

Project Plan

Summary

This project will be a vehicle rental system, where the vehicles are from famous films (Batmobile, Top Gun Motorcycle, etc.).

The system will allow a customer to rent a vehicle for a certain amount of days. The customer will be able to choose from a list of vehicles that are available for different price tiers, reserve the vehicles, and pick it up from the lot. Insurance will also be offered to cover any unforeseen issues with the rental.

Team Organization

Description of Team Organization:

Members:

- Max Edwards (scrum master)
- Jared Hansen
- Satchel Fausett
- Chase Miller

Scrum Meetings:

- T-TH Scrum Meeting
- MWF Post updates to discord

Software Development Process

Conducted on a Scrum/Agile schedule. Every two weeks will be a new sprint, with backlog built up on Jira. This will show the hours left for the project as well as generate the burn down charts for us.

The development will be broken up into five phases. Each phase will be a little like a Sprint in an Agile method and a little like an iteration in a Spiral process. Specifically, each phase will be like a Sprint, in that work to be done will be organized into small tasks, placed into a “backlog”, and prioritized. Then, using on time-box scheduling, the team will decide which tasks the phase (Sprint) will address. The team will use a Scrum Board to keep track of tasks in the backlog, those that will be part of the current Sprint, those in progress, and those that are done. Each phase will also be a little like an iteration in a Spiral process, in that each phase will include some risk analysis and that any development activity (requirements capture, analysis, design, implementation, etc.) can be done during any phase. Early phases will focus on understanding

(requirements capture and analysis) and subsequent phases will focus on design and implementation. Each phase will include a retrospective.

Policies and Procedure for Communication

Discord – Main channel for communication. Used for group calls, file sharing, and project updates. Team will use discord to coordinate meetings, and create channels for specific topics.

Google Drive/Docs – Storage for files needing collaborative effort and review for Milestone 1. We will use Google Docs to organize and create our Milestone 1 Documents.

GitHub – Formal repository used for submissions, version control, data tracking, and communication. We will be creating our own branches while we work, and merge to dev once we have teammate approval.
with Professor Dan Watson and Andrew Curtis.

Jira – We will use Jira to track, plan, and monitor progress on each of our individual stories. With it we will be able to see our progress as we complete our project.

Risk Analysis

Database Structure

- Likelihood – Low
- Severity – Very High
- Consequences – Ineffective data tracking leading to confusion concerning balances, transactions, account information, etc.
- Work-Around – None. System loses value and functionality without proper database implementation.

Login (to account)

- Likelihood – Low
- Severity – Med-High
- Consequences – Dissatisfactory customer experience concerning preferences, transaction information, cancellations, and current balance. Payroll and company capital may be at risk.
- Work-Around –

Verification System (verify car rental)

- Likelihood – Low
- Severity – Med
- Consequences – User receives wrong or no car rental. The reservation system becomes inaccurate.

- Work-Around – Verify by name and vehicle type. May even have a unique identifier for each vehicle.

UI

- Likelihood – Low
- Severity – Very High
- Consequences – Inability to interact with users in a clear and efficient way.
- Work-Around – None. The system loses value and functionality if users are not able to interact with it.

Hosting

- Likelihood – Low
- Severity – Med
- Consequences – Inability for system to host or serve information essential for system functionality
- Work-Around – Host system through a hosting service

Configuration Management

See the README.md in the Git repository