InternHub

Internship & Scholarship Tracker for Diploma Students

Main Project Report

Submitted in partial fulfillment of the requirements for the award of the degree of

Diploma in Computer Science / Information Technology

Submitted by

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Declaration

I hereby declare that this project titled **"InternHub: Internship & Scholarship Tracker for Diploma Students"** is my original work and has not been submitted previously for any degree or diploma.

Signature: **Date:**

Abstract

InternHub is a web-based platform designed to help diploma students discover, track, and apply for internships and scholarships efficiently. The system integrates artificial intelligence techniques to recommend relevant opportunities based on student profiles such as branch, skills, and academic year.

To ensure up-to-date information, InternHub automatically collects internship and scholarship details using web scraping from publicly available sources. The scraped data is filtered to include only diploma-eligible opportunities. The platform reduces manual searching effort and improves career awareness among diploma students.

Contents

Chapter 1

Introduction

Diploma students often face challenges in finding suitable internships and scholarships due to scattered and unorganized information. InternHub provides a centralized platform that automatically gathers opportunities and intelligently recommends them based on individual student profiles.

Chapter 2

Objectives

- Provide a centralized portal for diploma internships and scholarships
- Automatically collect opportunities using web scraping
- Recommend relevant opportunities using AI
- Reduce manual searching effort
- Improve career accessibility for diploma students

Chapter 3

System Architecture

The InternHub system consists of the following components:

- Frontend for user interaction
- Backend for business logic
- Database for data storage
- AI Recommendation Engine
- Web Scraping Module

Chapter 4

How the System Works

1. Student registers and logs in
2. Profile details are stored in the database
3. Web scraping module collects opportunities
4. Diploma-eligible opportunities are filtered
5. AI engine matches opportunities with profile
6. Recommendations are displayed on dashboard

Chapter 5

Modules and Page-wise Workflow

5.1 Authentication Module

Handles user registration, login, and logout with role-based access.

5.2 User Module

Allows diploma students to manage profiles, view recommendations, and apply for opportunities.

5.3 Admin Module

Allows administrators to manage users and opportunities.

Chapter 6

AI Recommendation System

6.1 Input Parameters

- Qualification (Diploma)
- Branch
- Skills
- Academic Year

6.2 Matching Process

- Filter diploma-eligible opportunities
- Match skills and branch
- Rank opportunities based on relevance

6.3 Output

Top-ranked internships and scholarships are displayed as AI recommendations.

Chapter 7

Web Scraping Module

7.1 Purpose

Automatically collect diploma-specific internship and scholarship data.

7.2 Workflow

1. Access public websites
2. Extract opportunity details
3. Filter diploma eligibility
4. Store valid data in database

Chapter 8

System Sequence Representation (SSR)

8.1 User Login

User submits credentials, system validates, and redirects based on role.

8.2 AI Recommendation Flow

Profile data and scraped opportunities are processed to generate recommendations.

8.3 Admin Management

Admin performs CRUD operations on users and opportunities.

Chapter 9

System Requirements

9.1 Hardware Requirements

- Processor: Intel i3 or higher
- RAM: Minimum 4 GB
- Storage: 20 GB free disk space
- Internet connection

9.2 Software Requirements

- Operating System: Windows / Linux / macOS
- Programming Language: Python 3
- Frontend: HTML, CSS, Bootstrap
- Backend: Flask
- Database: MongoDB
- Web Scraping Tool: BeautifulSoup
- Browser: Chrome / Firefox

Chapter 10

Advantages

- Diploma-focused recommendations
- Automatic data updates
- Easy to use interface
- Reduced manual effort

Chapter 11

Future Enhancements

- Resume upload and reuse
- Notification system
- Advanced NLP-based AI
- Mobile application

Chapter 12

Conclusion

InternHub provides an intelligent and automated solution for diploma students to discover internships and scholarships. By integrating AI recommendations and web scraping, the system ensures relevant and up-to-date career opportunities.

Bibliography

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