



BANNARI AMMAN INSTITUTE OF TECHNOLOGY

An Autonomous Institution Affiliated to Anna University - Chennai, Accredited by NAAC with A+ Grade
Sathyamangalam - 638401 Erode District, Tamil Nadu, India

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CampusConnect

Software Requirements Specification

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1.Introduction

a. Project Overview

To create a centralized platform where students and alumni of BITSathy can interact, connect, and facilitate recruitment opportunities, thereby streamlining the placement drive process.

b. Purpose

- i. Provide a dedicated space for students and alumni to network and engage with each other.
- ii. Enable alumni to identify and recruit suitable candidates from their alma mater.
- iii. Simplify the on-campus placement drive process, making it more efficient and effective.

c. Scope

- i. Students and alumni will have access to a user-friendly, centralized platform to connect, share experiences, and explore opportunities.
- ii. Real-time information about on-campus placement drives will be available to users, ensuring they stay informed and up-to-date.
- iii. Students and alumni can apply for jobs and internships through the platform, facilitating a seamless recruitment process.

d. Key Definitions

- i. **Student** A current enrolled student pursuing a BTech, MTech, MBA, BE, or ME course at BITSathy.
- ii. **Alumni** An individual holding a degree certificate from BITSathy.
- iii. **T&P Team** Collective term representing faculties from Training and Placement
- iv. **Admin** Person responsible for managing and maintaining the CampusConnect Platform

2. Description

a. Product Perspective

The platform is a core implementation of our institution, designed to play a vital role in every student's lives, it connects students with alumni, providing valuable insights into industry trends and requirements.

b. Product Functions

i. Job Management

1. Job Posting
2. Job searching
3. Job applying

ii. On-Campus Drives

1. View on-campus drive information
2. Apply for on-campus drives
3. Update drive details
4. Track selection process

iii. Networking

1. Connect with others (follow/unfollow)
2. Write and share posts

iv. User Management

1. Profile management
2. Send, accept and view connections
3. Search, apply and view jobs
4. Register for placement drives

c. User Characteristics

i. Student

1. Manage their profiles (CRUD of experiences, projects, skills, endorsements, profile section)
2. Search and apply jobs
3. Register placement drives

- ii. Alumni
 - 1. Same functionality as student, except they cannot register for drives
 - 2. Post job opportunities
- iii. T&P Team
 - 1. Manage placement drives and drive levels
 - 2. Analyze placement data and generate reports
- iv. Admin
 - 1. Manage users
 - 2. Manage user roles
 - 3. Moderate uploaded posts

3.Functional Requirements

a. User Management

- i. User Registration
 - ❖ The system shall allow students and alumni to register with BITSathy credentials.
- ii. User Profile Management
 - ❖ The system shall enable users to create, update and delete parts of their profiles, including experiences, projects, skills, endorsements.
- iii. Connection Management
 - ❖ The system shall allow users to send, accept and view connections with other users.

b. Job Management

- i. Job Posting
 - ❖ The system shall enable alumni and T&P Team to post job opportunities.

- ii. Job Searching
 - ❖ The system shall allow users to search for jobs by keyword, location, industry and other relevant criteria.
- iii. Job Application
 - ❖ The system shall enable users to apply for jobs through the platform.

c. On-Campus Drives

- i. On-Campus Drive Information
 - ❖ The system shall provide real-time information about on-campus placement drives as the T&P team updates.
- ii. Apply for On-Campus Drives
 - ❖ The system shall provide an interface for the candidates to apply for drives.
- iii. Update Drive Details
 - ❖ The system shall allow the T&P Team to update drive details.
- iv. Track Selection Process
 - ❖ The system shall enable students to track the selection process for on-campus drives.

d. Networking

- i. Connect with others
 - ❖ The system shall allow users to connect with others (follow/ unfollow/ connect).
- ii. Write and Share Posts
 - ❖ The system shall enable users to write and share posts.
- iii. Messaging
 - ❖ Send text messages to connections.

e. T&P Team

i. Manage Placement Drives

- ❖ The system shall enable the T&P Team to manage placement drives and drive levels.

ii. Analyze Placement Data

- ❖ The system shall enable the T&P Team to analyze placement data and generate reports.

f. Admin

i. Manage Users

- ❖ The system shall enable the Admin to manage users and user roles.

ii. Moderate Uploaded Posts

- ❖ The system shall enable the Admin to delete uploaded posts.

4. Non Functional Requirements

a. Performance

- The system shall respond to user requests within 2 seconds on average.
- The system shall handle a minimum of 500 concurrent users without significant performance degradation.
- The job search feature shall return results within 1 seconds for a database of up to 10,000 job postings.

b. Security

- The system shall use HTTPS protocol to ensure secure data transmission between the client and server.
- The system shall implement input validation and sanitization to prevent SQL injection attacks.

- iii. The system shall have a robust authentication mechanism to prevent unauthorized access.

c. Usability

- i. The system shall have an intuitive user interface that allows users to easily navigate and find features.
- ii. The system shall provide clear and concise error messages to users in case of errors or invalid inputs.
- iii. The system shall have automatic backup and recovery mechanisms in place to ensure data integrity in case of failures.

d. Maintainability

- i. The system shall have a modular architecture that allows for easy maintenance and updates of individual components.
- ii. The system shall have clear and concise documentation for developers, including API documentation and code comments.
- iii. The system shall have a continuous integration and continuous deployment (CI/CD) pipeline to automate testing, building and deployment.

e. Scalability

- i. The system shall be designed to scale horizontally by adding more servers as the user base grows.
- ii. The system shall use load balancing techniques to distribute traffic across multiple servers.

5. Interface Requirements

a. User Interface

- i. Web based interface
 - ❖ A user friendly, responsive web interface for users to interact with the platform.

- ii. Accessibility

- ❖ The interface should be accessible on various devices, including desktops, laptops, tablets and mobile phones.

- b. Hardware Interface

- i. Server

- ❖ For testing purposes the platform will be deployed on an AWS EC2 instance.

- ii. Database

- ❖ MySQL, a relational database, will be used to store platform data.

- c. Software Interface

- i. Programming languages

- 1. Javascript
 - 2. PHP

- ii. Frameworks

- 1. Laravel
 - 2. ReactJS

- iii. Database Connectivity

- Laravel's builtin solutions will be implemented.

- iv. API Integration

- Platform may integrate with the resume generator API to let user's generate resumes on the go.

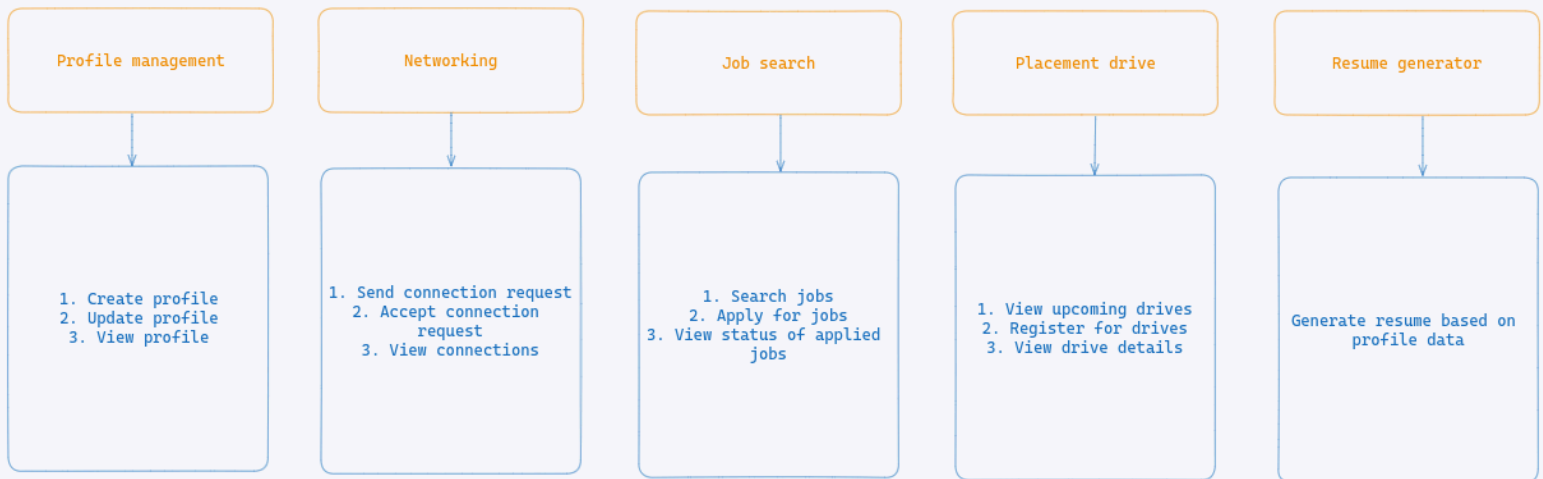
6.Assumptions

- a. The institution has an existing database of alumni and student history (email Id).
- b. The institution is willing to provide access to this database for the development and integration of the platform.

- c. The majority of users will have a basic understanding of social media platforms and online networking.
- d. The platform will be accessed using a stable internet connection.
- e. The institution will provide necessary resources and support for promoting the platform to its alumni and students.
- f. The platform will not be used commercially

7. Modules

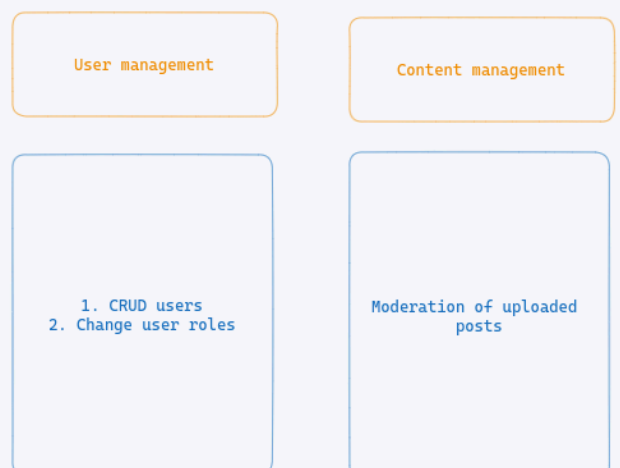
Student




T&P Team



Admin



8.Road Map

No	Stage	Status	Related links	Review Date
1	Planning and Requirement Gathering	Ready for Revi... ▾	 BITLinkedIn	May 2, 20...
2	UI/UX Design and Prototyping	In progress ▾	CC-Figma	
3	Database Design and Implementation	Not started ▾		
4	Backend Development	Not started ▾		
5	Integration and Testing	Not started ▾		
6	Deployment	Not started ▾		

9.Notes

- a. Could include feasibility analysis in the SRS Apr 26, 2024