

# Team Project

## Analysis report

“Student Assist app”

Course ID: CS487 Software Engineering I

Professor: Dennis Hood

Team Name: Team G8

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## Section 1

### I. Proposed application of "student assist app" App

The "student assist app" will be a handy tool for students to manage their academic and extracurricular activities. The app will be available on all platforms and students can log in to the app with their college username and password.

The app will be providing students with the below service:

- Collaboration tool: Through the 'collaboration tool option' students can join various communities like the 'Computer science community', 'sports community', etc where students with the same interests can find, join, collaborate and communicate in that particular community.  
Options we will provide in this tool: CS community, Law school community, Sports community, SWE (School/Assignment Section, On Campus Event Section, and General Chat Section)
- Job search: The tool will be integrated with job search platforms like linkedin and indeed. Students can then search various job opportunities, communicate with recruiters, etc through this tool.
- Roadmap to career: An improvement opportunity 'roadmap to career' will be added where students will have a platform to learn various courses/platforms which they will be needing throughout their career. For e.g. integrating leetcode, coursera, etc. They will get ideas like - How To start learning through leetcode, which tool he can learn, what's the hot technology in the market, etc

## Section 2

### II. User Analysis

#### A. Alumni

1. Alumni may be motivated to use a job-finding app for a variety of reasons, including a desire to change careers, find a better-paying job, or gain new skills. They may also be looking to network and connect with other professionals in their field.
2. Alumni are likely to have different needs compared to other user groups, such as undergraduate students or recent graduates. They may be looking for higher-level positions with more responsibilities, or they may be seeking part-time or flexible work options. They may also be interested in connecting with alumni from their alma mater.
3. Alumni may have different behaviors and habits compared to other user groups, such as undergraduate students or recent graduates. They may be more likely to use professional networking sites, such as LinkedIn, and they may be more selective about the job opportunities they apply for.

#### B. Graduate Student

1. Graduate students may be motivated to use a job-finding app for a variety of reasons, including a desire to gain practical experience in their field, a need to support themselves financially, or a desire to start building their professional network.
2. Some reports say graduate students may have different behaviors and habits compared to other user groups, such as alumni or system administrators. They may be less likely to have professional networks, and they may be more focused on finding part-time or flexible job opportunities that allow them to balance their academic and professional goals.

3. Graduate students are likely to have specific needs when it comes to finding a job, such as access to job postings for entry-level positions in their desired field, access to job postings that are relevant to their skills and interests, and the ability to easily apply for jobs through the app.

## C. Advisor

1. Advisors are typically responsible for providing guidance and support to students on course selection, program requirements, and academic planning.
2. Advisors should have a thorough understanding of the university's programs, policies, and procedures, as well as the ability to effectively communicate and advise students.
3. The primary goal of an academic advisor is to help students succeed academically and progress toward their desired careers. They also work to foster a positive relationship with students and help them navigate any challenges or obstacles they may face.

## Section 3

### III. Requirements Spec

#### A. Functional Requirements:

1. Every event/collaboration tool update needs to have a notification associated with it. Student should be able to get notifications of upcoming events( events like club event, any guest lecture, career fairs)
2. A login page must be present where students can log in with IIT username and password.
3. Applications must have job search opportunities where students can connect with persons from different organizations i.e. integrating with platforms like linkedin.
4. The app should have Two factor authentication.
5. Collaboration : communities for different courses, assignment discussion, etc.
6. Assistant bot should be able to solve queries immediately.
7. Students should be able to book appointments with advisors if assistance bot fails to help them.
8. Students should be able to track his or her past history through a report and dashboard.
9. User should be able to update his or her information related to the profile.
  - Should be able to upload their resume/ cover letter
  - Should be able to upload their achievements
  - Should be able to update their education profile/ area of interest so that application will guide them communities or courses which will help to build his career.
10. User should be able to make his/her profile public or private (visible to particular groups or persons)

11. Application should have a search bar on its home page (also the user is able to search through voice.)
12. While searching, Application should show the keyboard on screen if the user is using an application on a cell phone or tab.
13. Students are able to track/schedule their activities.
14. Student should be able to post/share their thoughts :
  - student should be able to connect with other student personally through chat messages or calls
  - Share their stories related to their academics, should be able to share comments on another student's work, should be able to ask his or her doubts.
  - Should be able to reshare other students' posts.
15. Assignment and task tracking: This feature will help students keep track of their assignments, deadlines, and progress. They can create to-do lists, set reminders, and check off tasks as they are completed.
16. API's such as GoogleOauth and LinkedIn's API should be used to connect with those specified services.
17. Each update/post in the collaboration tool should have a proper section/database associated with it.
18. The user should be able to see below tabs:
  - I. Home :
    - A. Home page should display posts and overview of applications.
  - II. Notifications
    - A. Should display notification, reminders, suggestions for student
  - III. Assistance( Bot/ Advisor):
    - A. Student should be able to chat with bot and directly send email to advisor for their doubt
  - IV. My connections :

- A. Students should be able to connect with other current students, Alumni and communities.

V. Report & Dashboard :

- A. Student should be able to see his/her record in past studies so that he/she can plan accordingly
- B. Dashboard will more useful for analysis so should be able to see dashboard of current activities, past records

B. Non-functional Requirements:

1. The application can be opened and used from any platform.
2. The app should be loaded within 1 sec.
3. It should be available 24/7.(no downtime of the application)
4. Students should be able to make their profile private and have the ability to share profile with any specific group of user
5. The application should be secure. User credentials should be stored in encrypted form.
6. The application should be scaled properly according to device (i.e. application view on each device should be clear)
7. The app should be user-friendly and easy to navigate.
8. Users should be able to seamlessly transition between different pages and functionalities within the application.