**Project Proposal**

**Software Engineering CS-360**

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Submitted in partial fulfillment

Of the requirements of a

Software Engineering course project

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# Note (delete this page after reading)

1. This is only a ‘guide’ document.
2. Anything highlighted in this color is optional: Groups who work on the optional sections would get bonus marks. There are no negative consequences if you decide to skip the highlighted sections.
3. Please write ‘to the point’ text in the proposal. No lengthy stories!
4. You have to replace any text between “<” and “>” with your text.
5. Any other text is written as an example.
6. The intended audience of this document is the course faculty so that they can determine whether the project should be approved as proposed, approved with modifications, or not approved.

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# Overview

## Purpose, Scope and Objectives

<This is the Purpose, Scope and Objectives of the *project* and the products to be delivered and those excluded. It should contain a brief statement of the business or system needs or hypothesis to be tested. Every project is designed to serve a need. In this section you provide the background for the project. Overview who needs it and what is the intended user group? What is the value of the product over the status quo? Where will it be used? What hardware and software will be required? >

The purpose of this project is to provide users with the option to play music of their choice at any desired place for example restaurants, gyms and other places where music is played frequently.

The target audience will mainly be of two categories, the users who will operate the app and the restaurants which will run the server. This service can eventually be dispatched globally to such places. On the other hand the app will be put on the android play store for people to access and use.

The main objective is to make an application where users can connect to a server deployed by the management of a franchise (e.g. restaurants). The mobile application will enable the user to pass his/her desired song to a queue where it will be played by the restaurant’s server. A challenging task would be to enable reliable and quick communication between the user, server and the music database.

We will need a hosting service (such as firebase) for hosting the controller and for the database. Apart from that we will require the users to have a WiFi enabled android device and the restaurants to have a WiFi enabled computer to run the server on.

## Project description (most important part)

< write everything to make your goal clear. list the services/features to be provided by the proposed system (describe each service very briefly). For every feature, state whether you will write the programs to support it, or you will use existing programs. For example, if you state: The system will provide search facilities, will you write the program to perform the search, or you plan to use existing software? >

< Explain what kind of data processing/analysis you will do. **Tell exactly why should we consider your project and accept your proposal.** >

< Mention also if you already have a customer (somebody interested in the end product that you will develop) >.

## Team profile

**<** Individual qualifications and strengths (such as: programming, design, presentation, documentation, management and organization)

Note: It is expected that every team member shall be involved in all project activities; this only indicates individual strengths, not their sole responsibilities >

**Profile card <Shall be used for all team members>:**

|  |  |
| --- | --- |
| Name:  Mohammad Obaid Ur Rehman | <Photo> |
| ID: 20100044 |
| Email:  20100044@lums.edu.pk |
| Qualifications and strengths:  Object oriented programming  Python, C++ programming |

***1.3.1 Expertise in a specific tool***

<If one of your team members have expertise in a particular tool/technology (relevant to the SE course e.g. GitHub, Slack, AWS, etc.) and would like to present, please mention here. You can list multiple tool and give your priority>

Slack

AWS

Bitbucket

Jira

## Assumptions and Constraints

**<** List here any assumptions on which the project is based and imposed constraints such as schedule, budget, resources, software to be reused, customer software to be incorporated, techniques to be employed and product interfaces to other products. Include performance or language/platform issues, >

We are assuming that restaurants in general would be willing to pay for our service.

Another assumption is that the users would be willing to pay to play their music at a specific place.

We have assumed that a sizeable amount of the customers at the restaurants have access to good internet or mobile data services.

The restaurant at which we are deploying the service should have a machine to play music and run the server it should also have access to sufficient WiFi connection.

For now we have only made our model for android users and we will need to extend our model to mobile websites and IOS applications as well.

## Project Deliverables

Deliverables include

* Software Project Proposal
* Requirement Specifications
* Design Specifications
* Development Plan
* Test plan
* Demo + source code
* Final document
* Final presentations

## Budget Summary

**Budget**

< Do some homework and figure out how to present feasibility and budget details in a project proposal >

|  |  |  |
| --- | --- | --- |
| Item | Men hours | Budget |
| Project Proposal | 20 | 0 |
| Proposal Presentation | 10 | 0 |
| SRS Document | 20 | 0 |
| Design Specifications and development plan | 50 | 0 |
| Development plan | 40 | 0 |
| Development | 300 | 25000 PKR |
| Test Plan | 40 | 0 |
| Final report (testing results) | 30 | 0 |
| Presentations | 30 | 0 |

# Feasibility Study

<Comment on the impact, viability, and practicality of the proposed project. You can elaborate on the availability of users and acceptance of the proposed software you are developing. You may also mention how the technical and non-technical expertise of your team posits constraints such as time to build software by the given deadline. >

# Project Organization

< Insert here any people or entities such as the customer or technical staff that may need to be involved. Specifically name these people. Each person must have been approached prior to submission of the proposal and the exact relationship approved by him or her. >

Hamza Hassan – Front End Dev- JQuery, js, HTML,

## Tools

<List down any team collaboration, prototyping, programming, and testing tools that you think will be particularly useful for your project. Mention at least three and give short reasoning for each.>

GitHub

Jira

Ruby on Rails

Slack

JavaScript (jQuery, React, React-native, redux, NodeJS)

Android Studio, Java

HTML, CSS

Firebase, Heroku, AWS

## References

<Insert here any document referred to in the proposal. An example might be articles or Websites that you consulted during the literature search.

<https://developer.android.com/>

<https://classroom.udacity.com/courses/ud834>

<https://classroom.udacity.com/courses/ud851>

<https://reactjs.org/>

<https://reactjs.org/tutorial/tutorial.html>

<https://facebook.github.io/react-native/>

https://redux.js.org/

<https://www.youtube.com/watch?v=0fKg7e37bQE>

https://www.youtube.com/watch?v=BCQHnlnPusY&list=PLRqwX-V7Uu6ZF9C0YMKuns9sLDzK6zoiV

<https://courses.cs.washington.edu/courses/cse403/12sp/Projects/proposals/brdmstr-proposal.pdf>

>

# Definitions

<Insert here any technical word for which the meaning may not be known. Do not assume that the readers have specialized knowledge in the *application*. Use a table format for these. >