Project Proposal

Document Control

Document Information

	Information
Document Id	01
Document Owner	Kian Elyasi, Omid Farhoomand, Sonisha Sutar Karki
Issue Date	02/12/2022
Last Saved Date	02/12/2022
File Name	Project Proposal

Document History

Version	Issue Date	Changes
[1.0]	02/12/2022	Project proposal presented to the professor

Document Approvals

Role	Name	Signature	Date
Project Sponsor	Professor Jahan Ghofrania		
Project Review Group			

Table of Contents

1 Executive Summary

A bad user experience is one of the major reasons why Java fuel pump has not been able to grow its business on a full scale. The person filling up the tank at the station needed to pay the cashier the amount they wanted to fill up the tank. This involves manual interactions and consumes time waiting in line to pay the cashier gas money. Some customers may find this tedious and the business is not guaranteed to grow as expected. Implementing a new technology/software that improves the quickness and ease of pumping gas in their car is the major motivation behind this project. Our vision is to design an interactive fuel pump simulator that will make it easier for customers to pump their gas and increase business productivity by 50% by 1st January 2023. This will help to improve the consumer experience by simplifying the purchasing process, and help the business with their inventory management and finances.

2 Background

2.1 History

Effectively managing the purchase of above 40 million Americans who buy gas every day for their vehicles creates a need for an automated fuel management system for the business, Java fuel pumps. Achieving an interactive and automatic way of fuel sales that cater to the needs of customers is the basis for the creation of this project. Before the idea of the development of interactive display software, the customer needed to talk with the cashier and could not execute the fueling process on their own. The development of this software minimizes the need for manual labor and the business can serve the customers in the absence of the patrons as well.

2.2 Requirements

Business Problem

The problem with the many early gas stations is that there is a bad user experience. The person filling up the tank has to go pay the cashier the money for how much they want to fill up the tank. Therefore, the user has a poor experience and consumes time waiting in line to pay the cashier gas money. The business will not have as many customers and not grow as expected. Also, many places that accept credit cards have clunky user interfaces where the user is confused by what gas they pumped in their car (87, 89, etc.) or how much gas they pumped in their car.

Business opportunity

The business opportunity is there is a new technology that improves the quickness and ease of pumping gas in their car. The interactive fuel pump simulator will make it easier for customers to pump their gas. There are many places in the world with outdated user interface technology in gas stations where just a small change will make it so much easier to pump gas. There will be less time figuring out the clunky user interface for consumers and less wait time at crowded gas stations.

2.3 Solution

This problem can be solved if the interactive automated display software is built and integrated into the fueling stations. The purpose of this solution is to improve the consumer experience by simplifying the purchasing process and helping the business with its inventory management as well. A commodity such as fuel is very hard to keep a track of if a business is operating manually on it. This solution will not only ease the customer side but will also help the business to keep

track of their inventory, purchase costs, and margin of profits. This software will be developed and delivered using the agile methodology where the beginning/first task to be completed is a working frontend display connected with a database and a backend.

3 Proposal

3.1 Vision and Goals

Our vision is to design an interactive fuel pump simulator that will make it easier for customers to pump their gas and increase the business productivity by 50% by 1st January 2023.

1. Improve the consumer experience by simplifying the purchasing process.
2. Help the business with their inventory management.
3. Effective management of finances for users and the business.

3.2 Deliverables

Project Deliverables		
Title	**Description**	**Notes/timeframe**
Choose fuel type feature	Lets the customer choose what they want to refill	Frontend display connected to backend which allows the business to update it daily. TimeFrame: 2/27
Fuel price button	This feature helps to display a daily updated rate of the 87, 89, and diesel at Java fuel center.	TimeFrame: 3/4

Customer balance input feature	How much the customer inserts into the pump and how much change the customer receives after the transaction.	TimeFrame: 3/11
Stop feature	Helps to stop the fueling process if customer does not want to spend the full amount	TimeFrame: 3/19
Get change feature	If a customer stops the fueling process, this will display the amount of change owed.	TimeFrame: 3/26
Sales receipt button	Displays time, date, amount spent, gas refilled for the customer.	TimeFrame: 4/11
Add pump feature	Helps customer to refill simultaneously at more than one pump	TimeFrame: 4/18
Log file	Displays each person that went to the gas station with specifics on what fuel they pumped, how much money they spent, and how much change they received.	Database TimeFrame: 5/5

3.3 Timeframe

Timeframe is included in the deliverables.

3.4 Resources

Project Resources		
Type	**Quantity**	**Notes**
Tiaga	N/A	Project management using agile methodology
Zoom	N/A	For meetings with group

Google Docs	N/A	For managing project proposals and written documents.

3.5 Budget (your budget will be the time and number of hours each person should allocate to the project on weekly basis)

Each team member is responsible for spending at least 8 hours on a weekly basis working on the deliverables.

3.6 Ownership

Project Ownership		
Role	**Name**	**Contact Details**
Project Sponsor	Professor Jahan Ghofranhia	jahan.ghofranhia@sjsu.edu
Project Customer	Java Fuel Pumps	fuelpumps@java.com 275-354-9880
Project Manager	Kian Elyasi, Omid Farhoomand, Sonisha Sutar Karki	kian.elyasi@sjsu.edu, omid.farhoomand@sjsu.edu, sonisha.sutarkarki@sjsu.edu

3.7 Reporting

A weekly canvas report will be submitted in order to brief about the project progress.

3.8 Risks & Issues

No risks and issues found at the start of the project. We will update as the project continues throughout the semester.

Project Risks		
Risk	**Details**	**Likelihood**
[list here]	[list here]	[list here]

Project Issues		
Issue	**Details**	**Impact**
[list here]	[list here]	[list here]

3.9 Implications

The implications of not starting the project are that consumers are going to keep complaining of the difficulty of pumping gas. The business will get less consumers piping gas at their station and lose their profit in the industry.

3.10 Success Criteria

1) The project is delivered on time and meets all timeframes for the deliverables.
2) The project is delivered with a high level of quality.
3) The project is full stack with a frontend and backend.
4) The project has a working database.
5) The project is very easy to use for the consumer.

3.11 Authorization

Not Available, Project is authorized