

SELF INTENSIVE TRAINING ON FULL STACK DEVELOPMENT

Stage -1

(Planning And Requirement Gathering)

Name	SYED MOHAMED SHAIBAN F
Roll No	7376221CS331
Project ID	16
Module Name	Internship Course Exemption

TECHNICAL COMPONENTS:

COMPONENT	SPRING BOOT STACK(JAVA)
Backend	SpringBoot(Java), Spring Security
Frontend	React.js,Bootstrap
Database	MySQL
API	RESTful API

1. Introduction

1.1. Purpose:

This system aims to streamline the internship exemption application process, allowing students to substitute an elective course with an internship conducted in a company for 6 to 7 weeks. The system records detailed information from day one of the internship, automates approval workflows, and ensures consistent and fair evaluation. This system reduces manual administrative tasks and integrates the evaluation of internship performance with the overall academic performance.

1.2. Scope of Project:

- This software system will serve as a portal for the Campus (BIT), enabling students to submit their internship forms and receive results (approved or rejected). It will provide a comprehensive analytical dashboard for administrators to oversee internships, allowing faculty to review, approve, or reject applications.
- Once an internship is approved, students can schedule their internship accordingly. The system records all details from the initial submission and automates the approval workflow to reduce manual administrative tasks.
 Upon completion of the internship, students will undergo an interview by the faculty, and the resulting marks will be added to their CGPA as a substitute for the elective course.
- The student can claim reward points for the internship if they didn't complete the internship for at least 6 weeks. This system ensures efficiency, transparency, and fairness in managing internship exemptions, benefiting both students and faculty at BIT.

2.System Overview

2.1. Users:

- ❖ Students: Students applying for Internship Course Exemption can submit detailed applications including date, proofs, work location, domain, project details, abstract, a detailed explanation of the internship, and a list of main components or modules required.
- ❖ Admins: Administrators will review the submitted details, approve or reject applications with remarks, manage appointments, schedule meetings, and access comprehensive analytical dashboards for overseeing projects.

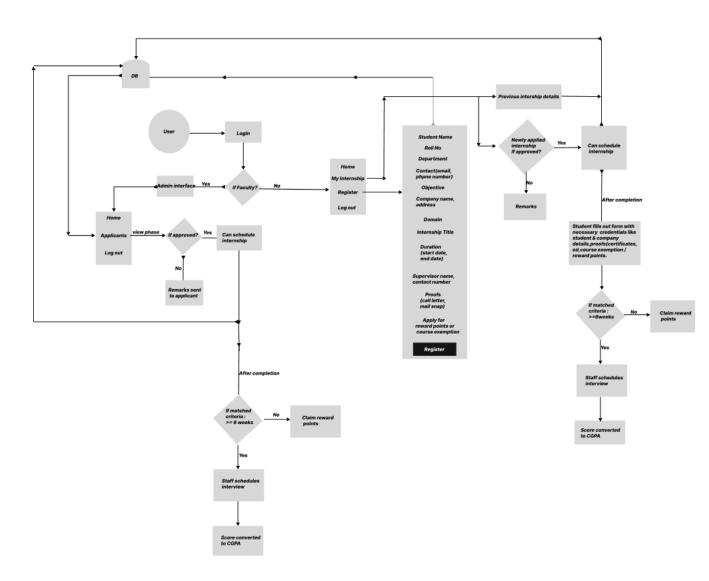
2.2. Features:

- → Login and Registration: Students can log in with Google Sign-in.
- → Application Submission: Students can input relevant details regarding their internship for course exemption. This includes internship details, colleague details, project title, abstract, detailed explanation of the internship, objectives, and domain. Upon fulfillment, the submission is sent to the admin interface for review

and further handling.

- → Application Status: Students can track the application progress and view the historical logs.
- → Admin Access: Admins can view all submitted internship applications categorized as either software or hardware, view application details, and approve or reject the application with suitable remarks.
- → Admin's Analytical Dashboard: Admins can view the number of applications by category, appointments requested, and see the latest log of applications.

User and admin flowchart:



3. System Requirements Specification:

3.1 Functional Requirements:

• User Management:

- Google Sign-in for simplified login.
- Admins have access control with an analytical dashboard and dedicated features.

• Registration Application:

- o Students can submit applications with mandatory fields.
- o Application form contains:

1. Student Information:

- 1.1 Full Name
- 1.2 Student ID
- **1.3** Department
- **1.4** Contact Information (Email, Phone Number)
- **1.5** Objective

2.Proof of Internship:

- **2.1** Company Name and Address
- 2.2 Internship Title
- 2.3 Internship Category
- 2.4 Internship Domain
- **2.5** Objective
- 2.6 Supervisor's Name and Contact Information
- **2.7** Proof Documents(on-duty,call letter,mail screenshot)

Application Status:

- Students can see the ongoing status of their application in the "My Internship" Page, and also students can see the internship title, details and components list.
- ❖ If the application is rejected ,then the remarks are shown.

Admin Dashboard:

- Admins can view the list of all submitted Internship applications.
- Applications can be filtered by category (software, hardware).
- Admins can view details of each application.
- Admins can approve or reject applications with suitable remarks.

3.2. Non-Functional Requirements:

- **Performance:** The framework should answer client activities in no less than 2 seconds to guarantee effective ease of use and should deal with a simultaneous client heap of something like 100 clients without huge execution corruption.
- **Security:** User data must be encrypted during transmission and storage, and access to sensitive functionalities should be restricted to authorized admin users through secure authentication mechanisms.
- **Usability:** The user interface should be intuitive and user-friendly, with clear and concise error messages provided to guide users in case of input errors or system failures.
- **Reliability:** The system should be available 24/7 with minimal downtime and should have a backup and recovery mechanism in place to prevent data loss in case of system failures or crashes.
- **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.