Software Requirements Specification

**ss**

**Event Notifier**

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| --- | --- | --- | --- |
| **NAME** | **DATE** | **REASON FOR CHANGE** | **VERSION** |
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# Introduction

* 1. **Purpose**

This document aims to present a detailed description of the Android Application –Event Notifier. It will explain the purpose and features of the application and the constraints under which it works. The purpose of this SRS document is to provide a detailed overview of our software product, its parameters, and goals. This document describes the project's target audience and its user interface, and hardware and software requirements.

* 1. **Document Conventions**

|  |  |  |
| --- | --- | --- |
| Headings | Times New Roman, Bold | 17 |
| Sub Headings | Times New Roman, Bold | 16 |
| Normal Text | Times New Roman | 12 |

* 1. **Intended Audience and Reading Suggestions**

This SRS is intended for the following audiences:

* + - The team members including project guide, coder, developer, tester, documentation writers
    - Professors of the college
    - Users of the project
    - Maintenance Engineers
  1. **Product Scope**

The project is an ML-based Android application that provides recommendations of events depending on the user's preferences. A recommendation system is a type of information filter, which can learn user’s interests and hobbies according to their profile or historical behaviors, and then predict their ratings or preferences for a given events. The recommendation task does not apply solely to items such as books or movies, it also handles huge amount of information regarding the most various types of events, e.g., concerts, music festivals, scientific conferences, etc., are also posted daily on the Internet.

* 1. **References**

Websites :

* + - https://stackoverflow.com
    - https://ieeexplore.ieee.org/document/9234293
    - https://medium.com
    - https://docs.flutter.dev

# Overall Description

* 1. **Product Perspective**

The Event Notifier is an Android application. After opening the application, the user sees Login page, option for sign up and forget password. On clicking the signup user redirected to the signup page for user or organization based on selection of type of user. User can login with username and password. If the user is logged in, it will be redirected to the home page of user or organization based on type of user. User homepage consists of List of all events, recommendation of events, option for taking membership in various organization and list of favorite events. Organization homepage consists of dashboard, option for creation of events, acceptance page.

* 1. **Product Functions**

The product functions of this application are:-

* + - User login.
    - Predict events depending on the user's preferences.
    - Organizations can create the events within the application.
    - Students can take membership in organizations.
  1. **User Classes and Characteristics**
     + The users of this application include organization and users(students).
     + The users are required to login to application to view.
     + The users(students) are also prompted to enter the interests.
     + Organization are prompts to create the events and also the authority to accept the membership to organization
  2. **Operating Environment**

The application will be operating on windows environment. Event notifier is a mobile based application which is compatible with commonly mobile OS like Android, iOS etc. The only requirement of this online mobile application is requirement of secure internet connection with a mobile device.

* 1. **Design and Implementation Constraints**
     + Cold start problem.
     + Recommends the events that are only created in application.
  2. **User Documentation**

The user documentation for this application include :-

* + - Help button available to everyone.
  1. **Assumptions and Dependencies**

Assumptions are :

* + - User-friendly system
    - Error free code
    - Faster computations

Dependencies :

* + - The specific hardware and software in which the application runs.

1. **External Interface Requirement**
   1. **User Interfaces**

Event notifier is a native mobile application that suggests recommendations of events depending on the user's preferences. The application opens to a home page from where it is navigated to the login or sign up page. The signup page collects the mail id, password, and interests to signup while the user can log in with the mail id and password to the home page. For organization sign up page, it collects name, mail id, password and logo to signup. Once the user is authenticated , he/she is navigated to the homepage of user which consists of list of all events, recommendation of events, option for taking membership in various organization and list of favorite events. User can register for the organization using the authentication details. It is used for exclusive event’s suggestions in recommendation.

Organization homepage consists of dashboard, option for creation of events, acceptance page. Organizations can create events within the application and distribute the certificates through the app. Organizations can add events and publish results through the platform. For recommending events we are using “Collaborative Filtering” approach and for prioritizing data “Naïve Bayes classifier” is used. The app is also intended to help students in getting notified about placements in the near future including Off-Campus placements. In Organization’s acceptance page, the organization accepts the membership from the users.

FRONT END LANGUAGE: Dart

BACK END SCRIPTING LANGUAGE: Java**,** Dart

* 1. **Hardware Interfaces**
* Windows 8 or above
* Android mobile or emulator that supports version 4.1.x or newer
  1. **Software Interfaces**

Following are the software used for the implementation of AI Fitness Guide.

|  |  |
| --- | --- |
| SOFTWARE USED | DESCRIPTION |
| Operating System | We have chosen Windows operating system for its best support and user-friendliness. |
| Database | Firebase framework is used to store login information. NoSQL used to access the database. |

* 1. **Communication Interfaces**

This project supports all types of Android mobile or emulator. Simple forms are used to input picture and other details from user.

1. **System Features**
   1. **System Feature I**

This application make recommendations of events depending on the user's preferences.

* 1. **System Feature II**

This application reduces the effort for publicity of organization.

# Other Nonfunctional Requirements

* 1. **Performance Requirements**

The application manages facilities required by the casual users quickly and easily. It offers recommendations of events depending on the user's preferences. It takes the interests from user and make recommendations of event.

* 1. **Safety Requirements**

In case the customer forgets or loses Password, the repair functionality helps

* Choosing “forgot password” option in the main login window.
* To avoid any data loss backups can be taken.
* While typing the password, passwords are hidden.
  1. **Security Requirements**

This mobile application is provided with authentication without which no user can pass. So only the legitimate users are allowed to use the application. If the legitimate user’s share the authentication information, then the system is open to outsiders.

* 1. **Software Quality Attributes**

Reliability: Good validations of user inputs will be done to avoid incorrect storage of records. Maintainability: During the maintenance stage, SRS document can be referred for any validations.

Portability: This system can be easily viewed in any browser.

Flexibility: The system keeps on updating the data according to the transactions that takes place. Timeless: The system carries out all the operations with consumption of very less time.

Security: Security of the system is maintained by giving access to only authenticated user id and password.

# 6. Other Requirements

**Appendix A: Glossary**

DB : Data Base

ML : Machine Learning

**Appendix B: Analysis Models**

**ER DIAGRAM**

