

## C868 – Software Capstone Project Summary

### Task 2 – Section A



**Capstone Proposal Project Name:** Client Scheduling Application

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# Business Problem

## The Customer

Marvel Sales Co. is a rapidly expanding sales company that offers a wide range of products to diverse customer base. As the company serves thousands of clients, it is now looking for an all-inclusive solution to effectively manage customer records and sales appointment scheduling. Presently, the company uses a combination of various software and manual methods to keep track of customer information and schedule sales appointments, resulting in an inconsistent system.

## Business Case

Marvel Sales Co. is currently using an outdated and inconsistent combination of non-proprietary software and physical records that have accumulated over time without proper planning. This inadequate solution is becoming a hindrance in daily operations as the company expands. In this proposal, we will outline, explain and defend the creation and implementation of a new proprietary desktop application specifically designed for Marvel Sales Co. This new application will standardize and centralize customer and sales data, thereby enhancing the company's ability to efficiently manage customer and sales appointments across all its locations.

## Fulfillment

The proposed software solution will feature a desktop-based interface that facilitates the input, modification and removal of sales data, a search function for searching client appointments, the capability to schedule, amend and cancel sales appointments and appointment details for all clients, a protected user environment and seamless integration with a relational database via SQL.

### SDLC Methodology

The Agile SCRUM methodology will be employed for this project, which is a widely accepted and modern approach with a proven history of success. It emphasizes close collaboration with the business and project stakeholders, as well as fast, iterative updates. Maintaining an open dialogue with Marvel Sales Co. and project stakeholders throughout the development process is crucial in order to attain the precise functionality and final product desired by the company. The Agile methodology will enable us to work efficiently and transparently in order to achieve the desired solution for the project stakeholders.

### Deliverables

Deliverable 1: Approval by Marvel Sales Co and project stakeholders of full design documentation, including wireframes, GUI mockups, and storyboards.

Deliverable 2: A standalone desktop application that meets the specifications of Marvel Sales Co., effectively achieves all stated goals, and features an intuitive graphical user interface for managing clients, editing client information, and scheduling sales appointments.

Deliverable 3: A SQL database that interfaces with the new application and can be accessed with appropriate security credentials, directly through SQL software, for custom queries and data changes.

Deliverable 4: Assistance in migrating all relevant data to the new system, including updating the SQL database directly through file migrations for data existing on older software solutions. Manual entry will be required for hard-copy records without a digital equivalent.

## Client Scheduling Application

Deliverable 5: Training of all relevant employees on the usage of the new software, providing live technical support, and providing relevant and user-friendly documentation that explains all features of the software.

## Implementation

After the development phase outlined in the proposed timeline, we will deploy our software on all necessary systems for Marvel Sales Co. This will be followed by the simultaneous migration of existing data into the new system, as well as creating test environments to ensure all systems are functioning properly. Once the software is in production use, we will provide ongoing technical support.

## Validation and Verification

The validation and verification of the application will be confirmed upon completion, in accordance with the system requirements, unit testing, and all related deliverables. The testing phase will be conducted by the development team, ensuring that best practices are followed. Unit testing will take place during the implementation phase by inputting test cases to verify functionality and that the requirements are met. Upon receipt of the application, Marvel Sales Co will conduct acceptance testing to ensure that all requirements have been fulfilled.

## Environments and Costs

- Windows 11
- MySQL Database Version 8+
- MySQL Workbench
- Google Cloud Platform
- IntelliJ IDEA CE

## Client Scheduling Application

### Human Resource Requirements

Workflow	Cost per Hour	Timeline	Total
Software Development	\$75/hr	3 Months	\$36,000
Database Creation and Migration	\$50/hr	1 Month	\$8,000
<b>Software Implementation</b>	25/hr	2 Month	\$8,000
<b>Software Training</b>	15/hr	2 Weeks	\$1,200
<b>Total</b>			\$43,200

### Project Timeline

Phase	Milestone/Task	Deliverable	Description	Dates
Pre-development	Task 1	Requirements	Meeting with client and procedure review	08/1/2022 – 9/1/2022
Design	Task 2 / Design files	Low fidelity wireframe And UML diagrams	Create the UI that relates the look and feel of the project	9/1/2022 – 10/1/2022
<b>Final Application</b>	Task 3 / Produce Application	Standalone application	Deliver finished application to client	10/1/22 – 11/1/22
<b>Data Migration</b>	Task 4 / Merge Databases	Database	Create new database and merge the old client database with the new one	11/1/22 – 12/1/22
<b>Testing and Implementation</b>	Task 5 / Implement systems	Finished product	Software has been tested and has implemented into company computers	12/1/22 – 01/20/23

## Works Cited

MichaelPageUK. (n.d.). *The top 7 SDLC methodologies*. Michael Page. Retrieved January 22, 2023, from <https://www.michaelpage.com.au/advice/career-advice/productivity-and-performance/top-7-sdlc-methodologies>