



# 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. NextJS

- 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.

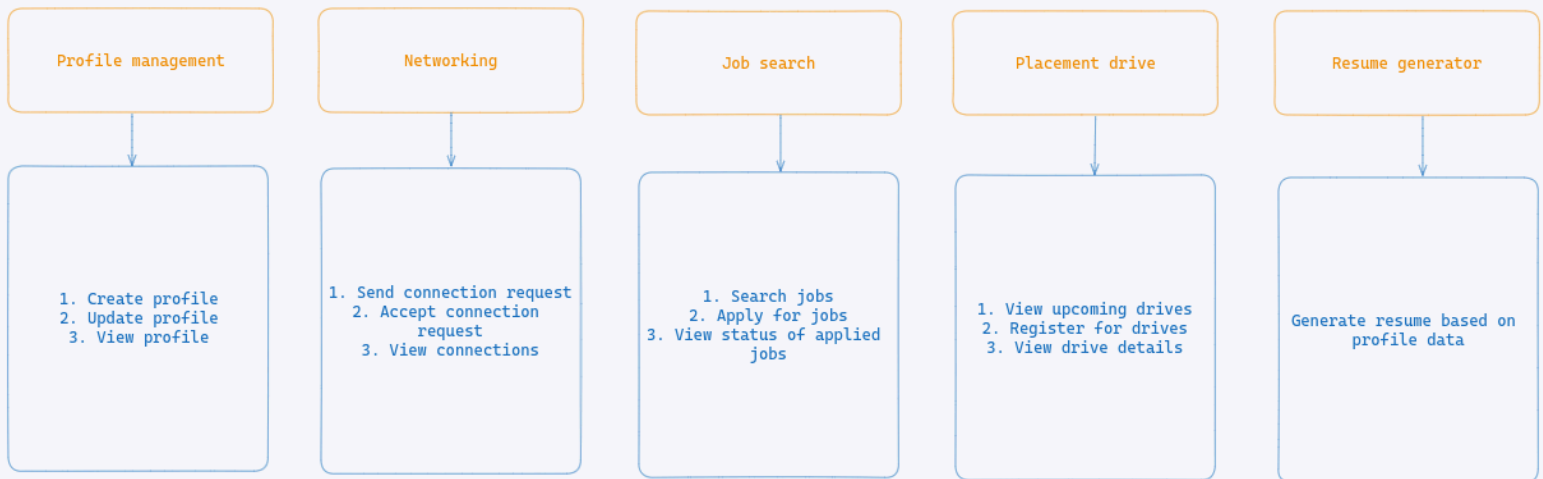
## 6.Assumptions

- 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

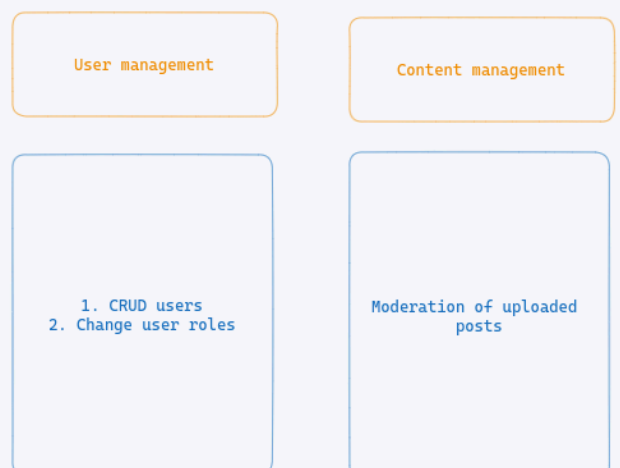
### Student




### 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 ▾	<a href="#">CC-Figma</a>	
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