Lake Mountain Leprechauns: Inception Deliverables

VISION STATEMENT

Planning a convention requires a lot of work. A couple of the necessary tasks include choosing times and venues for each event, making the schedule and other information readily available to staff and guests, and efficiently sharing last-minute changes. There is are existing software suites that streamline the convention process, but their cost is far above the budget of the average nonprofit group. This project will provide a free solution to the problem of convention planning for small-scale event organizers. It will combine back-end tools for organizing a schedule and other important information with a mobile application that convention-goers can use to notify them of convention events.

Business case

This project is designed in part to meet the same requirements as the existing Guidebook application. Guidebook allows you to view schedules and event information, sort events by category, look at maps of the event location, and receive updates from organizers when there are important changes to the events or schedule. Guidebook also can provide social media integration within the application.

Guidebook is the most popular information distribution app for conventions, but there are several alternative products currently on the market. These include Bizzabo, Bloodhound, DoubleDutch, zkipster, and SmartCrowdz. These are all listed here, along with several other apps that do not match the product scope as they are designed to manage audience participation, not to distribute information to attendees. Bizzabo and Bloodhound specifically are the closest competitors to Guidebook.

Guidebook, Bizzabo, and Bloodhound all provide general information, a list of speakers, a schedule, and maps in the standard version of their product. Bizzabo and Bloodhound have several features for free that Guidebook offers at an additional cost. These features are social network integration, in-app twitter feed, attendee messaging, tracks, and an attendee list. Guidebook also offers custom list creation and spreadsheet import, which neither Bloodhound nor Bizzabo has.

Each of these applications has certain issues which makes using them inconvenient. Guidebook's least popular feature is the cost associated with using it. You are able to use the app for free for up to 200 attendees. At the cost of $1750 unlimited users can view information about your event in the application. There are several pricing tiers that add in extra features for you or your attendees. Bizzabo and Bloodhound require that you sign in with an existing social networking profile, either Facebook or Linkedin. Convention attendees can not be expected to have accounts for these services.

None of these products will handle the logistics of the scheduling for you. They require that you import a previously created schedule. This portion of the project extends outside the usual scope of a Guidebook-style app.

The requirements we are looking at specifically are schedule generation and efficient information distribution. These are the key features we are looking to implement.

Project stakeholders

The major stakeholder in this project is the development team, consisting of four students taking RPI's Software Design and Documentation class. To them, this project is significant for a few reasons. The first of which is that this is a class project, the development of which carries a significant portion of their grade. The process by which they are creating and developing this project also has a high learning value, with new theories, methods and tools, and the team is invested as such. Finally, there are members of the team that are also members of Genericon staff, and they feel a drive to create a functional and helpful product for their client, to which they also feel a personal connection (and will benefit from its completion directly.)

Major Features

The core feature that will be implemented is an event scheduling application for the convention organizers. They should be able to give the application all the data on the events they seek to schedule. This data includes the event names, event runner (to avoid double scheduling them), their top 3 preferred time ranges, list of rooms where events will be placed, their capacities, and the expected attendance of the events. The scheduler should then provide an array of schedules sorted by how much they conform to the input. The user can then hand edit the schedule as needed. From there, they should be able to finalize and publish that schedule.

Once published, the schedule will be accessible from a free-to-download mobile application. The convention attendee will also receive any errata to the schedule from the mobile application. The mobile application will also provide a way for the attendee to mark events they are interested in and the application will set an alarm to sound 5,10, or 15 minutes before the event.

Major Risks

The team will face a few challenges and risks for the project. A handful of the technologies we plan to use are largely unfamiliar to the team. This is primarily mobile development as none of the developers have worked with tools such as Android Studio. The team is also uncertain about the time estimates on the application's features. This is caused by an uncertainty about the amount of effort implementation will take. Another risk is the alienation of half of the front end users by exclusively developing an Android app. This assumes that half uses iOS devices.

USER SCENARIOS

User Personalities

Front-end User: Frank Smith

Frank is a 25 year old RPI graduate living and working in Troy, NY. He earns a reasonable salary as an entry-level software engineer at a local company. He has hobby interests involved with science fiction and gaming, and enjoys sharing these interests with others at local tournaments and other game shop weekend events. In addition to hanging out with friends and attending smaller events, Frank also looks forward to attending local conventions every year, such as Genericon and Albany Comic Con. He has a laptop that he brings to work and a smartphone that he uses to help with many of his daily tasks and activities. Like many individuals his age, he prefers the convenience and ease of viewing and interacting with information on his computer and phone over traditional print media.

Back-end User: Jamie Wilson

Jamie is a junior at RPI majoring in Biology. She loves anime and has attending the anime club at the school since her third week of school as a freshman. When she heard that this club also hosted its own anime convention, Genericon, every year she joined convention staff almost immediately. She became “Panels Coordinator” in her sophomore year and was re-elected to the position this for this year also. She takes great pleasure in choosing and arranging the presentations people get to make at the convention, however she sometimes resents the hassle involved in organizing the convention.

User Scenarios

Front-end Scenarios:

1) Frank has just arrived at this year’s Genericon convention with some friends. He is looking forward to competing in several game tournaments. He pulls out his phone and opens this event application and finds the schedule page listing. Tapping on the title, he opens the schedule page and sees a list of events happening throughout the convention, sorted by time. Seeking video game events, he taps on a drop-down menu at the top of the page which allows him to specify the event organization in his application. The menu lets him sort by time, tag, and location. Frank selects the “tag” option and the schedule on his screen is sorted by tags, displayed alphabetically: anime showings, cosplay events, featured panels, guest events, panels, traditional game events, sci fi showings, and video game events.

   Using a finger on his touch screen, he scrolls down to the listed video game events, and finds several tournaments he is interested in. Frank presses an event title to open a page that gives him the event description in greater detail, then presses the “back” button on his phone to return to the main schedule listing. When he decides he’d like to attend that event, he presses an “add” button to the side of the title to add it to his personal schedule within the application. He does this for each event he’d like to attend. Returning to the application’s main menu, Frank is able to press on the title for his personal schedule and open and view it much in the same way he did with the

convention schedule. His personal schedule lists the events he added to it in the same way they are listed in the main schedule, sorted by time.

2) While attending the convention and checking the schedule with this event application, Frank notices a notification panel at the top of the screen change color. He presses on the panel to open up a notification screen that informs him that a guest talk has been rescheduled last minute due to transportation issues with the guest in question. He takes note of this update and decides to break for an early lunch before attending the panel, as it's been changed to later in the afternoon.

3) Frank wants to check out the vendors at the convention, but wants to know if there is a vendor selling used SNES games. He opens up this event application and presses on a title for the Vendor's Room. This opens up a list of businesses selling items at the convention. It has the store names listed alphabetically and a brief description underneath. He sees a business selling used games, and decides to go check it out.

4) On the way to the Vendor's Room, Frank becomes lost - it's been awhile since his days at RPI. He opens up this event application and presses on a title for the convention map. This brings up a provided image that articulates the buildings and rooms around him for convention space. After a few minutes of looking at the map, Frank gets his bearings and is able to direct himself to where he'd like to go.

Back-end Scenarios

1) Jamie's least favourite thing about organising Genericon is the scheduling meeting. In the past, this has required all of Genericon staff to get together in a room and manually write out the schedule in a spreadsheet. This takes several hours and often results in arguments between staff members. This year however, Genericon has a tool to automate this somewhat. Jamie opens up her computer and goes to the new management site for the convention. One by one she enters all of the information on the panels she is scheduling. Event name, event host, event length, and constraints on when and where the event can be held all have their own fields on the event entry page. She clicks submit once she has finished entering all the fields for this event. This is repeated for each event she is in charge of.
   Once all events have been entered, the convention chair starts the schedule generation. The program resolves all dependencies and conflicts and updates a schedule display page with all of the events that have been entered already. The staff reviews this schedule and will either accept this schedule or edit constraints on some of the events and rerun the program to generate a new schedule. At the end of this there will be a functioning schedule for the convention with a representation that can be distributed on the conventions information app and on the convention's website.
2) When it comes time to write the descriptions for all of the events and submit them to the conbook coordinator, Jamie usually has to rewrite a lot of information about specific events and email these descriptions to the conbook coordinator. Using the website, she

can add a paragraph about the event to its existing entry. Jamie can access this by visiting the website and clicking the link to the list of panels. Clicking on any panel title will bring up its information page, where she can edit all of its information, including the description. The conbook coordinator can come to this same page for information rather than needing to wait on emails from each staff member individually.

3) At the convention, Jamie must work on-site to help with running the convention, doing several tasks as assigned by the convention's administrative staff. For the past two years she has carried around a piece of paper with her shifts scribbled on, but now she can store her schedule on her phone in the same application given to attendees. She is able to add her shifts to her personal schedule in the apps. From the application's main menu, she can click the button that will take her to the convention's general schedule and for every event that she is scheduled to attend, she clicks the add button off to the side of it's title to put it on her personal schedule. All relevant information: event time, location, description, are packaged into an event. She was going to be carrying her phone around anyway and doesn't have to worry about losing or forgetting this piece of paper now.

PROJECT SCHEDULE

Color Key

Blue - Documentation Requirements

Red - Documentation & Class Schedule Deadlines

Green - Use Case/Feature Iterations

Start of Week	Deliverables (due by end of week unless otherwise specified)
9/27	**Beginning of Elaboration (9/28)** • All inception materials (due 9/28)
10/4	• Deployment diagram, supplemental specifications, use cases • Front- & Back-end: UI functional design
10/11	**Beginning of Construction (10/13)** • Updated schedule, work breakdown structure, domain model, contribution summary, status report (all due 10/15) • Back-end: online form to add/remove events to schedule list, view list, sort by tags/etc. • Front-end: display schedule, display personal schedule
10/18	• Back-end: schedule maker, ability to add/remove to structured schedule / rehash it. • Front-end: add events from full schedule to personal schedule, sort schedules by tags/etc. • Infrastructure: Stand up basic database framework.
10/25	• Back-end: add/remove/view documents (maps, etc.) • Front-end: View detailed event pages from personal & main convention schedule
11/1	• Stakeholder review #1 (due 11/5) • Back-end: send notifications about changes, connect to front-end • Front-end: receive and display notifications from personal schedule & about changes
11/8	• Back-end: create/view vendor list, add/remove • Front-end: view documents (maps, etc.), view/sort vendor list/details
11/15	• Back-end: UI aesthetic design, view metrics • Front-end: UI aesthetic design
11/22	**Beginning of Transition (11/23)** • Stakeholder review #2 (due 11/23)
11/29	• Beta testing, alter based on feedback
12/6	• Done with everything! (final release & final test results)

FINAL STATUS REPORT

Our team has formed under the name Lake Mountain Leprechauns. We have figured out a weekly meeting time that works for everyone. We decided to tackle the problem of creating an app suite for convention planners and center the design on the generation and publication of an event schedule. We assessed the skills of our team and figured out what tools will be needed for implementing our application. We reviewed the different applications that are similar to the one we want to develop. This was used as a reference for what features we deem necessary and which ones are auxiliary. Some team members have began to install and familiarize themselves with the tools that will be needed as there are a number of needed tools that the team is not familiar with. A Github repository has also been initialized. From here, we plan to design a deployment diagram. We will also begin work on a minimal user interface to begin the construction phase.

CONTRIBUTION SUMMARY

Maggie Borkowski wrote the executive summary and contribution summary, and spearheaded creation of the schedule. Rachel King wrote the stakeholder description and one user scenario, and contributed to the schedule. Michael Mortimer wrote the business case description and one user scenario. Kyle Samson wrote descriptions of the features and risks and compiled the final status report.