



Green University of Bangladesh

*Department of Computer Science and Engineering (CSE)
Semester: (Spring, Year: 2025), B.Sc. in CSE (Day)*

High & Low-Level Design

*Course Title: Integrated Design Project II
Course Code: CSE 406
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<u>Lab Report Status</u>	
Marks:	Signature:
Comments:	Date:

1 Introduction

The High-Level Design (HLD) of the Professional and Educational Hub System provides an architectural overview of the system. It defines the key functional modules and their interactions with the centralized Edu Hub System. This system integrates various components to facilitate academic growth, career development, and community involvement.

The low-level design (LLD) of the Professional and Educational Hub System provides a detailed structural breakdown of the system's functional components. It defines various modules, their interactions, and how they contribute to achieving the overall system objectives. The system is divided into educational and professional sections, allowing users to access academic resources, career guidance, job matching, and community features.

2 Objective

- To design high level architecture for the given project.
- To define a comprehensive solution based on principles, concepts, and properties logically related to and consistent with each other of a system.
- To design low level architecture for the given project
- To understand the motive of high level design for a project.
- To describe the functionalities performed by the system.

3 Overview

The Professional and Educational Hub System is a multi-functional platform designed to support students and professionals by integrating academic resources, skill development tools, career-building features, and community engagement. The system bridges the gap between education and employment by providing AI-driven CV matching, job search assistance, course-based learning materials, and personal growth analysis.

The system follows a modular architecture, ensuring scalability, efficiency, and ease of use. The High-Level Design (HLD) presents the overall structure, detailing key functional modules such as the Notice and Announcement Panel, Skill Development Section, Course-Based Resource Library, CV Building and Review, and Community Interaction. Meanwhile, the Low-Level Design (LLD) provides an in-depth view of how these modules function internally, including authentication mechanisms, AI-based CV analysis, and job recommendation algorithms.

By combining educational and professional resources in one centralized system, the Edu Hub System enables users to enhance their learning, build their careers, and stay updated with industry trends. This system ensures efficient data management, real-time updates, and AI-driven insights, making it a powerful tool for students, graduates, and job seekers.

4 Implementation

4.1 Diagram of the high level design

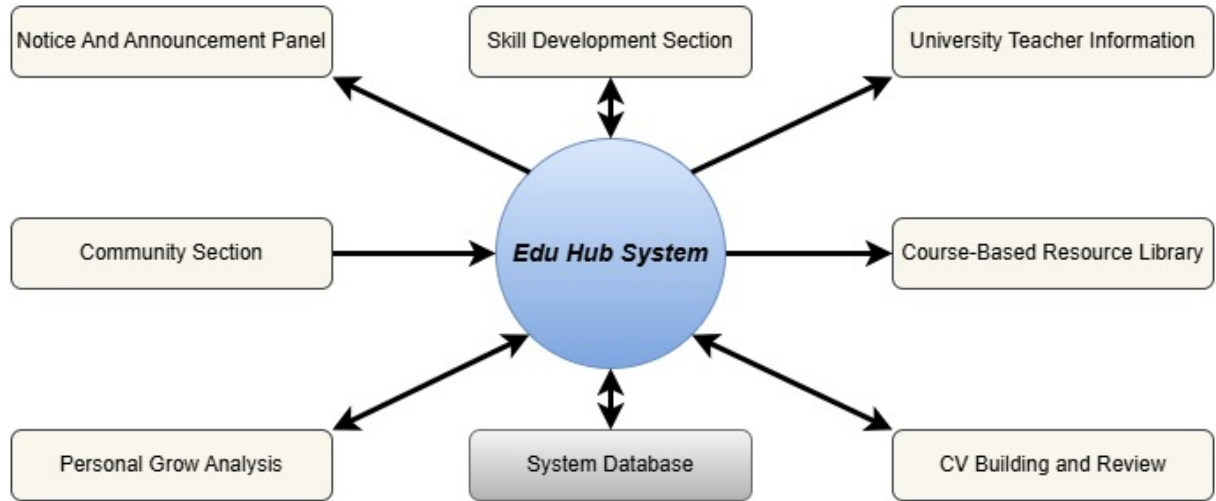


Figure 1: High-Level Design

The key modules of the system include:

- **Notice and Announcement Panel** – Provides *real-time updates* on university events, job opportunities, and important announcements.
- **Skill Development Section** – Offers *learning resources and career growth tools* for users to enhance their skills.
- **University Teacher Information** – Enables students to access *faculty details, contact information, and class schedules*.
- **Course-Based Resource Library** – Contains *books, handouts, and video tutorials* to support academic learning.
- **CV Building and Review System** – Assists users in *creating and refining their resumes* with AI-driven suggestions.
- **Community Section** – Allows *public reviews, feedback sharing, and networking* AMING users.
- **Personal Growth Analysis** – Helps users evaluate their *academic performance and co-curricular activities*.
- **System Database** – Manages *user data, job listings, course materials, and system logs* for efficient data handling.

4.2 Diagram of the low level design

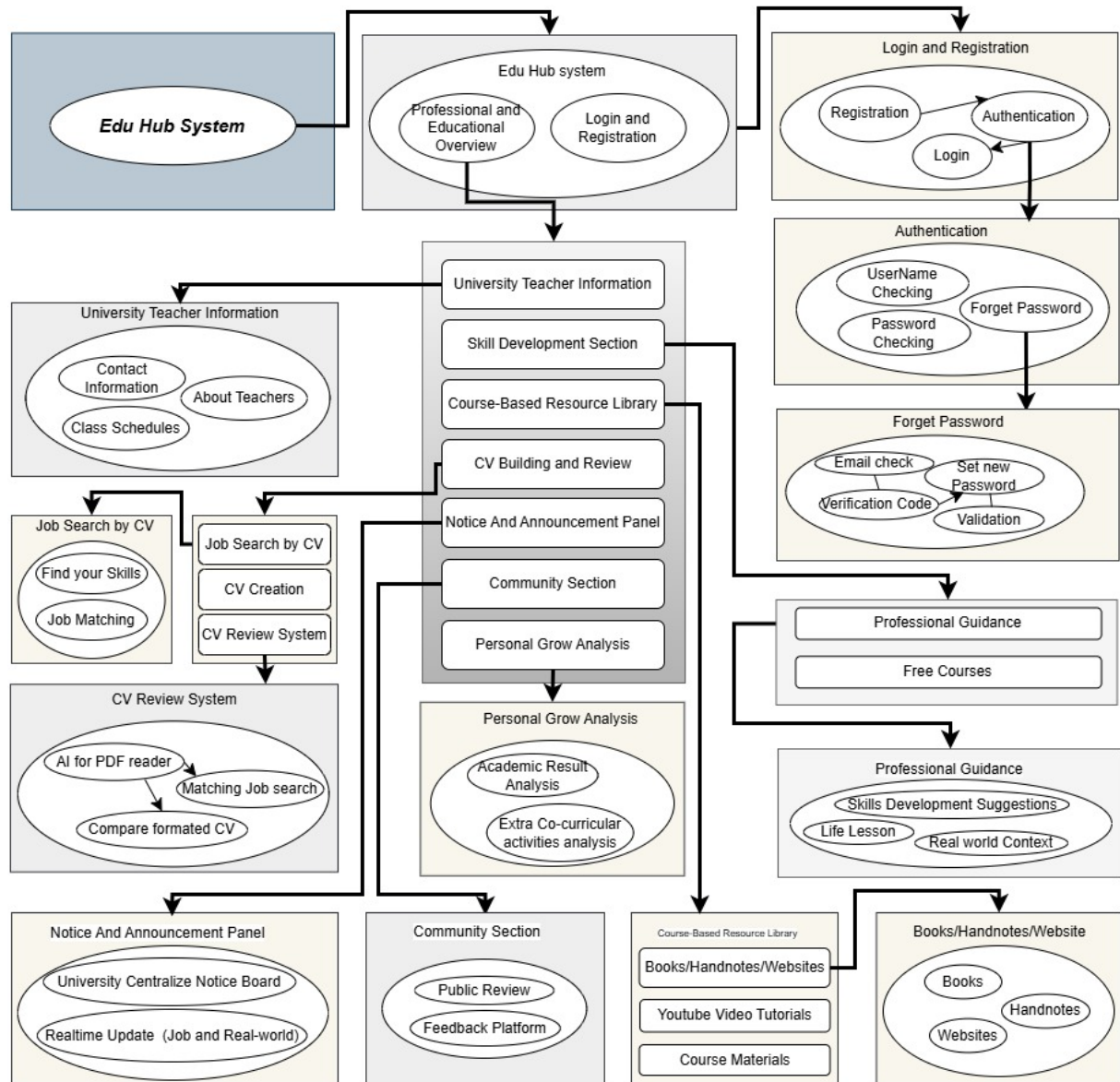


Figure 2: Low-Level Design

The Edu Hub System (Professional and Educational Hub) consists of multiple interconnected modules that support student career growth and academic development. The Login and Registration Module manages user authentication, while various sub-modules handle specific functionalities like CV building, job search, personal growth analysis, and community interactions.

5 Conclusion

The Professional and Educational Hub System is designed to serve as a comprehensive platform that integrates academic and professional development in a unified environment. Through its modular structure, the system provides educational resources, career-building tools, personal growth analysis, and community engagement features.

The High-Level Design (HLD) outlines the system's core architecture, ensuring seamless interaction between modules such as the Notice and Announcement Panel, Skill Development Section, Course-Based Resource Library, CV Building, and Review System. The centralized database efficiently manages and stores all system data, enhancing performance and accessibility.

The Low-Level Design (LLD) provides a detailed breakdown of each functional module, emphasizing their operational flow and internal processes. Key components, such as AI-powered CV matching, real-time job updates, authentication mechanisms, and interactive community features, are structured to deliver a user-friendly and efficient experience.

Overall, this system offers a scalable and intelligent solution for students and professionals to enhance their learning, develop skills, and secure job opportunities. With AI-driven insights, automated processes, and interactive learning tools, the Edu Hub System aims to bridge the gap between education and employment, fostering career readiness and academic excellence in a single platform.