

Annexure I (For Project Proposal for BEE)

- 1. **Project Statement:** In this project, we will develop a comprehensive online learning platform named LearnHub, with the following features:
 - Multi-role user system (Normal User, Publisher)
 - Course creation and management by publishers
 - Course enrollment and progress tracking for users
 - User-specific dashboards and controls
 - Rating and review system for courses
 - Payment gateway integra on for course purchases

2. Approximate duration (in hours) to complete the project:

Month One (August):

- (1-2 week) Frontend Design and User Interface
- (3-4 week) User Authentication and Role-based Access Control

Month Two (September):

- (1-2 week) Normal User Dashboard and Functionality
- (3-4 week) Publisher Dashboard and Functionality

Month Three (October):

- (1-2 week) Course Creation and Management System
- (3-4 week) Enrollment and Progress Tracking System

Month Four (November):

- (1-2 Week) Rating and Review System
- (3-4 week) Payment Gateway Integra on and Final Integration

3. **Proposed Project In charge:** Preenu Mittan

4. Team Members along with roll no's:

- 1. Baibhay Kumar 2210991433
- 2. Azimusshan Khan 2210991432
- 3. Gaurang Batra 2210991456

5. Check Points:

- 1. Does the project statement result in a product? Yes, a web-based online learning platform.
- 2. If it is a product, can a prototype be made? Yes, a functional prototype can be made.
- 3. Does the project statement use multiple concepts to achieve the outcome? Yes.
- 4. Does it have enough for our team members to do a sufficient amount of work? Yes

6. Technical Nodes

Subject / Area / Topic	Technical Nodes	
Frontend Development	React, Api, HTML, CSS, JavaScript, tailwind	
Backend Development	Node.js, Express.js, API creation, Authentication, clerk, stripe	
Database Management	MongoDB, Mongoose	
Maps Integration	Leaflet Library	
UI/UX Design	Figma Responsive Design	
Deployment	Vercel/aws lambda	

7. Prerequisites (in terms of knowledge, concepts and material) for doing the Project:

Complete knowledge of MERN stack that includes React for frontend, Express, Node.js for Backend, and MongoDB for storing the data.

- 8. Material That May Be Required to Make the Project and Where It Might Be Available:
 - Development Tools and So ware: VS Code, Postman
 - Programming Libraries and Frameworks: Next.js, Node.js, Express.js, Mongoose
 - APIs and Services: JWT for authentication, payment gateways (e.g., Stripe)
 - Hosting and Deployment Platforms: Vercel, AWS Lambda
 - 9. What Could Be the Total Cost of the Project? [To be estimated based on hosting and any paid services required]
 - 10. Resources Available to Us:
 - Technical Infrastructure: Personal computers, internet connection
 - Version Control: GitHub
 - Design Tools: Figma (free er)
 - Hosting: Vercel (free er), AWS Lambda (paid er)
 - Development Environment: Local development servers