

Project Proposal

By

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CSCI 4100U: Mobile Devices

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October 20th, 2023

Overview of Project:

musicVisualized is an android application that uses the LastFM API to visualize a user's music listening history, providing insights to representations of their music habits.

List of Group Members and their Responsibilities:

	Roles
Harish.K	Model of App Describing app features UML Name creation Writing Check
Om.P	Describing app features UML Name Creation Scope of project Writing check
Haider.A	Describing app features UML Name Creation Writing Check

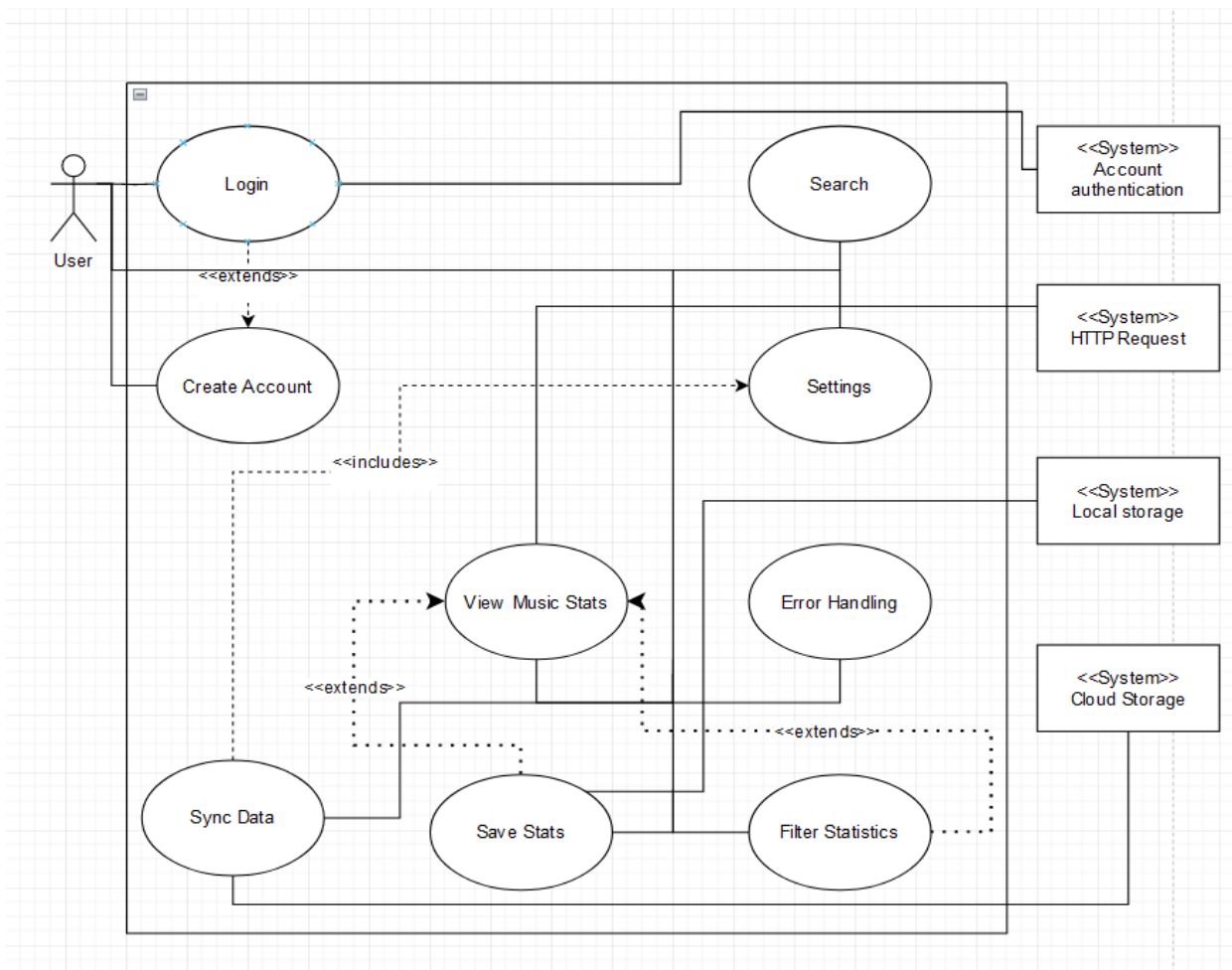
[LastFM API](#)

List of Features and Functional Requirements

- Dialogs and pickers
 - Pick a date range to filter listening data.
- Multiple screens and navigation
 - Main Screen
 - Display the user's top artists, tracks, and albums.
 - Overview Screen
 - Visualize the user's listening data over time.
 - Artist Page
 - Display data about the artist
 - Concert
 - Add a section to the artist page with geolocated photos for concerts
 - Navigation bar
 - Allow users to easily switch to other sections of the app.
- Snack bars

- (Un)successful Login
- (Un)successful Authorization
- Fetching Data
- Error Handling
- Notifications
 - Song Notifications
 - Notifications when you play a song
 - When you hit milestones such as (top 15% or top 50% off listeners)
 - Weekly notification
 - Weekly notifications showing you what you listened to that week and how you compared to others.
- Local storage (SQLite)
 - Save account connections (last fm user against our service's account?)
- Cloud storage (Firestore or other)
 - Sync data across all platforms (themes etc)
- HTTP requests
 - Querying data from the LastFM API

Code Design



Mockup of User Interface

Name

Search a user

or

Settings

Profile

Account

Application

Your Picture



Choose File

No file chosen

Upload Picture

Delete Picture

Your Information

Display Name

Country

About you



Top Artist of the Week
as profile banner

Username · Join Date

Overview

Library

Loved tracks Graphs

Scrabbles

xxx, xxx

Artists

x, xxx



Top Track

Name

Artist

Recent Tracks



Name

Artist

Date/Time



Name

Artist

Date/Time



Name

Artist

Date/Time



Name

Artist

Date/Time

Scope of Project

- The scope of the project is to create an app that can use last fm data and allows the user to see all their tracked stats through our app. The app contains multiple navigation options, offers notifications to the users who opt in, has information about concerts, artists, and songs themselves. The app will have one prerequisite which is having a valid Last FM account already made, and once you have an account the app is fully usable.