Project 04

# Introduction and Context

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.

# Users and their Goals

Bidders will be able to take actions in the auction by

* Bidding on an item
* Viewing items bidded on and see items winning
* Viewing items that are marked as favorite
* Notified on each item marked as favorite or bidded on.
* Viewing all items in categories
* Finding an Item by an ID.

Admin will be able to take control of the auction by

* Starting an Auction
* Ending Silent Auction
* Adding Items to Auction
* Editing Items in an Auction
* Removing Items in an Auction
* Adding Bidders to an Auction
* Entering in live item Winners
* Seeing all bidders total amount
* Showing all winners of items

# Functional Requirements

A user should be able to view all auction items.

A user should be able to view their favorited items.

A user should be able to favorite items.

A user should be able to view the items they have bidded on.

A user should be able to place a custom bid.

A user should be able to increment the bid on an item by $1, $2, $5, and $10 by clicking a button.

A user should be able to view items by category.

A user should be able to look up an item by and ID.

A user should be able to view their outstanding balance.

A user should have the option to change their username and password.

A user should be able to login and logout of the system.

An admin should be able to start an auction.

An admin should be able to end an auction.

An admin should be able to add items to an auction.

An admin should be able to remove items from an auction.

An admin should be able to re-order the list of items in a live auction.

An admin should be able to enter the ID of the winner of a live auction item.

An admin should be able to see the winners of all the items.

An admin should be able to print off a list of winners.

An admin should be able to print off a list of ID codes for the items.

An admin should be able to login and logout of the system.

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# Non-functional Requirements

Development will follow an Agile method.

The database will be implemented using sqlite3.

The system will be able to support at least 100 users.

The system will be able to support at least 500 items.

The price of an item will be updated in real time.

# Future Features

* Silent auction with no price viewing
* Globalization
  + Spanish translation (and other languages)
  + RTL support
* QR code generated for each item

# Glossary

Auction - a public sale in which goods are sold to the highest bidder.