1. Project Planning and Objectives:
2. Define Goals and Objectives:

* Identify the primary objectives, such as connecting students, faculty, and alumni, and providing job opportunities and mentorship.
* Specify measurable goals, like user engagement metrics and successful job placements.

1. User Categories and Features:

* Identify user categories (Students, Faculty, Alumni, Admin) and list features relevant to each category.
* For example, Students might need job insights and project opportunities, while Alumni may require a job posting and mentorship hub.

1. Technology Stack Selection:
2. Web Development (MERN Stack):

* MongoDB: Set up a MongoDB database to store user profiles, job postings, and other relevant data.
* Express.js: Develop a RESTful API to handle requests from the frontend.
* React: Build the web application's frontend with React components.
* Node.js: Use Node.js to run the server and manage server-side logic.

1. Mobile Development (Flutter):

* Set up a Flutter project and configure project structure.
* Develop UI components using Flutter widgets.
* Implement logic to communicate with the backend using HTTP requests.

1. System Architecture Design:
2. Web Application:

* Design a scalable and modular architecture for the web application.
* Define API contracts for communication between frontend and backend using RESTful principles.

1. Mobile Application:

* Design the mobile application architecture, considering responsiveness and performance.
* Define a clear separation between UI components and business logic.

1. Development:
2. Backend Development (MERN Stack):

* Set up Node.js server and configure Express.js for routing.
* Connect to MongoDB to store and retrieve data.
* Implement RESTful APIs for user authentication, job postings, and other functionalities.

1. Frontend Development (MERN Stack):

* Develop React components for each module (Alumni Network, Job Postings, etc.).
* Integrate components with the backend APIs.
* Implement responsive design for cross-browser and cross-device compatibility.

1. Mobile Application Development (Flutter):

* Set up Flutter project and configure dependencies.
* Develop UI screens using Flutter widgets.
* Implement logic to interact with the backend through HTTP requests.

1. Integration and Testing:
2. Integration:

* Integrate web and mobile components to ensure seamless communication.
* Verify that data flows correctly between the frontend and backend.

1. Testing:

* Conduct unit tests for individual components.
* Perform integration testing to ensure proper functioning of the entire system.
* Test user authentication, job posting, and other critical features.

6. Deployment:

Web Application:

Deploy the web application to a hosting platform like Heroku or AWS.

Configure domain settings for a custom domain.

Mobile Application:

Prepare the mobile application for deployment to app stores (Google Play Store, Apple App Store).

Follow the submission guidelines for each platform.