<Thomas Edison Auction>

# Project Overview

This project aims to build a system for running an auction at a school or church activity.

The auction system will be for managing a live event, not running an online auction like e-bay. It aims to replace paper voting with a mobile phone system so that people can know what they’ve spent so far and will also help tally the results at the end of the night. The system will support both a silent auction and a live auction and be capable of running on a PC (for an administrator) and iOS and Android mobile devices.

# Team Organization

Our team consists of five computer scientists. We plan to practice cohesive team work to produce a fully functional app. Clear and constant communication is a team priority. We will mutually support each other in the following roles.

Generalized Role Structure:

Hunter – Team Lead

Colton – Git Issues and Projects

Jace – User Experience Designer

Sally – Documentation and Team Organization

Connor – Testing Lead

Each individual will be expected to work in overlapping areas with other developers and take a share of the tasks.

# Software Development Process

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.

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| **Phase** | **Iteration** |
| 1. | Phase 1 - Requirements Capture |
| 2. | Phase 2 - Analysis, Architectural, UI, and DB Design |
| 3 | Phase 3 - Implementation, and Unit Testing |
| 4 | Phase 4 - More Implementation and Testing |

We will use Unified Modeling Language (UML) to document user goals, structural concepts, component interactions, and behaviors.

# Communication policies, procedures, and tools

Discord should be used for most things including scheduling meetings (which may take place over Discord or in person), and Git issues and milestones should be used for tracking important points and projects. Team members should have Discord notifications on, or check it at least once per day. Pull requests should be reviewed by another member of the team, and every branch merge should be a pull request. Work should be reported on Discord as it is completed.

# Future Features

* Quality of life improvements
  + Personalization (themes)
  + Improved UI
  + Countdown clock
  + Support for a Map of Auction floor
  + User Customized Page sizes
  + Item Search Bar
* Functional Features
  + Live Auction
  + API Support, Documentation, and Authentication
  + User bid retraction
  + Expanded Auction Modes
  + Electronic Payment

# Configuration Management

See the README.md in the Git repository.