables.

## **Project Deliverables**

These consist of items that are part of the Project Manager’s realm of responsibilities.

* Project Schedule
  + When and what will be worked…
* Test Plans
  + The testing steps that the customer uses to perform validation…
* Requirements Traceability Matrix (RTM) …etc…

## **Product Deliverables**

Product Deliverables represents what is produced to deliver to the customer.

* Wireframes
  + A low fidelity, rough representation of the application…
* Mockups/Layout
  + These are designs that are typically high fidelity but contain no functionality. The customer can review…
* Prototype…etc…

# **Implementation**

Explain how the project will be implemented. This has to do with how the software application will be put into the production environment, not how it will be created. So, consider the customer and timing required to meet its needs. When will validation and verification take place? What personnel will be part of the implementation and what roles will they serve?

For example:

The implementation of this application is simple…of this being a new system no outages are necessary and the deployment to production can be staged prior to the customer communicating with the user base to start…

Implementation coordinated by the Project Manager and involves several different groups in a variety of capacities. The Web Administrators …etc…

# **Validation and Verification**

Describe the methods that you'll use to prove that the software application functions sufficiently well to meet the customer's needs. Does it provide all the functionality required? How will those tests be performed and by whom? Identify how segments of the code will be tested. The Customer will perform Acceptance Testing prior to taking ownership of the application. The Acceptance Te

For example:

Testing will be a comprehensive full lifecycle test to ensure that the application has met the requirements as designed. The customer will complete multiple testing sessions with multiple users…etc..

# **Environments and Costs**

## **Programming Environment**

Provide a clear picture of what hardware and software are required to complete the project.

For example:

* Windows 2016 Server running IIS 7.5 or higher
* Microsoft SQL Server 2012 or higher
* …etc..

## **Environment Costs**

Provide an explanation of the costs associated with the software application. Some might be startup, first-time costs while others might be a percentage of licensing costs. Environment costs are relatively minimal. The environment where the system resides in a shared environment where costs are shared by the organizations. There is a nominal fee associated with maintaining the database of $500 a year that allows for unlimited storage size and 99.8% uptime. The web server is another fee of $300 a year that includes maintenance and upgrades of the following; Windows Server, IIS, and ColdFusion. The final cost is based on the thick or thin clients utilized by the customer. Each device that is attached to the network has a $40 annual fee which covers Operating System and Network upgrades.

## **Human Resource Requirements**

What is the time and cost for the labor to complete the application?

For example: The larger share of human resource is by the developers of the project followed by the PM. Developers consume approximately 75% of the hours and dollars associated with …etc.

# **Project Timeline**

For this section, you'll need to look at the phases of the project and provide information about the time required to complete each phase.

For example:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Phase | Milestone/Task | Deliverable | Description | Dates |
| Pre-development | Task 1 | Requirements | Meeting with customer and procedure review | 6/1/2018 – 6/30/2018 |
| Design | Task 2 / Design files | Low fidelity wireframe  High fidelity mockup | Create the UI that relates the look and feel of the project | 7/1/2018 – 7/15/2018 |
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