9/11/2022

Dan’s Frappuccino Hell

# Project Overview

This project aims to build a website for the customers, employees, and management of Dan’s Frappuccino Hell.

The website will allow customers to place and pay for a variety of customizable signature beverages. The website will also function as a point of sale and order fulfillment terminal for the baristas as well as having inventory management and ordering capabilities for management. Finally, the website will also contain all HR aspects of Dan’s Frappuccino Hell such as hiring, firing, and payroll.

# Team Organization

Project Manager: Wesley Edwards (may change over the course of the project)

Designers and Developers: Landon Doyle, Wesley Edwards, Joshua McClung, Geoffrey Haselden

# Software Development Process

The development will be split into 4 phases. Each phase will be a blend between an Agile sprint and a Spiral iteration. Each phase will contain several tasks that each have a priority and potentially child tasks, these tasks will be managed using time-box scheduling like in a sprint. The tasks included in each sprint will be determined by the team and then subsequently prioritized and assigned. The team will use a Jira board to contain the tasks and hold regular Scrum meetings to ensure progress and discuss issues throughout the sprint.

The elements of each phase that will resemble a Spiral iteration include risk analysis and that any activity involved in development can be found in any of the phases. The first phase primarily focuses on requirements capture and structuring of the team and tools, subsequent phases will focus on development, implementation, and testing. Each phase will also include a retrospective.

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| Phase | Iteration |
| 1. | Requirements Capture, establishment of team and tools |
| 2. | Back/Frontend design and prototyping |
| 3. | Implementation and testing |
| 4. | Implementation of final/optional features as well as final and robust testing |

We will Unified Modeling Language (UML) to document the structure of the project and user interactions.

# Communication policies, Procedures, and tools

Discord will be used as the primary communication method as well as the forum for Scrum meetings which will be held every other day.

Github will be used as the repository for the project as well as accompanying documentation. Github will also be used for communicating with the client.

Jira will be the home for all information related to each Sprint, it will be used to track the progress of each task throughout the sprint as well as aiding in production of the retrospective at the end of each phase

# Risk Analysis

## Database Structure

1. Likelihood - Low
2. Severity – Very High
3. Consequences – Misrepresentation of inventory or account balances, both of which would create immense difficulty for both management and customers
4. Work-Around – None. With faulty database performance the project is an abject failure

## Login

1. Likelihood - Low
2. Severity – High/Very High
3. Consequences – All project functionality is dependent on being signed into an account, inability to login would leave the business unable to function
4. Work-Around - None. Inability to login into a registered account would leave the business non-functional

## Verification System

1. Likelihood - Low
2. Severity – High
3. Consequences – Improper verification could introduce security issues regarding user accounts as well as potentially create scenarios of accounts having incorrect functionality access based on their role.
4. Work-Around – The business could still function with improper verification, but customer data would be vulnerable. This could also lead to unprotected access to management and employee functionality, both of which are unacceptable outcomes.

## User Interface

1. Likelihood - Low
2. Severity – Very High
3. Consequences – Improperly functioning UI could introduce immense frustration for all users of the project
4. Work-Around – Depending on the severity of the UI issues functionality of the project could range between slightly impaired to completely disabled, a work-around could be potentially impossible

# Configuration Management

See the README.md in the Git repository.