SE 3XA3: Development Plan
Title of Project

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Table 1: **Revision History**

Date	**Version**	**Notes**
Wed. Oct. 5	0.1	Basic Outline
Wed. Oct. 5	0.2	Requirements added
Thurs. Oct. 6	0.3	Section 1 added and formatting
Thurs. Oct. 6	0.4	First draft
Thurs. Oct. 6	0.5	Formatting and minor changes
Fri. Oct. 7	0.6	First Revision complete

This document describes the requirements for .... The template for the Software Requirements Specification (SRS) is a subset of the Volere template (Robertson and Robertson, 2012). If you make further modifications to the template, you should explicity state what modifications were made.

1 Project Drivers

1.1 The Purpose of the Project

The purpose of this project is to make it easier for people that attend social gatherings or events to select a songs and form their own playlist according to the mood or perference of the attendees. The current implementation (PlayMyWay) has an unflattering and difficult to use UI, as well as no easy way for the average person to integrate the software into their party. We plan on making a revised version that has an elengant web app interface, and an easy to install server.

Social gatherings are much more enjoyable when most of the attendee's enjoy the music that is being played. This project was inspired by

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1.2 The Stakeholders

1.2.1 The Client

Event Organizer
The client is the host of the social event or gathering, who is trying to save money by not hiring a DJ and simply relying on this system, which allows the attendees to chose what songs they want to listen to. Having users select music will put less stress on the event organizers, and allow them to focus on other aspects of the event, or let them enjoy themselves.

DJ
The client can also be a DJ, hired by a party planner, who is not willing to put up with people fighting over what song to play next.

Shorthand	Explanation
JS	Javascript
HTML	Hypertext Markup Language
CSS	Cascading Style Sheets
Event	Any event that includes shared music listening. Party, Wedding, etc.

1.2.2 The Customers

Event Attendee's
If the system is working properly and attendee's are voting for songs, then the event will be more enjoyable for them.

1.2.3 Other Stakeholders

[1]
No other stakeholders have been discovered.

1.3 Mandated Constraints

- The front-end of the product will take the form of a web-app that can run on any javascript-enabled browser. This means the app should be able to accomodate all common Operating Systems (phone and desktop) and all common Javascript-enabled browsers. Internet Explorer may be exempt

- The front-end web-app and server need to both be connected to the same WiFi network.

- The server needs to be stable with very low downtime, in order to prevent scenarios where the music stops playing accidentaly.

1.4 Naming Conventions and Terminology

1.5 Relevant Facts and Assumptions

- We assume that users of the app are mmpatient (they don't want to spend a long time learning the software)

2 Functional Requirements

- Allow users to vote on which song to play next at a social gathering
- Users can select to vote for any of a pre-determined set of approximately 10 songs.
- The predetermined set of songs can be selected randomly from a larger pool of songs
- Queue up songs that have been voted on and automatically play them
- Provide a simple web-app for users to vote with. The web-app has a list that shows users what their options to pick from are

2.1 The Scope of the Work and the Product

2.1.1 The Context of the Work

2.1.2 Work Partitioning

2.1.3 Individual Product Use Cases

2.2 Functional Requirements

3 Non-functional Requirements

3.1 Look and Feel Requirements

- Visually pleasing web app interface

3.2 Usability and Humanity Requirements

- Straight-forward web app (new users should be able to adopt it easily)

- No sign up required
- Automatically connects to server via WiFi with little to no input from user

3.3 Performance Requirements

- Songs should play one after another with small or no delay in between
- Server should have high uptime

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3.6 Operational and Environmental Requirements

3.7 Maintainability and Support Requirements

3.8 Security Requirements

- A user should only be allowed to vote once per *'round'* of votes
- Restarting the app/WiFi/phone should not change the fact that a user can only vote once per *'round'*

3.9 Cultural Requirements

3.10 Legal Requirements

- Music that is played should have legal rights to be played publically

3.11 Health and Safety Requirements

This section is not in the original Volere template, but health and safety are issues that should be considered for every engineering project.

4 Project Issues

4.1 Open Issues

- How exactly do we make sure that a user can only vote once per song, without requiring people to sign up for an account

4.2 Off-the-Shelf Solutions

The project that we are modelling (PlayMyWay) already does most of what our project will do.

As for other solutions, there are various libraries that we will use in our development. These libraries will help with various functionality, and include (but are not limited to):

- Express.JS (Server framework for Node.JS)
- Angular.JS (Front-end framework for the webapp)
- nodeunit (Unit testing package)
- Mocha (general testing package)

4.3 New Problems

DJ.Js is based off the open source project called playymway that can be found here. We are going to recreate the project, in javascript. The original project was written in Jade, which is a Object Oriented programming language based on Java. Jade is kind of outdated and not as universal as javascript, which is the golden standard for web page applications.

4.4 Tasks

The project requires many steps to complete but here is a list:

1.

4.5 Migration to the New Product

There is no transition needed because this is a webapp, and is the first iteration of the product.

4.6 Risks

-The product is a webapp and therefore relies on an internet connection.
- Bugs or catastrophic errors in the server could cause the music to start playing sporadically
- Only people with a device that can connect to the internet can use the webapp
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4.7 Costs

4.8 User Documentation and Training

4.9 Waiting Room

Something that is part of our vision is having all genres of music having a diverse list of music so users can select songs that cater to their tastes.

4.10 Ideas for Solutions

References

James Robertson and Suzanne Robertson. *Volere Requirements Specification Template*. Atlantic Systems Guild Limited, 16 edition, 2012.

5 Appendix

This section has been added to the Volere template. This is where you can place additional information.

5.1 Symbolic Parameters

The definition of the requirements will likely call for SYMBOLIC_CONSTANTS. Their values are defined in this section for easy maintenance.