



SMART INDIA HACKATHON 2025

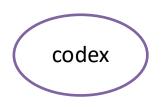
- Problem Statement ID 25019
- Problem Statement Title- Digital Learning

Platform for Rural School Students in

Nabha

- Theme-Smart Education
- PS Category- Software
- Team ID- GID 242





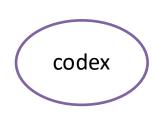


Proposed Solution

- •Works offline for uninterrupted learning
- •Content in Punjabi and Hindi, culturally relevant
- •Digital literacy included with academic lessons
- Teacher dashboards for personalized support
- •Optimized for low-end devices and poor internet

- Enables offline learning for students without reliable internet
- Offers tailored digital literacy lessons for rural learners
- Engages students with interactive content in local languages
- Provides teachers with easy-to-use dashboards to monitor progress
- Optimized for low-end devices to ensure broad accessibility

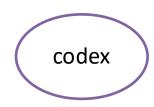
- Our website works even without internet, so you can learn anytime.
- The lessons are in Punjabi and Hindi and match the local culture, making them easier to understand.
- We teach digital skills along with school subjects, which most other sites don't.
- work well on simple phones and slow internet.



TECHNICAL APPROACH



- Technologies to be used (e.g. programming languages, frameworks, hardware)
- Methodology and process for implementation (Flow Charts/Images/ working prototype)



FEASIBILITY AND VIABILITY



Feasibility

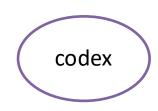
- Uses open-source, low-cost technology
- We can make lessons available offline and in local languages using today's technology.
- Keeps learning going even when weather or connectivity fail.

Strategies to overcome

- Offline content pack(preloaded SD card)
- Partnerships with Govt. & NGOs for deployment
 - Use gamification (quizzes)
- Include real life skill modules like typing ,basic coding

Challenges

- Limited digital infrastructure
- Teacher training requirements
 - Low student engagement
- Maintenance & Technical Support



IMPACT AND BENEFITS



Students in rural areas like Nabha can learn anytime, even without internet, reducing educational gaps.

Beyond textbooks, students gain digital confidence that opens doors to new opportunities in a rapidly changing world.

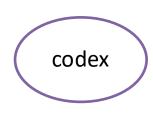
Teachers can see how each student is doing and give extra help when needed, so students do better.

Students can keep learning anywhere, anytime without the worry of bad weather.

Social: Every child, even those living far away in villages, can get a good education without missing out.

Economic: Families save money because kids don't have to travel far or buy many books. Plus, learning digital skills opens up better job opportunities in the future.

Environmental: Using digital lessons means less paper is wasted, and fewer trips are needed, which helps keep our environment clean and healthy



RESEARCH AND REFERENCES



- ASER 2023 Annual Status of Education Report (India) evidence on weak foundational skills and digital readiness. ASER: Annual Status of Education Report
- Digital divide and access to online education (PMC review, 2023) discusses connectivity & access
 problems during COVID and policy implications. PMC
- Kolibri / KA Lite / Offline-first EdTech case notes how offline content libraries (Kolibri) work in lowconnectivity contexts (EdSurge summary / Kolibri resources).