**Theater Ticket Software**

**Project Proposal**

**Prepared by**

**Christopher Henry,**

**Andrew Huggins,**

**Reece Johnston,**

**Michael Jones,**

**Vineela Kakani,**

**Saivamsikrishna Kanukanti**

**CS 650 – Team Gambit (Team C)**

**09/24/2014**

Table of Contents

[1 Project Description 3](#_Toc399267395)

[1.1 Theater Ticket Application 3](#_Toc399267396)

[1.2 Managing Venues 3](#_Toc399267397)

[1.3 Venue and Patron Database 3](#_Toc399267398)

[2 Personnel 4](#_Toc399267399)

[2.1 Team Communication 4](#_Toc399267400)

[3 Deliverable Documents 4](#_Toc399267401)

[4 Initial Constraints and Assumptions 4](#_Toc399267402)

[**Appendix A: Glossary** 5](#_Toc399267403)

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
| Christopher Henry | 09/22/2014 | Initial Project Proposal | 0.1 |
| Reece Johnston | 09/23/2014 | Simplification/Shortening and Expanding Project Details | 0.2 |
| Michael Jones | 09/23/2014 | Final Editing and Formatting | 0.3 |

# Project Description

The Theater Ticket Software shall be created as a software solution for volunteers who help non-professional performing arts groups put on plays, musicals, concerts, and exhibitions for the general public. The software will be composed of two major parts.

## 1.1 Theater Ticket Application

The ticket application will be a user interface for volunteers to manage ticket transactions. There will be a simple, figure focused GUI that will allow volunteers to navigate and find all currently held information regarding a specific patron or a specific venue. Meaning, when possible, an image or table will be used in place of, or in conjunction with, words to account for untrained users. The application will allow lower privileged users (tellers) to reserve tickets (seasonal or per event) for patrons, pay for these tickets, refund or transfer tickets, and record any special notes for patrons. Moreover, the seat availability will be displayed graphically to provide a level of ease-of-use applicable for untrained volunteers. This graphical display will be configurable by an administrative user (administrator) of the system. For more information on this configurability, see Section 1.2. Lastly, this application will be operated by the tellers and the administrator(s) on any typical Windows machine.

## **1.2 Managing Venues**

The application will also be configurable for different venues via an administrative account. Each venue will have a layout attached to it. This layout will be a figure, as described in Section 1.1, with every seat, row, section, and stage placed and labeled. Moreover, an administrative user will be able to create this layout of the venue, utilizing a visual "drag-and-drop" style tool. From this layout, events can be created by the administrator, and then they can be assigned certain sections of the layout in order to allow for smaller events when needed.

## 1.3 Venue and Patron Database

The database will store relevant patron information and link patrons to tickets reserved or bought for an event. Further, the event will be linked to a particular venue. To clarify on the scope of the project, some of the analysis classes that will be used during the project are listed below.

|  |
| --- |
| Patron |
| ID  Name |
| Address |
| Ticket List |
| Special Notes |
| Payment Information |

|  |
| --- |
| Venue |
| Layout   * Stages (standing/seating) * Rows * Seats * Layout Figure |
| Event List |

|  |
| --- |
| Ticket |
| Seat  Price  Amount Paid  Patron ID  Event ID |

|  |
| --- |
| Event |
| Price Modifier for Seating  Open Section List  Seat Availability |

# Personnel

The following is a personnel listing of Team Gambit for the Fall 2014 CS 650 course at UAH:

* Christopher Henry
* Andrew Huggins
* Reece Johnston
* Michael Jones
* Vineela Kakani
* Saivamsikrishna Kanukanti

## 2.1 Team Communication

Team Gambit will use email and a Github repository for the majority of our communication needs. A brief, weekly meeting will take place after class on Wednesdays for any problems or questions that cannot be resolved through electronic communication with occasional meetings on Monday as needed. The team will utilize conference calls when needed for any distance learning or out-of-town members. Moreover, a weekly task report will be required per member to monitor progress on tasks as designated by meetings and group communication.

# Deliverable Documents

Throughout the semester, Team Gambit will be submitting various documents (internally and to the professor). The internal documents that will be submitted to the rest of the group are weekly progress reports that will include the individual tasks that we have completed, what we are currently working on, and what we will be working on in the future. This set of progress reports will allow us to measure and ensure traceability throughout the semester.

Using the progress reports and the efforts of each member of Team Gambit, we will submit various documents to the professor. These documents (Requirements Specification Document, Project Management Document, Risk Analysis Document, etc.) will be submitted for a grade and will be used by other groups during the design process.

# Initial Constraints and Assumptions

**Constraint 1:** This project is to be completed by the end of the semester. This gives Gambit Incorporated roughly 8 weeks to draft and approve the Requirements Analysis and Specification document.

**Constraint 2:** All team members are considered part-time for work done on this project. Since each member is assumed to work or be taking other classes at UAH, only 13% of each student’s daily schedule will be allotted towards completing this project.

**Assumption 1:** We assume that the customer acknowledges the above constraints, and that a working prototype will most likely not be produced.

1. **Glossary**

* Administrator - a user of the application who is responsible for the configuration and maintenance of the application.
* Database - the storage mechanism for all data used by the application.
* GUI - a graphical user interface in which users will interact with the application
* Patron - a customer of the venue who will purchase ticket(s) for a particular event.
* Teller - a user that is responsible for gathering the required information from a patron to complete a ticket transaction
* Ticket transaction - a patron may purchase or return a ticket; the database will be updated accordingly.
* User - a user of the application. A user maybe a teller or an administrator.
* Venue - the location of the event scheduled for a time period. The location will remain static but the event and time periods may change. The venue will be comprised of sections, seats and the stage.