Software Requirement Specification for TAC Portal

Name	DIVYA PRASANNA K
Roll no	7376221EI112
Project ID	15
Problem Statement	12 WEEKS NPTEL COURSE EXCEMPTION

COMPONENTS:

FRONT END	Angular(Js Framework)
BACK END	Express.js(Web framework for Node.js) Node.js(Javascript runtime environment)
DATABASE	MongoDB(NOSQL Database)
API	REST Ful API / GraphQL APIs

1. Introduction

Purpose:

The purpose is to provide clear and concise information regarding the NPTEL course exemption criteria. It aims to guide students through the eligibility requirements, ensuring they understand the steps involved in applying for course exemption based on their completed NPTEL courses.

Scope of Project:

1. Enables students to gain recognition for their online learning efforts, enhancing their educational journey.

2. Allows for streamlined academic progression by granting exemptions for relevant NPTEL courses.

3. Incentivizes student engagement with NPTEL courses, promoting a culture of self-directed learning.

4. Ensures alignment between NPTEL courses and the institution's curriculum, maintaining academic integrity.

5. Accommodates diverse learning paths by recognizing the value of non-traditional education methods.

2. System Overview:

2.1. Users:

1. Students:

- Students can check whether they are eligible for course excemption.
- If not they can check their reasons .
- If not they can eligible for reward points.

2. Admins:

- Can check whether the student is eligible for course excemption or not.
- They can see the students course details and departments subject details.
- They can also see the reason for not eligible.
- They can provide reward points if not eligible.

STUDENT AND ADMINS WORKFLOW:
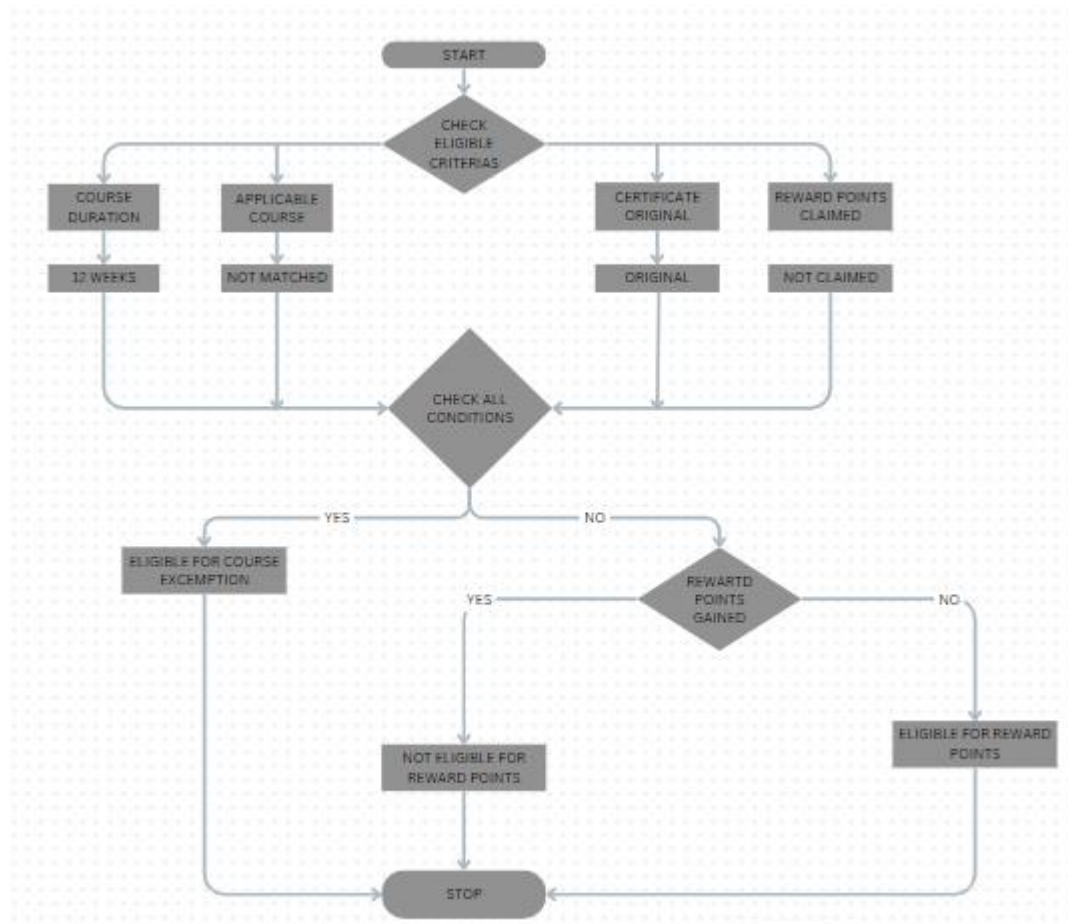
3. Non-Functional Requirements:

- **Performance**: System should handle a large number of concurrent users (students and admins). Ensure fast response times for check-in/check-out and logging activities.

- **Security**: Encrypt sensitive data such as passwords and personal information. Implement role-based access control to ensure only authorized users can access certain features.

- **Usability**: Design intuitive and easy-to-use interfaces for both students and admins.

- **Reliability**: Ensure high system availability and reliability. Regular data backups to prevent data loss.

- **Scalability**: The system should be designed to accommodate an increasing number of users and data volume over time, and it should be scalable to support additional features and functionalities as per future requirements.