



Software Requirement Specification (SRS)

For FM Addis Website and Mobile app

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1. Introduction

1.1 Purpose

The purpose of this document is to specify all the user requirement for FM Addis Website and App System. It describes what developers implement. This document is used by both the system developers and stakeholders of the system.

1.2 Intended Audience

This document is intended for FM Addis Management, Ashewa Senior Management, developers, and project manager.

1.3 Project Objective

1.3.1 General Objective

The general Objective of the system is to develop state of the art website and mobile app for FM Addis Radio that will provide listeners with easy access to the station's live as well as other stream Services

1.3.2 Specific Objective

- Develop a responsive website
- Provide easy access to live stream and on demand content
- Implement interactive features such as social media integration and online chat
- Fetch songs and submit feedback
- Integrate with other systems or website if needed

1.4 Project Scope

The scope of the project is to develop a responsive website and mobile app for both IOS and Android devices.

1.5 References

- Ashewa and FM addis Radio Contractual agreement

2. Over all Description

2.1 Product Perspective

The FM Addis Radio Website and App is a web application accessed through the browser and mobile apparatus that enables users of the system to access the station's daily program from anywhere and anytime.

The following are the main features that are included in the system:

- **Cross platform support:** It can be accessed using the browser or mobile device for both IOS and Android.
- **User account:** Hierarchal user management system, starting from super admin different roles like Admin, Editor, Content writer will be entertained
- **Number of users being supported by the system:** The system is able to support a large number of online users at a time.
- **Interactive:** user can interact with the system through one to one chat or Discussion forum

2.2 User Classes and Characteristics

Users of the system is mainly the general public and users should be able to use smart phone or pc to access the system and all users should be familiar with how to use internet and browser.

2.3 Operating Environment

The user interface shall work on the following operating systems:

- Linux
- Windows 7, 8.1, 10
- OS X (Mac)

The User Interface support all major browsers including

- Chrome
- Firefox
- Internet explorer
- Opera

2.4 Design and Implementation Constraints

This system is provisioned to be built on the WordPress framework which is developed using PHP Laravel. The data base for the system will be MySQL.

2.5 Assumptions and Dependencies

- All the required data and necessary input will be available by FM Addis.
- Some AI and Biometrics Plugin will be available
- Once the Figma design is developed and accepted by the client it will be freeze and the development will be based on the freeze figma design.

3. External Interface Requirements

This section of the SRS describes the interface requirements for the system. Requirements for user, hardware, software, and communication interfaces are defined

3.1 User Interfaces

The user interface will be based on the accepted Figma design.

3.2 Hardware Interfaces

The system will be hosted in AWS and it will be a pay as you go service. No specific hardware is required since all resource is acquired virtually.

3.3 Software Interfaces

Development Env't

- Word press
- MySQL

Type of Web Server requirement

- Apache

3.4 Communications Interfaces

web browser, HTTPS, e-mail, SMS Messages

5. System Features

This section of the SRS describes the requirements for the system's features. Specifically, requirements for FM Addis Radio Website and App software.

5.1.1 User Management

- User Registration
- User Login
- Account Activation
- Account Blocking
- Role and User Group
- Notification (Email and SMS)

5.1.2 Live Streaming:

- Enable users to listen to the radio station's live broadcasts via the website and app.
- Provide a reliable and uninterrupted streaming experience across various devices.

5.1.3 On-Demand Content:

- Allow users to access and listen to previously aired shows or segments on-demand.
- Implement search and filtering options for easy content discovery.

5.1.4 Program Schedule and Show Information:

- Display an updated program schedule with show timings and descriptions.
- Include detailed information about each show, hosts, and guest appearances.

5.1.5 User Engagement:

- Enable users to interact with the radio station through comments, ratings, and feedback.
- Incorporate social sharing options to promote content and increase reach.

5.1.6 Personalization:

- Implement user profiles to allow customization of preferences and recommendations.
- Provide bookmarking or playlist features for users to save their favorite content.

5.1.7 Podcast

- Users should be able to browse and listen to a collection of podcasts provided by the radio station.
- The podcasts should be categorized and searchable.
- Users should be able to subscribe to podcasts and receive notifications for new episodes.
- The website and app should provide an option to download podcasts for offline listening.

5.1.8 Music

- The website and app should offer a music library with a wide range of songs.
- Users should be able to browse and search for songs by various criteria such as artist, genre, and album.
- The music library should be regularly updated with new releases.
- Users should be able to create playlists and add songs to their playlists.
- Songs should be playable on demand and should support features like play, pause, skip, and shuffle.

5.1.9 News

- The website and app should provide news articles related to music, artists, and events.
- Users should be able to browse and search for news articles.
- News articles should be categorized and should include images and relevant links.
- Users should be able to share news articles on social media platforms.

5.1.10 Online Chat on Live Shows

- Users should be able to participate in online chat discussions during live shows.
- The chat feature should be available on both the website and the mobile app.
- Moderators should be able to manage and moderate the chat.

5.1.11 Song Requests

- Users should have the option to request songs to be played on the radio station.
- There should be a dedicated section on the website and app for users to submit song requests.
- Users should receive notifications when their requested songs are played.

5.1.12 Favorite Songs

- - Users should be able to mark songs as favorites.
- - The website and app should provide a section where users can view and manage their favorite songs.
- - Users should have the option to listen to their favorite songs on demand.

5.1.13 Custom Playlist Creation

- - Users should be able to create custom playlists by selecting songs from the music library.
- - The website and app should provide options to add, remove, and reorder songs in the playlist.
- - Users should have the option to save and share their playlists.

5.1.14 Trivia Questions

- - The website and app should include trivia questions related to music and artists.
- - Users should be able to participate in trivia quizzes and earn points.
- - The trivia questions should be regularly updated to keep the content fresh and engaging.
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5.1.15 Push Notifications

- - The website and app should have push notification functionality to send updates, news, and alerts to users.
- - Users should be able to customize their notification preferences.

5.1.16 Loyalty Rewards

- - The website and app should have a loyalty rewards program for users.
- - Users should be able to earn points for activities such as listening to music, participating in quizzes, and sharing content.
- Points earned should be redeemable for rewards, such as exclusive content, merchandise, or discounts on events.

5.1.17 Traffic Conditions

- - The website and app should provide real-time traffic condition updates for relevant areas.
- - Users should be able to view traffic conditions on a map or in a list format.
- - The traffic information should include congestion levels, accidents, and road closures.

5.1.18 Weather

- The website and app should provide weather updates for the user's location or a selected location.
- Users should be able to view current weather conditions, forecasts, and alerts.
- The weather information should include temperature, humidity, wind speed, and precipitation.

5.1.19 AI based biometric features

- Fingerprint or Face Recognition: Implement fingerprint or face recognition technology to allow users to securely log in to the podcast app. Biometric authentication can provide a convenient and quick way for users to access their accounts without the need for remembering passwords.

5.1.20 Ask me anything AI Feature (AMA)

- Virtual Assistant: Implement a virtual assistant that uses natural language processing (NLP) and AI algorithms to provide interactive and conversational responses to user queries. The virtual assistant can answer questions about podcasts, provide recommendations, offer information about podcast guests or topics, and assist with general inquiries.

6. Nonfunctional Requirements

6.1 Performance Requirements

FMAddis Website and app Must provide available UpToDate data to the requesting authorized client, all other performance related to storage, memory, and processing should be optimal and recommended practices.

6.2 Reliability Requirements

Software system should undergo feature testing, load testing, and regression testing prior to release and/or deployment

6.3 Maintainability Requirements

The architecture, design, implementation, and documentation of the application must minimize the maintenance costs of the software system. The maximum person-time required to fix a security defect including testing must not exceed one day.

6.4 Safety Requirements

Once the system is commenced, the system should be followed up critically while in production. If not this and unnoticed errors are running, data loss or collection of invalid data may down the system.

6.5 Security Requirements

The software system defined in this SRS must follow recommended practices for secure software development. At a minimum, the software development must practice the principle of least privilege for defining access-level requirements of the software system and its associated services. The production-release version of the software system must pass an automated dynamic application security testing tool. Furthermore, the security will be check and verified by INSA.

6.6 Availability Requirements

Reasonable efforts will be made to ensure the software system is available with an up time of 99%.

6.7 Business Rules

The system must have at least a Super-User role and a User role defined for accessing and interacting with the system. Additional roles may be defined for the system as long as the business rules for the administrator and user roles are satisfied. At a minimum, the Super-User role must account for CRUD Users Information and their roles in a system.

Annex

WE hereby agreed on SRS document prepared for FM Addis Radio Website and App system.

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Signed By

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Signature____-Date:_____

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Witnesses

1_____

2_____

3_____

