



University of Sindh
The oldest University of Pakistan

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FULL PROJECT ID: 29

Project Title

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Introduction of Project

- ▶ Project Background..
- ▶ Learnity bridges educational gaps by combining quality tutoring with collaborative learning in a single, curriculum-aligned digital ecosystem. It's a comprehensive educational platform for Pakistani students that:

Introduction of Project Continued!

- ▶ ● Connects learners with verified tutors and study groups across grades 1-12 and specialised exam prep
- ▶ ● Facilitates learning through integrated video classrooms, chat functionality, and resource sharing
- ▶ ● Provides affordable, accessible education with a multi-factor tutor rating system and peer collaboration tools

Literature Review / Similar Project

- 1. Limitations of Existing Platforms**
- 2. Use of WhatsApp in Education**
- 3. Language Accessibility and Inclusion**
- 4. Gamification in Learning**
- 5. Affordability and Digital Access in Pakistan**

Problem Identification / Statement

- ▶ As identified issues in previous projects..

Despite the availability of global e-learning platforms, **Pakistani students lack access to affordable, locally-aligned, and inclusive digital education tools**. Platforms like Khan Academy and Coursera provide excellent content, but they do **not follow Pakistan's Matric and FSC syllabi**, limiting their usefulness for national board exams. Similarly, tutoring platforms like Preply and Superprof are **too expensive** for most Pakistani students, often charging **\$15–25 per hour**.

- ▶ There is strong need to provide:

Furthermore, while students use **WhatsApp groups for peer learning**, these are **unstructured, lack verified content**, and offer **no tracking or progress monitoring features**. Additionally, **most platforms don't support Urdu or regional languages**, making learning harder for non-English speakers.

Aim and Objectives

- ▶ To build a unified educational platform tailored to the Pakistani curriculum that merges certified tutoring, peer-led study groups, and gamified learning—empowering students with accessible, affordable, and engaging digital learning experiences.



OBJECTIVES

- ▶ Reward Ecosystem:
- ▶ Adaptive Interface:
- ▶ Structured Learning Paths:
- ▶ Smart Tutor & Peer Matching:
- ▶ Collaborative Community Tools:
- ▶ Free Starter Credits:

Scope of Project

- ▶ The **Learny platform** is designed to cater specifically to the **Pakistani education system**, targeting students preparing for Matric, FSc, and other national board exams. Its scope covers the **development, deployment, and scaling** of a digital learning ecosystem

Project Milestones and Deliverables

SNo	Milestone	Date	Deliverable
1	Literature Review, Req Gathering	5 May 2025 (1 Month)	SRS
2	UI/UX Prototyping & Frontend setup	25 May 2025(1 Month)	Clickable wireframes, Next.js Scaffold
3	Backend Development & Database Integration	25 July 2025 (1 Month)	RESTfull APIS, Database schema and table designs
4	Testing/Deployment	25 August 2025 (3 Month)	Completed tests (unit, integration, UAT).
5	Deployment(CI/CD pipeline integration)	15 September 2025	Making the app live for the public
6	Thesis Writing	25 October 2025	Thesis Report

Tools and Technologies

▶ FRONT END

- Next.js & React Native
- Tailwind CSS & NativeWind

▶ BACK END

- Node.js with Nestjs
- Neon DB & Mongoddb
- Firebase Realtime

DEVELOPING TOOL

- GitHub Actions
- Vercel
- AWS/GCP
- Stream

Design and Development Methodology

User Use Case Diagram

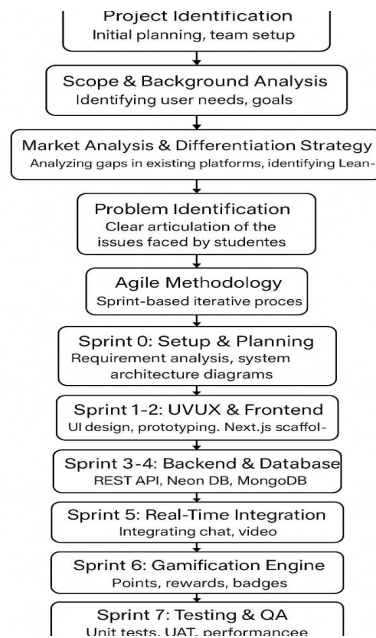


Figure 1 user use case diagram

Design and Development Methodology

► PROTOTYPE MODEL

- The prototype approach allows for **early validation of core features**, enabling stakeholders (students, tutors, and academic advisors) to **interact with a working model** of the platform and provide feedback. This iterative process helps refine user experience, ensures that the system aligns with user expectations (such as curriculum coverage, affordability, and group study tools), and reduces the risk of developing features that do not meet local educational needs. It also supports **agile development**, allowing the team to build and improve the platform in stages while continuously integrating user insights..

References

► PROTOTYPE MODEL

- <https://www.khanacademy.org/>
- <https://www.khanacademy.org/>
- <https://preply.com/en/online/english-tutors>
- <https://www.superprof.com/>

Thank you!