



# Basic Details of the Team and Problem Statement

ByteVerse

**Problem Statement:** Many students and professionals waste valuable time due to unclear career paths. Without a structured and personalized plan, achieving a career goal becomes inefficient and stressful.

**Team Name:** Simple Coders

**Institute Name:** National Institute of Technology, Patna

**Theme Name:** Quality Education



# Idea/Approach Details

## Describe your idea/Solution/Prototype here:

- A personalized career roadmap generator website.
- Users enter their desired career (e.g., Data Scientist, Web Developer) and their available time.
- The system creates a clear, step-by-step learning plan with resources, estimated effort, and timelines.
- The roadmap evolves dynamically based on progress and feedback.
- Helps users in avoiding confusion, saving time, and achieving their objectives effectively.

## Describe your Technology stack here:

- **Frontend:** React, Tailwind CSS
- **Backend:** Node.js, Express.js, MongoDB
- **Others:** FlowBite, OpenAI api, jsonwebtoken (JWT), zod, bcrypt hashing.



### Step 1: User Input Stage

User selects career goal, available time, preferred learning style and current skill level.

### Step 2: Goal-Time Analysis

System processes input to estimate required skills, learning pace, and available effort.

### Step 3: Roadmap Generation

AI reasoning creates a customized step-by-step roadmap with learning paths, resources, and time slots.

### Step 4: Interactive Dashboard

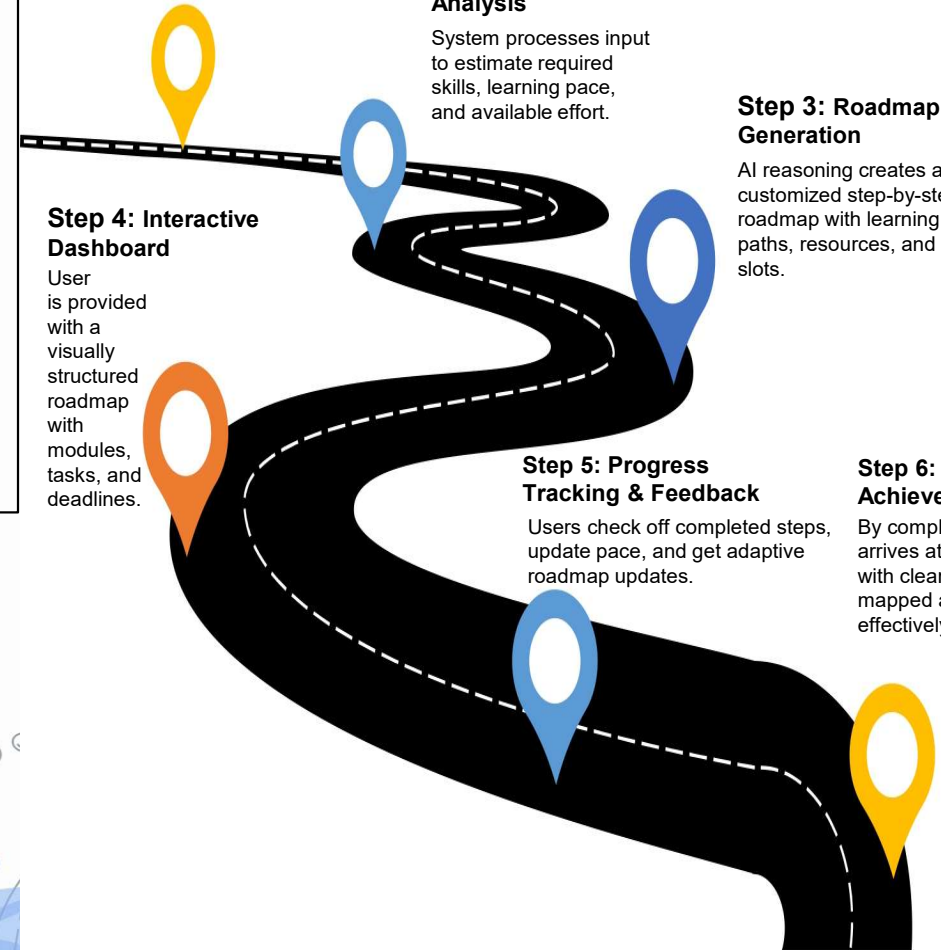
User is provided with a visually structured roadmap with modules, tasks, and deadlines.

### Step 5: Progress Tracking & Feedback

Users check off completed steps, update pace, and get adaptive roadmap updates.

### Step 6: Final Goal Achievement

By completing, user arrives at career goal with clear journey mapped and time effectively spent.





# Idea/Approach Details

## Describe your Use Cases here:

- A student wants to become a Data Analyst within 6 months.
- A working professional aims to switch to AI in 1 year.
- A college graduate unsure where to begin their chosen career path.
- Institutions offering guidance through this platform to their students.
- A software engineer in a service-based job wants to switch to Full Stack Web Development within 6 months.
- A gap-year student who has upskilled or has redirected career streams. The tool provides them with a structured timetable so they don't lose time and remain focused.

## Describe your Dependencies/Show Stopper here:

- Accuracy of the roadmap depends on high-quality career data and resources.
- Back-end AI model building delay can affect personalized output.
- Need for frequent updates and maintenance to keep content relevant.
- User motivation and input quality directly influence success rate.



# Team Member Details

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Stream : EE

Year : III

**Team Member 1 Name: Nandini Kumari**

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**Team Member 2 Name: Vansh Gupta**

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