REQUIREMENT SPECIFICATION: UNIVERSAL RAFFLE MANAGEMENT SYSTEM

Version 1.0

Team #1

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TABLE OF CONTENTS

INTRODUCTION

1.1 Purpose of the Software

The intent of our proposed software, currently referred to as the Universal Raffle Management System, is to provide a system that an organization may use to facilitate the sale of tickets and simplify management for a raffle. The pursuit for this type of system stemmed from the troubles faced by our client while managing their raffle. The current procedure used by our client is to extract buyer information from a paper ticket, and manually input this information into a spreadsheet. This manual inputting of information leads to information inconsistency. Presently, our client stores ticket and seller information across various spreadsheets. This variety of storage locations causes unnecessary complexity within their current system. The sale of their tickets spans a large area, and some communities in this area are fairly rural and distant. This makes it difficult for our client to deliver paper tickets to these communities. It was for these reasons, as well as others, that our client sought to find a new system that allows the sale of digital tickets in addition to the conventional physical tickets, and that provides better organization and analysis of their raffle.

1.2 Client

The system is being developed for the Strait Area Chamber of Commerce in Port Hawkesbury. Our main contact within this organization is their Executive Director, Amanda Mombourquette. Amanda handles the majority of operations associated with their annual fundraising raffle, called The 12 Draws of Christmas. She will be responsible for providing feedback to our proposals and prototypes.

1.3 Users of the Software

There are four types of users associated with the software:

Administrator – These users have full control over the management of the raffle. They have all privileges of a seller, making them able to input ticket information. They may add a new seller, update an existing seller, and/or remove a current seller. They can provide additional digital tickets to a seller if need be. They are able to look-up useful statistics about the raffle, such as the highest seller. They are also responsible to respond to inquiries sent by buyers or sellers that require support.

Seller – These users are tasked to sell tickets, either physical or digital, by the organization holding the raffle. They provide a way for buyers to input their information into the system after purchasing a digital ticket. They are also able to look up statistics about their ticket selling performance. They can submit requests to administrators, such as asking for additional tickets.

Buyer – These users purchase tickets from a seller. If the ticket they purchase is digital, the seller provides an online form to fill out all their information which is submitted directly into the system. They can also submit requests to administrators with any issues they may have.

General Public – These users may visit the home page of the website in order to view information about the raffle and contact information for the organization.

1.4 Software Scope & Constraints

The Universal Raffle Management System will be a web-based application. Therefore, in order to access it, a device must have an internet browser as well as an internet connection. The organization employing the Universal Raffle Management System will have to host a server to make the software remotely accessible. In terms of resource constraints, our team consists of six (6) members who are able to work concurrently on different parts of the system. The design phase for the system will last about three (3) weeks, and the development phase approximately five to six (5-6) weeks, at the end of which the team is expected to have a finished product along with all corresponding documentation.

FUNCTIONAL REQUIREMENTS

Use Case Number: F-01
Use Case: Guest goes to About page
Actors: Guest
Scope: In
Priority: 4
Precondition: Guest must be on home page
Minimal Guarantees: Guest has no access to about page
Success Guarantees: Guest is on the about page
Trigger: Guest clicks on the “About Us” tab
Main Success Scenario:
<step 1> <Guest Clicks>Guest is redirected to the “About Us” page
Extensions:
N/A
Related Information:
N/A

Use Case Number: F-02
Use Case: Guest goes to Contact Us page
Actors: Guest
Scope: In
Priority: 4
Precondition: Guest must be on home page
Minimal Guarantees: guest has no access to the “Contact us” page
Success Guarantees: Guest is on the “Contact us” page
Trigger: Guest clicks on the “Contact us” tab
Main Success Scenario:
<step 1> <Guest Clicks>Guest is redirected to the “Contact us” page
Extensions:
N/A
Related Information:
N/A

Use Case Number: F-03
Use Case: User Registration as Seller
Actors: Seller, User Database, Administrator
Scope: In
Priority: 2
Precondition: seller must have a registered e-mail (done by Administrator)
Minimal Guarantees: user database remains unchanged
Success Guarantees: seller creates a profile, user database is updated
Trigger: link on sign-in page
Main Success Scenario:

<step 1> <Seller Enters Info>Seller enters:

a. Verified e-mail
b. Full name
c. Address
d. Phone number

<step 2> <Database Updated> User database is updated with user info provided

<step 3> <Notification> Notification sent to Administrator

Extensions:

<step 1> <E-mail not approved by administrator> error message ("Invalid e-mail: contact administrator")

<step 1> <Unrecognized e-mail format> error message ("Invalid e-mail: please enter your email in the correct format (ex. abc123@example.ca")

<step 1> <Invalid address> error message ("Invalid address: please enter your address in the correct format (ex. "123 Cookie Lane")

<step 1> <Invalid phone number> error message ("Invalid number: please enter your number with no additional characters (ex. 9021234567)")

Use Case Number: F-04
Use Case: Seller Login
Actors: Seller
Scope: In
Priority: 1
Precondition: Seller must have a registered account
Minimal Guarantees: Seller is unable to login, no access is granted to the Seller view of the website
Success Guarantees: Seller gains access to appropriate system
Trigger: link to sign in page on main public page
Main Success Scenario:

<step 1> <Seller Enters Email> Seller enters e-mail address into field.

<step 2> <Seller Enters Password> Seller enters password into field.

Extensions:

<step 1> <E-mail address isn't recognized> error message ("Unrecognized e-mail or password")

<step 2> <Password isn't recognized> error message ("Unrecognized e-mail or password")

Related information:

If there are x amount of unsuccessful login attempts, page should be locked and administrator alerted. The e-mail that was being accessed should also be noted so that the administrator can follow up.

Use Case Number: F-05
Use Case: Seller Forgot Password

Actors: Seller, Administrator
Scope: In
Priority: 2
Precondition: n/a
Minimal Guarantees: Seller can't access their account
Success Guarantees: Seller regains access to account
Trigger: Seller clicks on "Forgot password" link on sign-in page
Main Success Scenario:

<step 1> <Seller Enters Email>Seller enters a valid e-mail address in field.
<step 2> <Notification> Notification sent to administrator
<step 3> <Admin Contacts> Administrator contacts seller via registered e-mail with temp password
<step 4> <Seller Logs In> Seller logs back in.

Extensions:

<step 1> <Invalid e-mail> error message ("Invalid e-mail: please enter a valid e-mail address")

Related Information:

This is a very rough use case, hopefully it will be updated so that the process is more automatic and the administrator doesn't need to send an e-mail themselves, but will still be notified.

Use Case Number: F-06
Use Case: Seller sells Ticket
Actors: Seller, Customer, ticket database
Scope: In
Priority: 1
Precondition: Seller has to be logged into their account, and on the sell ticket page
Minimal Guarantees: Ticket database remains unchanged and no tickets are registered as being sold
Success Guarantees: System registers the sale of a ticket and updates the ticket database
Trigger: Seller sold a ticket/book
Main Success Scenario:

<step 1> <Seller Enters Email> Seller enters the amount of tickets sold
<step 2> <Seller Enters Location> Seller enters location of sale
<step 3> <Enter Customer> Seller/Customer enters customer:
a. Name
b. Phone number
c. Address
d. E-mail
<step 4> <Confirmation> Seller confirms sale of ticket
<step 5> <Ticket Database Updated> Ticket database is updated with buyer and seller info
<step 6> <Seller Database is Updated> Seller database is updated (amount of tickets sold, update available tickets)
<step 7> <Email is Sent> E-mail is sent to customer with receipt of purchase (include time of sale, ticket number(s),
transaction cost)

Extensions:

<step 1> <less than 1> error message ("Invalid amount entered: tickets sold must be greater than 1")
<step 1> <greater than tickets issued to the seller> error message ("Invalid amount entered: max tickets available = x", where x is the amount of available tickets)
<step 3> a. <Invalid phone number > error message ("Invalid number: please enter your number with no additional characters (ex. 9021234567)")
b. <Unrecognized e-mail format > error message ("Invalid e-mail: please enter your email in the correct format (ex. abc123@example.ca")

Related Information:
N/A

Use Case Number: F-07
Use Case: Activate Seller Account
Actors: Administrator
Scope: In
Priority: 1

Precondition: Successful administrator account login is necessary followed by a successful link with activation page.
Minimal Guarantees: The data entity for seller accounts will remain unchanged from before the activation was attempted.
Success Guarantees: A seller account will now be eligible for sign up under the email provided.
Trigger: While on the activation page, the administrator enters an email address into the email address field and clicks the "Activate" button.
Main Success Scenario:
<step 1> <Admin Enters Email> Admin enters a valid email address into the email address field, enters the number of tickets they wish to allocate to that seller, and clicks the "Activate" button.
<step 2> <Seller Database Updates> The seller account data entity will have a row appended with the corresponding email address in the email address column.
<step 3> <Notification> The administrator is notified via a pop-up window that the row has been successfully added.

Extensions:
<step 1> <The administrator enters an invalid email address> : The administrator might enter an email address of incorrect format or of an unregistered address. In either case, the administrator will be notified via a pop-up window that the email address is not valid and why it is not valid.
<step 1> <The administrator enters an already activated email address>: This email will not be added to the entity. The administrator will be notified via a pop-up window that this email address is already activated.
<step 2> <System loses internet connection>: The administrator will be notified via a pop-up window that the system has lost internet connection. They will be asked to try activating that email address again once an internet connection has been established.
Related Information:
N/A

Use Case Number: F-08
Use Case: Edit Seller Account
Actors: Administrator
Scope: In
Priority: 1

Precondition: Successful administrator account login is necessary followed by a successful link with the seller info page. At least one of the fields of the seller info page must be filled in.
Minimal Guarantees: The data entity for seller accounts will remain unchanged from before the activation was attempted.

Success Guarantees: A seller account will be edited according to those changes made by the administrator.
Trigger: While on the seller info page, the administrator fills in one of the fields. Using a search, the system will provide the most likely seller given the information available. The user can then change a seller's information and click the "Update" update button to store those changes in the database.
Main Success Scenario:

<step 1> <Administrator Enters Information> The administrator fills out one of the fields for seller with the information corresponding to a seller account.
<step 2> <System Provides Potential Sellers> The system searches for the seller using the available information then provides the administrator with the information of the most likely seller.
<step 3> <Display Information> The system displays the remaining information of the most likely seller.
<step 4> <Changes Made> The administrator uses the data fields to make changes to the seller's information then clicks the "Update" button.
<step 5> <Notification> The administrator is notified via a pop up window that the row has been successfully added.

Extensions:

<step 1> <The administrator enters information for a non-existent seller> : The administrator might enter information that does not have a corresponding seller. The system will not display any information about a likely seller unless the information provided has a corresponding seller.
<step 1> <Administrator enters information into the wrong field>: The administrator might enter information into the incorrect field. The system will notify the administrator via a pop-up window suggesting which field is incorrect. The administrator will then be prompted to correct their mistake and to try again.
<step 2> <System loses internet connection> : The administrator will be notified via a pop up window that the system has lost internet connection. The system will restart searching the seller account data entity once an internet connection has been established.
<step 4> <System loses internet connection>: The administrator is notified via a pop-up window that the system has lost internet connection. They will be asked to try repeating the process above again once an internet connection has been established.

Related Information:
N/A

Use Case Number: F-09
Use Case: Sell Ticket
Actors: Administrator
Scope: In
Priority: 1

Precondition: Successful administrator account login is necessary followed by a successful link with ticket info page.
Minimal Guarantees: The data entity for tickets will remain unchanged from before the activation was attempted.
Success Guarantees: The information of a physical sold ticket will be entered into the ticket data entity.
Trigger: While on the ticket info page, the administrator selects the "Entry" button then fills in the information of the physical ticket sold into the correct fields, then hits the "Enter" button.
Main Success Scenario:

<step 1> <Administrator Enters Information> Administrator selects the "Entry" button the proceeds to fill out the information of the physical ticket they wish to enter, they then click the "Enter" button.

<step 2> <Ticket is entered into Database> The ticket information is filled into the row of the database with the corresponding ticket identifier.

<step 3> <Notification> The administrator is notified via a pop up notification that the ticket was successfully added.

Extensions:

<step 1> <Invalid Information> : If the "Enter" button is clicked with invalid information (invalid meaning that the information is not of the correct form), the administrator is notified via a pop up window that the information is invalid. The fields are then cleared and they are prompted to try again.

<step 1> <Information Taken> : If the information provided has a corresponding ticket that is not flagged as a physical ticket, the administrator is notified via a pop up window of this error. They are prompted to verify their ticket information.

<step 2><No Corresponding Ticket ID>: If the provided ticket ID does not have a corresponding ticket ID in the ticket data entity, then the administrator is notified via a pop-up window of this error. They are then prompted to verify their ticket information.

Related Information:

N/A

Use Case Number: F-10
Use Case: Edit Ticket
Actors: Administrator
Scope: In
Priority: 1

Precondition: Successful administrator account login is necessary followed by a successful link with ticket info page.
Minimal Guarantees: The data entity for tickets will remain unchanged from before the activation was attempted.
Success Guarantees: A ticket sold will be edited according to those changes made by the administrator.
Trigger: While on the ticket info page, the administrator selects the "Search" button then fills in one or more fields corresponding to a seller, then hits the "Enter" button. The system then returns a list of possible tickets given the available information.
Main Success Scenario:

<step 1> <Administrator Makes a Search> Administrator selects the "Search" button then proceeds to fill out the information they know belonging to the seller the wish to edit, they then click the "Enter" button.

<step 2> <System Provides Potential Tickets> The system searches through the ticket data entity looking for tickets whose information matches the information provided by the administrator. The system returns all tickets who match these criteria.

<step 3> <Administrator Selects Ticket> Given the list of potential tickets, the administrator selects which ticket's info they would like to edit. The selected tickets' information will be filled into the data fields on the ticket info page. The administrator is then free to make changes to the ticket. Once finished, the administrator clicks the "Enter" button.

<step 4> <Notification> The administrator is notified via a pop-up notification that the ticket was successfully edited.

Extensions:

<step 1> <Invalid Information Entered> : Once the "Enter" button is pressed with invalid information (invalid meaning that the information is not of the correct form), the administrator is notified via a pop up window that the information is invalid. They are then prompted to try the search again.

<step 2> <Information Not Found> : The information is unable to be found.

Related Information:

N/A

Use Case Number: F-11
Use Case: Complete Ticket Request
Actors: Administrator
Scope: In
Priority: 1
Precondition: Successful administrator account login is necessary followed by a successful link with ticket info page. Seller must have made a ticket request, there are two types: request more tickets or request to return tickets.
Minimal Guarantees: No tickets are exchanged. The seller who made the request maintains the same number of tickets.
Success Guarantees: The seller who made the request has their tickets adjusted accordingly. If they requested more tickets, those tickets' seller fields are attributed to the new seller. If they request to remove tickets, those tickets; seller fields are attributed to an empty pool seller.
Trigger: Administrator clicks the "Ticket Requests" button. They are shown those sellers who have ticket requests along the type of request and number of tickets. To complete the request, the administrator clicks the "make request" button.
Main Success Scenario:

<step 1> <Clicks "Ticket Requests" Button> From the administrator account page, the administrator clicks the "Ticket Requests" button.

<step 2> <Display Ticket Requests> The system displays any open ticket requests from the sellers.

<step 3> <Administrator Completes Request> Being provided with the total number of tickets available for requests, the administrator decides whether or not to complete the request by clicking either "accept request" or "decline request".

<step 4> <Request Confirmation> The administrator is notified via a pop up window that their selection has been completed.

Extensions:

<step 2> <No Open Requests> : In the place of the open ticket requests, the system displays a message notifying the administrator that no seller has an open ticket request.

<step 3> <Ticket Request with no Available Tickets> : If a seller makes a ticket request for more tickets when no tickets are available, the system will notify the user upon their request. The administrator only sees those requests when enough tickets are available.

Related Information:

N/A

NON-FUNCTIONAL REQUIREMENTS

Case Number: NF-01

Case Name: Data Integrity and Security

The database containing all ticket and buyer information must be consistently updated as to not lose integrity of the underlying data.

The data can only be accessed by those who are given permission by the administrator or organizer of the event.

Case Number: NF-02

Case Name: Query Response Time

At least 80% of searches on the database containing ticket and user information should be completed within under 5 seconds to maintain a consistent workflow.

Additions or deletions from the database will also be a process that should only take 2 seconds maximum (not including time for user to input into fields).

Case Number: NF-03

Case Name: User Security

Sellers with accounts on the application must have their user information including password, and email stored safely so that it is only known by them or their administrator in certain cases.

Case Number: NF-04

Case Name: Application Manageability

The system should give the administrator the ability of troubleshooting problems such as changing incorrect data entries.

USER INTERFACE REQUIREMENTS

The web-based application is designed with four possible users in mind, the ticket seller (Seller), the fundraiser administrator (Admin) and the general public or buyer (referred to collectively as Public in this section because they interact with the user interface in the same manner). For the convenience of the development team these pages have been temporarily colour coded. Red for Public, green Seller, and blue Admin. Figure 1 depicts the main webpage (Home) that is accessible to all, and contains a description of the 12 Draws of Christmas, a prize list and a countdown to the first draw. The material on this page will be customized to meet the advertising needs of the client over time. Its main function is to serve as an information source for the Public. This page contains links to three other pages through the “About”, “Contact Us” and “Login” buttons and these pages are depicted in Figures 2, 3, and 4 respectively.

Figure 1: Home Page

Figure 2 and 3 show simple webpages that provide additional information to the general public about the draw and the sponsoring organization(s). These pages serve as sources of information only, and therefore will host material provided to the development team by the client. This information includes details about the client’s organization (Figure 2) and contact information for the fundraisers main administrators (Figure 3).

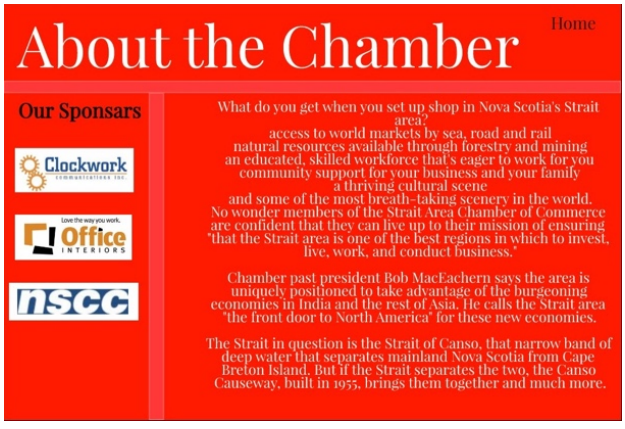

Figure 2: About Page

Figure 3: Contact Page

From the Home webpage, a user can navigate to the login page via the “Login” button, this page is shown in Figure 4. This page is where a Admin or Seller can login to their account to view details about their accounts and the fundraiser by entering their email and password, then clicking the “Login” button. If someone attempts to login with an unknown email and password combination the page will show a brief animation communicating the inability to login (not shown as animations cannot be shown in a “screen shot”). If a Seller or Admin is using their account for the first time they can click the “Sign Up” link and be directed to the Sign Up page. From the Login page a user or Admin can also navigate back to Home using the “Home” button or can select “Forgot Password”. In order to select “Forgot Password”, a recognized email address must be entered, if so, then a request is sent to the Admin page for account Reactivation (see Figures 11 and 12). If the email address is not recognized or not entered a brief animation will communicate the inability to send the reactivation request. Figure 5 shows the Sign Up page, this page allows a first time Seller or Admin to enter their information and then gain access to their account by clicking the “Sign Up” button. In order for anyone to have an account and Admin must have previously activated their email address through the Activate Page. This ensures that only people belonging to, or who are known by the organization may be granted an account. This page also allows a user to navigate back to Home via the “Home” button, or to go to the Login page if they already have an account. The data entered in this page automatically updates the database when a valid email is entered, data is entered and the “Sign Up” button is when a valid email is entered, data is entered and the “Sign Up” button is clicked.

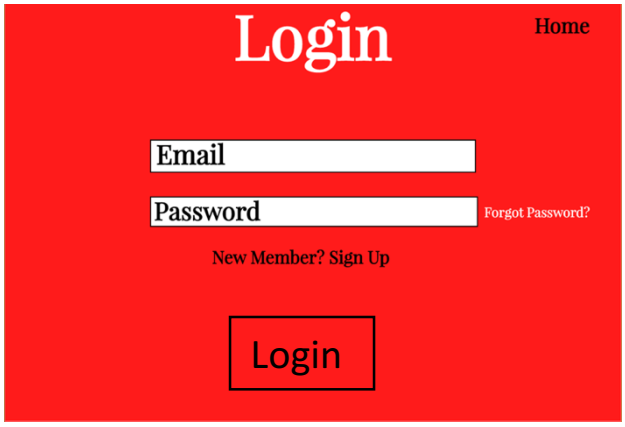

Figure 4: Login Page

Figure 5: Sign Up Page

If a Seller successfully logs into their account they are directed to their Seller Account page (Figure 6). This page shows a graphical representation of how many tickets they have sold out of their allotted amount. It also allows a Seller to navigate back to Home using the “Home” button, and lets them request more tickets, or to have their tickets reduced by clicking the “Request Tickets” and “Reduce Tickets” buttons respectively. Clicking the “Request

Tickets" or "Reduce Tickets" brings up a corresponding popup as is shown in Figures 7 and 8. These forms all Sellers to enter how many tickets they would like to request to be allotted or to give back. Clicking the "Confirm" button sends an appropriate request to the Admin page (see Figure 11). Clicking the "Sell" button directs a seller to the Sell page.

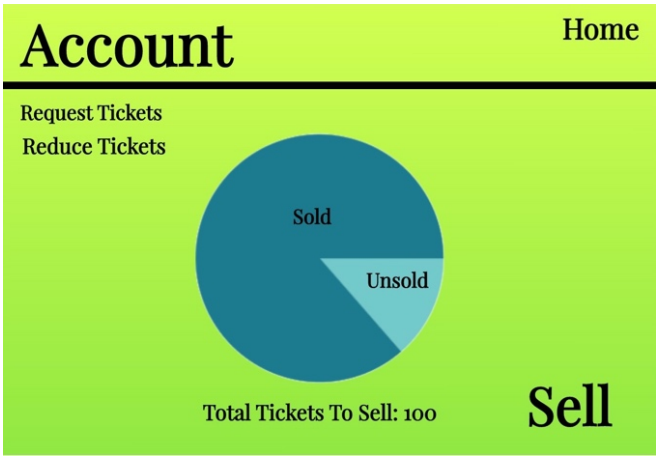

Figure 6: Seller Account Page

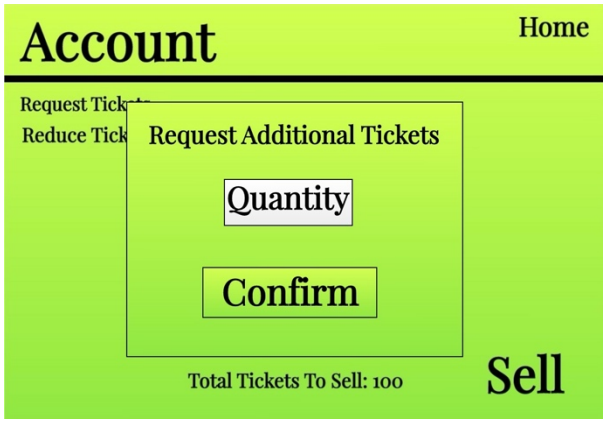

Figure 7: Request Additional Tickets Popup

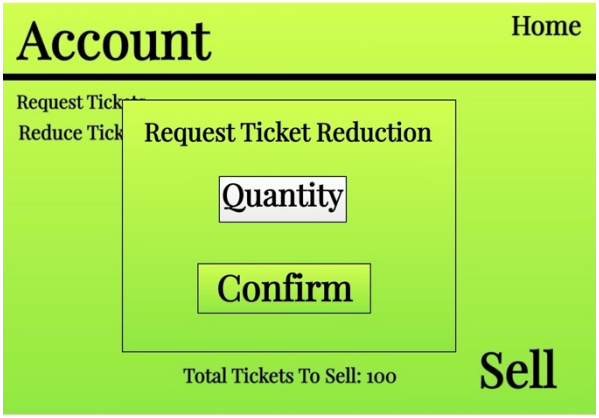

Figure 8: Request Reduction of Tickets Popup

Figure 9 depicts the Sell page. This page is where a Seller can sell digital tickets to a buyer through a user-friendly form. This form allows the seller to select a book (group of 3 tickets) or individual tickets, and enter the quantity and other relevant data. When all the data is entered they will click the "Enter" button, which prompts a popup (Figure 10) which displays the information entered and a "Confirm" button. If the seller is happy with the displayed information they will click "Confirm" which automatically enters the ticket data into the database. If there was an error in a ticket entry a Seller can click the "Error" button and then re-enter the ticket data, fixing any mistakes. Clicking the error button sends a request to Admin with the relevant information (see Figure 11). Lastly this page has a "Back" button which returns a Seller to their Seller Account page.

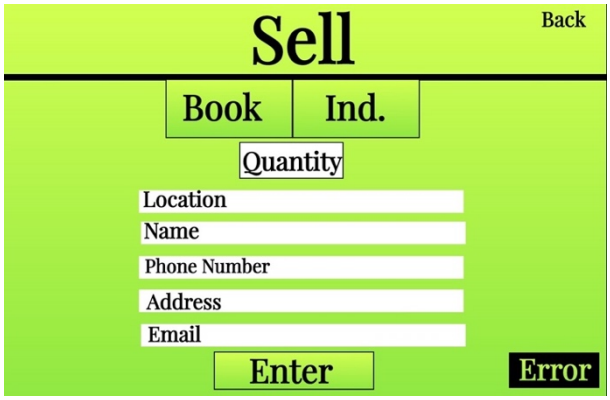

Figure 9: Sell Page

Figure 10: Sell Page with Popup

When an Admin successfully logs into their account they are directed to their Admin Account page (Figure 11). This page shows a graphical representation of total ticket sales over time. It also shows a list of all the Sellers for this fundraiser and a list of received requests. If an Admin clicks on a seller name they are directed to the Seller Info page (Figure 14), if they click on a request they are taken to either the Seller Info Page, the Ticket Info Page (Figure 15), or the Activation page (Figure 12). They can also access the Ticket Info page by clicking the "Tickets" button and the Activation page by clicking the "Activate" button. An Admin may also sell Tickets by clicking the "Sell" button, this will direct them to the Sell page (Figure 7). An Admin may go back to the Home page (Figure 1) by clicking the "Home" button.

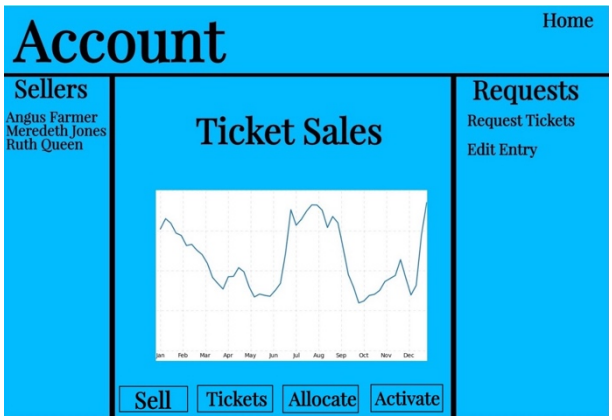

Figure 11: Admin Account Page

An Admin can activate seller accounts by clicking the "Activate" button, which will take them to the Activation page (Figure 12). This page allows an Admin to activate a new account by entering an email address, the number of tickets to allocate to that seller and clicking the "Activate" button. This will automatically update the database with this information. The Admin can go back to their account page by clicking the "Back" button. An Admin can allocate new tickets to a seller or reduce the number of tickets a seller is allocated through the Allocation page (Figure 13). This page can be reached via the "Allocate" button on the Admin Account page (Figure 11). On the Allocate page the Admin can choose if they wish to allocate or reduce the number of tickets a seller has and enter

the quantity they wish to add or take away. They can then press the “Confirm” button which updates the database. The Admin can go back to their Admin Account page by clicking the “Back” button.

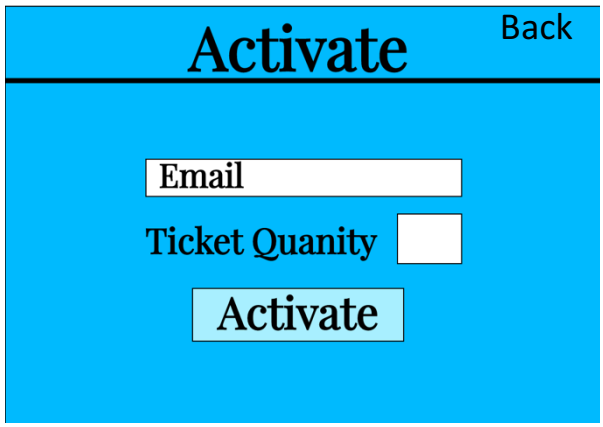

Figure 12: Activation Page

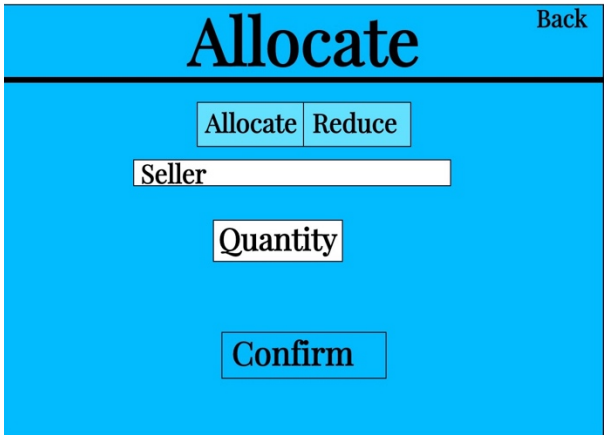

Figure 13: Allocation Page

Figure 14 shows the Seller Info page, which can be used to view and update seller information. If any of the field in the Seller Info page are filled in suggestions of who the Admin may be searching for appears. If a suggestion is selected all the information for that Seller appears in the fields. This information can then be changed by editing the information then clicking the “Update” button. The Admin may return to the Admin Account Page (Figure 9) by clicking the “Back” button. Figure 11 shows the Ticket Info page, which can be used to view, edit and enter ticket information. As any of the fields are filled in ticket suggestions are displayed. If one of these suggestions are clicked all corresponding information appears in the fields. This information can be edited when the “Search” button is selected, the new data is entered and the “Enter” button is pressed, thus updating the database. Selecting the “Entry” button allows an Admin to enter new ticket data from physical tickets that have been sold. In that case the Admin can enter ticket data and click the “Enter” button to add this data to the database. The Admin can go back to the Admin Account page (Figure 9) by clicking the “Back” button.

Figure 14: Seller Info Page

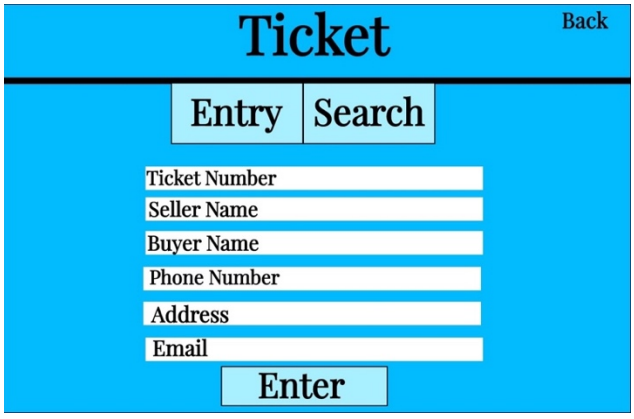

Figure 15: Ticket Info Page

DELIVERABLES

NAME	ASSIGNED TO	DUE DATE	DESCRIPTION
Project Plan	Whole Team	January 18, 2018 - SUBMITTED	-The Project plan was the initial proposal and planning document that was created in conjunction with the entire team -It outlined the details of the project as well as the risks and organization of the entire project -The Plan is to be submitted to the instructor for grading
Requirement Specification	Whole Team	February 8, 2018	-The requirement specification is a document that outlines the current requirements that are needed in order to finish the project and to create a successful application for the end users -It lists the Functional and Non-Functional requirements as well as open issues - To be submitted to the instructor for grading
Initial Design Draft	Whole Team	February 26, 2018	-This is an internal document that outlines the initial design of the project. -This will be for the Teams eyes only as it will give us an idea of how to begin and approach the final Design requirement -To be submitted to the Team Leader
Final Design Draft	Whole Team	March 1, 2018	-This is the final draft of the Design document -The document will include another updated introduction, system architecture, some pseudocode, and details about the GUI -This document will assist in the next stage of development which is the beginning of the coding process - To be submitted to the instructor for grading
Pseudo Code and Rationale for Front End and Backend	Split into Separate teams at a later date	March 10, 2018	-These are internal documents -They will facilitate conversation between teammates on the rationale and logic of the code prior to the Hard Coding process. -This is intended to make the coding process more straightforward and simple as it will give the developers a way forward once coding begins -To be submitted to the Team Leader

First Draft of Code	Same teams as the prior Deliverables	March 18th,2018	-These are internal documents -Once the pseudocode has been revised and edited by the team at a team meeting, the development can begin. -A first draft of Executable code is to be presented to the team to show the functionality of the current section being worked on. -This is to work out any outstanding bugs in a team environment as well as ensure that all team members remain on the same page for development - To be submitted to the team leader.
Testing Documents	TBD	TBD	-As the development continues, the team will be required to take notes on the various tests they will perform including any bugs that have been detected and remedied -This will allow the Team Leader to see the progress that is being made with the code and give the team a chance to view the progress of a section they might not be directly involved in
Final Product Submission	Whole Team	April 2, 2018	-This is the final code and polished version of the application that will be submitted to the Instructor and Client. -Along with the application (to be submitted via the web) it will also include the documentation and instructions for use -At this time, a training session will be arranged with the client to demonstrate the abilities and functionality of the application.

OPEN ISSUES

1. Need to determine a method to create data that is very similar to information that will be inputted by the Sellers for validation and testing purposes.
2. Research the best way to design our database and implement it.
3. Determine the best layout for our user interface to facilitate its use.