INFOHIVE: A DEPARTMENTAL STUDENT INFORMATION BOARD

SOFTWARE REQUIREMENTS SPECIFICATION

SEPTEMBER, 2025

1. Introduction

This document outlines the requirements for InfoHive, a web-based platform designed to streamline communication within university departments.

1.1 Purpose

The primary purpose of InfoHive is to provide a centralized and accessible platform for disseminating important information to students. This system aims to replace traditional notice boards and fragmented communication channels with a unified digital solution, ensuring that students have timely access to departmental announcements, schedules, and events. By enhancing communication, InfoHive seeks to improve student engagement and overall departmental efficiency.

1.2 Scope

This project, undertaken for the CIT306 Web Design and Programming course, will deliver a fully functional departmental student information board website. The platform will enable administrators to post and update announcements, manage an event calendar, and archive past information.[3] Students will be able to view and search for announcements, access timetables and results, and stay informed about departmental events. The system's boundaries are defined by these core functionalities, excluding features such as student registration, course enrollment, or direct messaging between users.

1.3 Definitions, Acronyms, and Abbreviations

- Admin: A user with privileges to add, edit, and delete content on the information board.
- SRS: Software Requirements Specification.
- UI/UX: User Interface/User Experience.
- User: Any individual interacting with the system, including students and administrators.

1.4 References

- CIT306 Semester Project Brief, Federal University of Technology, Owerri.
- "Software Requirements Specification (SRS) Format." GeeksforGeeks, 2023.[4]
- IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements

 Specifications

1.5 Overview

This SRS document provides a comprehensive description of the InfoHive system. It begins with an overall description of the product, its functions, user characteristics, and constraints. Subsequent sections will detail the specific functional and non-functional requirements, system models including use case and ER diagrams, and the proposed technology stack.

2. Overall Description

2.1 Product Perspective

InfoHive is a self-contained web application that will be accessible through standard web browsers on desktop and mobile devices. It is intended to operate independently of other university systems but can be linked from the main departmental website for easy access. Future enhancements may include integration with university-wide authentication systems.2.2

Product Functions

The core functions of the InfoHive platform include:

- 1. **Posting and Updating Announcements:** Administrators can create, modify, and remove departmental announcements.
- 2. Event Calendar: An interactive calendar will display upcoming departmental events.
- 3. **Search and Filter:** Users can search for specific information and filter announcements based on categories or dates.
- 4. Secure Admin Login: A secure login system for administrators to manage content.
- 5. **Archive:** Past announcements and events will be archived and accessible for reference.
- 6. **Display of Timetables and Results:** The platform will display departmental timetables and, if applicable, student results.

2.3 User Characteristics

The expected users of the InfoHive system fall into two main categories:

- 1. **Students:** The primary users of the system. They are tech-savvy and will access the platform using a variety of devices, including laptops, tablets, and smartphones. Their main goal is to quickly find and view departmental information.
- 2. **Administrators:** Departmental staff responsible for managing and updating the content on the information board. They will have basic computer skills and will require a user-friendly interface to perform their tasks efficiently.

2.4 Constraints

- **Software:** The system will be developed using modern web technologies. The front-end will be built with HTML, CSS, and JavaScript, and the back-end will be powered by a Node.js server. The platform must be compatible with the latest versions of major web browsers, including Chrome and Firefox.
- **Hardware:** As a web-based application, InfoHive will not have specific hardware requirements for end-users, beyond a device with a web browser and an internet connection.
- **Regulatory:** The system must comply with university policies regarding data privacy and information dissemination.

2.5 Assumptions and Dependencies

- 1. It is assumed that the university department will provide a hosting environment for the web application.
- 2. The content (announcements, events, event Calendar) will be provided and kept up-to-date by the departmental administrators.
- 3. The project will be completed within the semester timeline, with the defense scheduled two weeks before the final examinations.