

# Baderia Global Institute of Engineering and Management, Jabalpur, Madhya Pradesh 482002



# Brehmes 40

The Creation of Tomorrow

Brehmex 40



# **Profile Overview**

- Theme EdTech
- Problem Statement Title- Personalized learning platforms and

Gamification of education

- Team ID (As per Unstop registration)
- Team Name Byte Busters

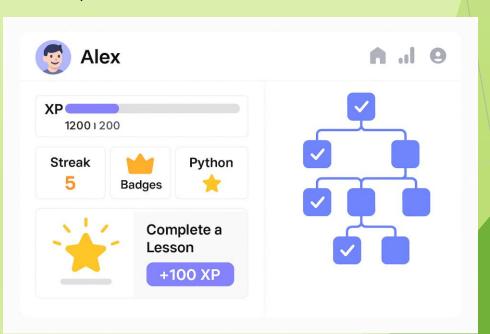




# "SkillSprint" - A Gamified Personalized Learning Hub

A web app where users take short quizzes or mini-lessons and earn XP, badges, and level-ups. The app adapts to their learning style and progress over time.

- **Solution Overview**: SkillSprint is a gamified web platform that delivers bite-sized lessons and quizzes tailored to each learner's style and pace. It transforms learning into an engaging journey with rewards, levels, and a personalized path to mastery..
- **Problem-Solving:** It addresses the challenge of low learner motivation and engagement in traditional platforms by using game mechanics and adaptive content delivery. Learners stay motivated through XP, streaks, and skill unlocks.
- Innovation:
- Adaptive learning based on user style (visual/textual).
- > Knowledge marketplace: Peer-to-peer mentorship exchange.
- > Gamified progression with XP, badges, and personalized dashboards.
- > Optional AI hints and feedback using OpenAI.





# **Technical Approach**



## Technical Approach:

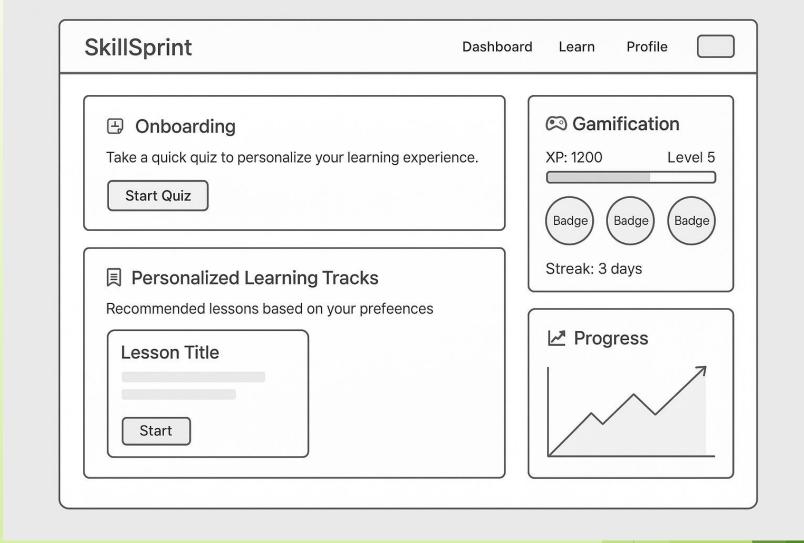
- Frontend: React / Next.js + Tailwind CSS
- Backend: Firebase / Supabase
- > Gamification Logic: JavaScript or Firebase Functions
- ➤ AI (optional): OpenAI GPT API
- ➤ Hosting: Vercel / Netlify

### Methodology:

- > User onboarding with learning-style quiz
- > tailored lesson tracks recommended
- > lessons followed by quizzes/challenges
- > gamification system updates user progress XP, and badges
- > optional AI feedback engine gives hints/explanations
- > Users can post or accept skill-based challenge exchanges.

#### Process Flow:

User Login  $\to$  Style Quiz  $\to$  Lesson Track  $\to$  Mini Quizzes  $\to$  Earn XP  $\to$  Track Post/Accept Challenges  $\to$  Mentor or Learn from Peers







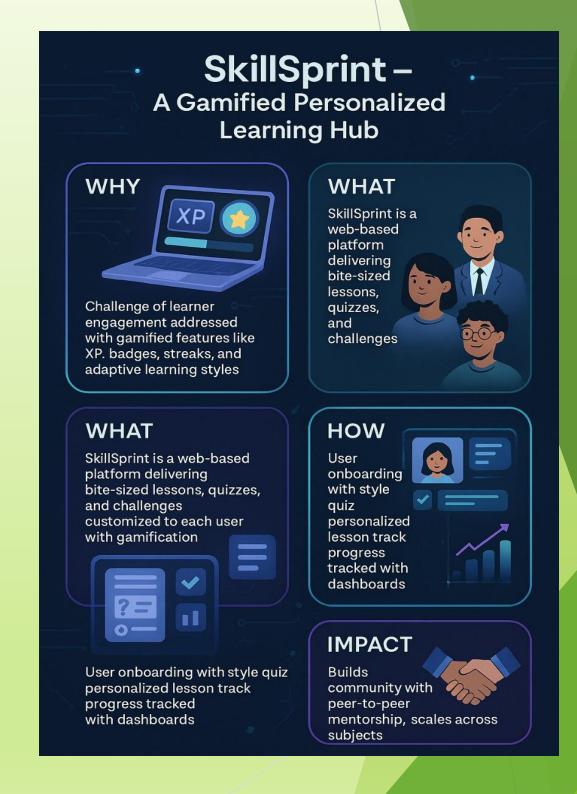




# FEASIBILITY AND VIABILITY



- Feasibility:
- > Technically feasible using modern frontend/backend stacks
- > Firebase and OpenAI integrations are reliable and scalable.
- Challenges & Risks:
- Personalization complexity
- maintaining user retention
- real-time gamification updates
- Mitigation Strategies:
- > Start with basic personalization improve iteratively
- > use engagement hooks (daily streaks, reminders)
- > leverage Firebase real-time database for instant updates.



# **IMPACT AND BENEFITS**



### Target Audience Impact:

Students, professionals, and hobby learners benefit from engaging, adaptive learning.

### Key Benefits:

- > Boosts learner retention and motivation
- > peer-to-peer knowledge exchange builds community
- > equitable access to mentorship
- Long-Term Value:
- > Scalable to new subjects and age groups
- > potential to integrate with schools or edtech partners
- > sustainable through freemium or partner model





# REFERENCES

- OpenAI GPT documentation
- Firebase developer docs
- Research on gamified learning systems
- UX case studies on adaptive learning platforms

