Software Requirements Specification

for

NEWBIEE

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Revision History

Name	Date	Reason For Changes	Version
-	-	-	-

1. Introduction

1.1 Purpose

With newly admitted students coming to the college for the first time, the usual expectation is participation in social events and events based on personal interest. Helping these freshers as well as the respective years seniors by helping them connect with each other based on their hobbies and interests is our basic motivation.

1.2 Intended Audience and Reading Suggestions

The document is intended for :

- *Developers who can review a project's capabilities and easily understand where their efforts should be targeted to improve or add more features.*
- *Project Managers who by availing this document could understand the aim of this application and its functionalities providing a more structured approach and a road map to achieve our goal.*
- *Project testers can avail this document as a base for their testing strategy to test the functionalities of this application. This could help in making the application more robust.*
- *Marketing staff who by understanding this document could use their marketing skills to draw in a large number of customers.*
- *End users of this application who wish to learn more about this system and its functionalities. This document need not be read sequentially; users are encouraged to jump to any section they find relevant*

1.3 Product Scope

The scope of the project is clear to give a simple and attractive application to connect various college students to develop interpersonal relationships. In this application we are able to save a database of all real-life entities present in the real world. In this we can join one or more groups and attend their various events. Also, a new group can be created in the given categories by the user which will be functional after the superuser has granted the permission to do so.

1.4 References

1. *www.meetup.com*
2. *https://www.tutorialspoint.com/mysql/*
3. *https://www.w3schools.com/nodejs/*
4. *https://www.npmjs.com/package/ejs*
5. *https://www.geeksforgeeks.org/use-ejs-as-template-engine-in-node-js/*
6. *https://codeforgeek.com/nodejs-mysql-tutorial/*

2. Overall Description

2.1 Product Perspective

NEWBIEE aims to connect the freshers joining a college with seniors and thus promote a healthy relationship between the seniors and the juniors. It also aims to promote the personal development of individuals through the means of promoting various events. NEWBIEE also connects students of different colleges with similar interests.

2.2 Product Functions

Need of connecting college students:

- *Promoting a healthy relationship between students of similar colleges.*
- *Senior – Junior interaction promotes growth.*
- *Personal development by attending various events.*

2.3 User Tables and Characteristics

- *User* - Contains the all user details.
- *Category* - The various categories
- *Groups* - Stores details of various student groups
- *Events* - Stores details of various events
- *Notification* - Used to give notification to the users
- *Forum* - Stores the details of the user forum
- *User Event* - The events enrolled by the user
- *User Group* - The groups that the user is a part of

2.4 Operating Environment

The software runs in the form of a web application. It must be hosted on a central server which may be present inside or outside the institute. The server must have a minimum 4GB capacity of ram along with a 2.8GHz quad core processor. It must contain MySQL 8.0+ to host the database which is an integral component of the software It can connect any number of devices depending on the internet bandwidth. The webapp requires the use of the latest web browser such as Mozilla FireFox, Google Chrome and Edge Browser.

2.5 Design and Implementation Constraints

The project can only be developed on Netbeans or an equivalent IDE. It requires the use of JDK 11 to host the server in order to debug. The database must be hosted on MySQL 8 or MariaDB equivalent. It requires Mozilla Firefox or a Chromium based browser.

2.6 User Documentation

No user documentation has been provided with this version of the software.

2.7 Assumptions and Dependencies

The project assumes that the data models will not be changed during any part of developments. Any changes of this manner will lead to complete failure of the project.

3. External Interface Requirements

3.1 User Interfaces

The interface of the software will provide options for relatively easy data input processes text-boxes that will be properly labeled. It will also have a user-friendly view of the whole system with simple and easy undertaking of action-driven processes as command buttons are functionally labeled. With all these, target users of this software will relatively find it not difficult to use it.

- *Front-end : HTML5 ,CSS3 , Bootstrap4 , EJS*
- *Back-end : NODE JS*
- *Database : MYSQL*

3.2 Hardware Interfaces

Since neither the mobile application nor the web portal have any designated hardware, it does not have any direct hardware interfaces. The browser manages application on desktop and in mobile phone and the connection to the database server is managed by the underlying operating system on the mobile phone and the web server.This application works on Android, IOS mobile devices and tablets. No other hardware is required.

3.3 Software Interfaces

Operating system	*We have chosen Windows operating system for its best support and user-friendliness.*
Database	*To save the events records, user records we have chosen the MYSQL database.*
NODE JS	*To implement the project we have chosen the NODE JS framework for its more interactive support.*

3.4 Communications Interfaces

Communication interface is not needed as this software is a stand-alone system.

4. System Features

4.1 Enrolling for various events

4.1.1 Description and Priority

The user wants to enroll for a particular event. This is one of the most important events and has higher priority.

4.1.2 Stimulus/Response Sequences

- *The user has to register for the event.*
- *His user id is added to the database of all the users attending the event.*

4.1.3 Functional Requirements

- *The organiser will have to sign in into his/her account and click on organise a new event.*

- *Then the user will have to fill the form providing all the details of the event. Invalid inputs will be handled here with form validations.*
- *The user can post or comment on the groups to which they are interested in.New groups can be created by the organiser who wants to organise events.*

4.2 Getting permission from the Admin

4.2.1 Description and Priority

Once the organiser gets the permission for organising an event,the event will be seen on the events calendar.

4.2.2 Stimulus/Response Sequences

- *Before giving the permission,the admin has two options that are either to accept or reject the request of the event.*
- *The organiser will get the status of his/her permission for which they have requested to the admin.*

4.2.3 Functional Requirements

- *Once the event gets approved by the admin, the organiser can get permission for the events to be held.*
- *After application gets approved then the event will be seen on the events page from which students may join the groups or events.*

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- *The software application should be able to handle multiple requests efficiently. Many users may submit applications for organising new events simultaneously.*
- *The senior - junior interaction should work well even under heavy load.*

5.2 Safety Requirements

- *A duplicate copy of the data about the users must be maintained.*
- *This will help to avoid data loss.*

5.3 Security Requirements

- *Ensure that only specific members are given access to the database.*
- *There will be a separate login for the users and the admin.*

- *The login id and password must not be shared with others.*

5.4 Software Quality Attributes

- *The UI is responsive and can be used on any device such as mobiles, tablets, laptops, etc.*
- *Proper functions are used so that the code can be reused by the developers.*

Appendix A: Analysis Models

ER Diagram