Requirements Analysis Document

Event Management System

CITS3200 Group 9

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University of Western Australia

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Revision History:

Version 0.1 10/08/2022 Jakob Kuriata. Created

Version 0.2 16/08/2022 Joshia Nambi. Formatting and Additions

Preface:

This document addresses the requirements of the Event Management System. The intended audience of this document are our client, mentor, and designers of the project.

Target Audience:

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INSTRUCTIONS

Creation of a secure web-based shop front for event attendees:

1. to book his/her attendance (including partner, children);
2. to register contact details;
3. to indicate no fees involved;
4. to enable uploading images/text; and
5. to interface with printer to generate badges

Security of data is an important consideration.

MILESTONES

- 17/08 Sprint 1 Deliverables Due
- 21/09 Sprint 2 Deliverables Due
- 17/10 All work on project stops, Handover to client of project deliverables, system demonstration & client retrospective.
- 19/10 Sprint 3 System and Retrospective Due

1.0 General Goals

- To provide a suitable alternative to the current system in place that will be hosted via a web application that attendees can interact with using their mobile devices as an alternative to paper in order to be more environmentally friendly.

2.0 Current System

Currently the client uses paper invitations for her events.

3.0 Proposed System

3.1 Overview

- Our team will create a web application to manage these events.
- This application will be able to book/mark an attendee's attendance (including their partner /or children).
- It will also register their contact details and be able to indicate whether there are fees involved for that event.
- Our system will be able to take images to be used as attendees profile picture for their contact details.
- Our system will also be able to generate individual badges for each event as a form of ID for that event.
- Our system will be built using the Flask framework.

3.2 Functional Requirements

- Storing/marking attendance booking into a database
- Registering contact details into a database.
- To generate badges for a form of ID.
- A secure online payment system.
- UI testing, ensuring that the application feels good to use over the current system.
- API interface to check if fees are required.

3.3 Nonfunctional Requirements

- Being able to print badges as an alternative.
- Being able to upload images/text to our database/system.
- Speed/performance of the website.
- Security testing.
- Scalability.
- User feedback.

3.3.1 User Interface and Human Factors

- Novice users/ordinary people should be able to use our system with ease.
- Should be easy as it just filling out a simple form (name, email, mobile number, emergency contact, dietary requirements).
- There will be error detection for example, a user cannot have a number in their name or characters cannot be in a mobile number, this is to ensure that the database doesn't get confused with incorrect data.
- The input device will be a keyboard (physical or digital).
- The output device will be either a monitor or a mobile device screen as the application will be accessible on both.

3.3.2 Documentation

- Deployment documentation - Demonstrate how the client can deploy our web application.
- Usage documentation – Details how a user can use and interact with our web application.
- Troubleshoot documentation – Go through the common problems and solutions an ordinary user may have with our web application.

3.3.3 Hardware Consideration

- As our system will be a web application, it can either be accessible via a web address or hosted locally, both of which can be accessible on a mobile device/computer or any system with a modern internet browser.

3.3.4 Performance Characteristics

- The speed of the application should be relatively fast as checking in should be quick and convenient to the user.

3.3.5 Error Handling and Extreme Conditions

- Our system should be able to detect input errors such as invalid names/phone numbers to prevent them from entering our system and causing any further problems.

3.3.6 System Interfacing

- Data for attendees will entering our system.
- Details for events will be going into our system.
- A secure payment system will be going into our system.

3.3.7 Quality Issues

- The system is portable as it is a web application they can be deployed locally or hosted on a domain.
- As the system is portable it can easily be deployed on multiple systems if needed.

3.3.8 System Modifications

- The badging system could be modified in the future (QR codes or Apple Wallet Passes)
- The system should ideally be always running; however, it should be fine to only turn it on when there is an upcoming event, then reset it after that event.
- The design/theme of the website is also something that can be updated in the future.
- The web framework used could be changed early in development if necessary.

3.3.9 Physical Environment

- The system can be hosted locally on a single computer, or it can be hosted on a domain which can be accessed via its domain address.
- The target equipment will be multiple devices as it is a management system interacting with many users.
- The system should not be affected by environmental conditions as it is just a web application being deployed, however, if the machine that is being deployed is affected by something like a bandwidth issue the system may slow down.

3.3.10 Security Issues

- Security is an important factor of our system as we are dealing with each user's personal information.
- This personal information will be stored in a database that can only be accessed on the computer/server the system is being deployed on.

3.3.11 Resource Issues

- As the data for this system will be contained in a database located on the computer hosting the system, it can only be backed up with access to that system if needed.

3.4 Constraints

- Flask is not as popular as other web frameworks.
- Flask is dependent on libraries for decent functionality (login/authentication).
- Less secure than other similar web frameworks (Django).

3.5 System Model

3.5.1 Dynamic Models

- Updatable emblem regarding specific events
- Animated Buttons

3.5.2 User Interface – Navigational Paths and Screen Mockups