Development of

DIGITAL MUSIC MAP

of Indore

Software Requirements Specification

Version 1

21 Jan 2019

Team F

Prepared for

CS 258 Software Engineering

Spring 2019

Revision History

Date	Description	Author	Comments
<date>	<Version 1>	<Your Name>	<First Revision>

Document Approval

The following Software Requirements Specification has been accepted and approved by the following :

Signature	Printed Name	Title	Date
	<Your Name>		

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1. Introduction

This document is a description and overview of everything included in this SRS document. Also, the purpose for this document and a list of abbreviations and definitions is provided.

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the “Development of a Digital Music Map for the city of Indore” Project. It will throw light on the purpose and complete description of the project. It will also explain the system constraints, interface, and interactions. The exact purpose of the document is to get approval from the client and a reference for developing the first version of the Musical Map.

1.2 Scope

The “Musical Map of Indore City” is primarily a web-based application which will map the city in a musical way. It will mark the places related to music like music clubs, music halls, concert halls, musical shops and many more.

Since music is a very important and integral part of almost everyone’s life, therefore, a musical map would be of great help for everyone.

The map would be using Google Maps as the base for the basic layout. Music-related places would be marked on the map and on user interaction with these marking they will be

provided with more information related to that place. A musical clip on the interaction shows some photos and other links would be provided. It would be location-based application automatically peeking in the location detected.

1.3 Definitions, Acronyms, and Abbreviations

Term	Definition
GPS	Global Positioning System
User	Anyone interacting with the website or application
Back-End	The coding and application that work in the background to power the overall applications
Front-End	The Appearance of the website and the application
Extend the table with other terminologies	Will add the languages and a short text about them

1.4 References

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5. http://newyorkmusicmap.com/map/
6. https://www.itsnicethat.com/news/dorothy-american-map-1000-songs-graphic-design-011118
7. http://www.bkmag.com/2016/10/07/musical-map-united-states/

1.5 Overview

The remaining of the documents describes the detailed software requirements and their exact purpose in the project.

WILL FILL IT AT LAST. We can even remove this section. Seems not so important.

2. General Description

This project will be built using a couple of javascript based technologies. The server-side application will be written using Django/Node JS. The client-side web application for accessing the result analytics will be developed using Angular JS. The android application will be developed using Native Script. MySQL will be used as the database engine. Django/Node JS will be used to query the database and perform all heavy processes and then the processed data will be rendered in the client side.

2.1 Product Perspective

This subsection of the SRS puts the product into perspective with other related products or projects. (See the IEEE Guide to SRS for more details).

2.2 Product Functions

The Product can be divided into 3 sections :-

Android Application : The android application will be used by users to get an idea of the type of music, listen in a particular area. The app will also have a GPS feature so that the user will know the type of music that people are listening near him.

Website : The website will have all the feature as the android app and also it will have a admin section so that the inserting/deleting of data in the database will

be easy and anyone even with no technical knowledge will be able to use it.

Server : The server basically does all the heavy tasks. All the data storage and analytics will be done in the server side. The processed data will be given to the client.

2.3 User Characteristics

Users can be anyone who wants to know about the music culture and its history. Also, there will be an admin who will be entering or deleting data.

2.4 Assumptions and Dependencies

Server-side:

The following are the requirements from the server :

Linux based system(preferred)
Node JS installed
MySQL database engine installed

Client-Side:

The website will work on any system with browser later than IE 7. It is assumed that the operating system and other underlying pieces of software on the user side are free from any error which may affect the functioning of this system.

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

The user will interact with the map in the Android/web app, to know more about the music culture and history. The user will be able to search a specific area to know about it. The map will have markings on it which on clicked will give all those details.

Our app is based on Indore as of know but as it will be growing in future, there will be a admin section in the website, in which the admin can log in and will be able to add/remove data from the database.

3.1.2 Hardware Interfaces

Anyone with working internet and an Android or a web browser will be able to access the data provided by the app.

3.1.3 Software Interfaces

The project will be mainly done in two parts. First, we will be working on the website implementing everything including the admin section. After completing that we will start working on the android app. The android app will not contain the admin section.

3.1.4 Communications Interfaces

All the data will be stored on the servers and will be accessed by the applications as and when required. To upload more data there will be an admin section for all of this internet connection is required.

3.2 Functional Requirements

To search a particular area the user will enter its name or can search for it on the map. The name will be sent to the server where it will go through the database and will return the data available for the area.

In order to add data, the admin will have to login on the website by using the url “URL +/admin” where he/she has to enter has to enter its credentials which will be then sent to the server. The admin will receive access only after the server has verified it. The server will send a web page, basically a dashboard with which the admin can interact do insert/ delete data as required.

3.3 Non-Functional Requirements

3.3.1 Performance

Since the system is web-based, the server/servers should be capable of handling a large number of simultaneous requests(say 100).Thus the Internet bandwidth should be as high as possible (200mbps recommended)to handle a large number of requests. It is recommended that the server hardware have at least 2GHz processing speed and 8GB

RAM.

3.3.2 Reliability

The system should be able to process all the information for analytics and store them permanently as any loss of data will render the whole portal useless for the user.

3.3.3 Availability

The system should be up and running so that there is no problem and everything runs smoothly.

3.3.4 Security

The operating system being used on the server should be updated so that it is free of common vulnerabilities. The application should also have security features to protect it. The administrator shall also be able to the timely inspection of the database to ensure safety.

3.3.5 Maintainability

The database should be accessible to the administrators so as to carry out maintenance.

3.3.6 Portability

The platforms on which the system runs should be generic enough to allow a substantial amount of portability.

3.4 Logical Database Requirements

The place name , music details should in a valid standard format to maximize the correctness of information. - At least 10 GB storage is recommended for database storage requirements as of now as our app is limited to the Indore city. More storage will be needed as the app grow