Team Greenlight Organization - Milestone 1

The system being designed for The Greenlight Organization is a schedule-building software that will allow a manager to create automatic schedules for their employees based on employee availability and maintain a specific payroll budget for the weekly schedule. The payroll budget, employee information, and the finalized schedule can be edited by the employer only.

This software will:

- Allow the manager to maintain a budget which allows the store a higher profit.

- Save time from gathering employee and payroll information to create the weekly work schedule for the employer.

- Allow a healthier work environment for all employees, giving them their desired work shifts and boosting morale in the workplace.

I.   The Software Development Process

The software will be designed using an Agile methodology. We chose this methodology because the Agile method will ensure the project will be finished in a timely manner. We lost a lot of time due to the hurricane in the fall, so we need to divide this system into four separate sprints in which we can come together in an organized manner and work on a specific part of the project every few weeks. The sprints will be divided as the following:

Sprint	Start Date	End Date	Description and Details
Sprint 1: Database	January 28th, 2023	February 10th, 2023	In this phase we will create the database for information such as Employee Data and Sales History and prepare to create necessary functions within CLion using this database.
Sprint 2: Functions	February 11th, 2023	March 3rd, 2023	Within this phase, we used the database created in Sprint 1 to create functions for building an optimal employee schedule, as well as the sales history functions to maximize profits based on payroll budgets.
Sprint 3: User Interface	March 4th, 2023	March 17th, 2023	The final sprint in which we plan to clean up the final product with a workable UI. We will also ensure system functionality and

and Ease of Access			ease-of-access techniques to ensure the system will be simple to use for the manager.
Sprint 4: Finalize and Testing	March 18th, 2023	April 7th, 2023	Ensure the final product is free from virtually any defects or bugs. Provide several test cases for each function and results.

1. Technology Stack

The system will be created using the language C++ within the program CLion. We will be creating an employee database using MySQL. The functions we create within CLion will link to the database within MySQL. These functions include adding/deleting employees, editing employee information, viewing employee information, and pulling information to create the weekly schedules.

MySQL will also have another database for daily sales information which will be edited by the store manager as well. This sales information will be able to be viewed which the manager could choose to view sales by day, week, month, or yearly. The data within this database will also be used within the scheduling function to ensure a desired weekly payroll cap by the manager when creating the schedule. This will ensure the schedule stays within the budget.

2. Repository Tools

The system's source code will be organized using Github. All source code for the database, the system's functions, and UI code will be stored within this Github repository. All reports, milestones, and deliverables will be stored within a project folder on Google Drive which the group can access at all times.

3. Group Contribution Method

The group will discuss who will work on each part as each phase presents itself. We will collectively work on one phase at a time and discuss strengths and weaknesses to ensure not only full group participation, but also allow us to teach and help each other with parts of software development where one may have questions or issues. All group members hope to finish this project with new knowledge on system creation.

To show the total contribution for each member, every phase will have a contribution log to show what each member has done. We will also leave comments within the code with our names and explanations on the code to ensure everyone understands each section of code and can work off that code to create more functions.

4. Project Management

The team meetings will mostly take place on the computer using Discord. We have created a Discord group to not only be able to vocally communicate, but to also have a section where we can type things out to each other, post availability and ideas, and post any deliverables or work due for the class.

We also have phone numbers and email addresses of all members in case we need to contact each other immediately for important information.

II.   Course/Sponsor Deadline Dates

Deadline Date	Deliverable	Course / Sponsor
January 27th, 2023	Milestone 1	Course
March 3rd, 2023	Database and Functionality Deliverable	Sponsor
March 17th, 2023	Milestone 2	Course
March 31st, 2023	User Interface Deliverable	Sponsor
April 14th. 2023	Milestone 3	Course
April 21th, 2023	Poster Presentation	Course
April 28th, 2023	Final Report	Course
April 28th, 2023	Final Product Deliverable	Sponsor