TITLE PAGE

- **Problem Statement ID – 1664**
- **Problem Statement Title-** Develop Software Solutions to Enhance Educational Infrastructure and Connectivity in Rural Areas
- **Theme-** Miscellaneous
- **PS Category- Software**
- **Team ID-**
- **Team Name (Registered on portal)-** DevWise

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नव शिक्षा

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Proposed Solution:

- Develop a comprehensive **digital platform** with **three user logins**: student, teacher, and parent, focusing on improving rural education through technology.
- Features include **personalised learning**, **parental guidance** on home education, **teacher training** modules, and community engagement tools.

- **Data Analytics & Resource Management:**
  - **Performance Analytics**: Integration of a comprehensive **data tracking system** linking past academic records with current performance, identifies trends, and helps customise learning strategies.
  - **Infrastructure Optimisation**: Digital inventory for resource allocation, minimising wastage and promoting resource sharing across schools.
  - **AI for Planning**: Data-driven infrastructure planning and resource management, improving efficiency.

How it Addresses the Problem:

- **Student Portal**: Provides access to tailored **educational content**, interactive lessons, and **doubt-solving sections**, enhancing learning in low-resource environments, low internet
- **Teacher Portal**: Offers professional development resources and collaborative tools, **improving teaching quality** in rural areas.
- **Parent Portal**: Connects parents and students with a unique code, offering guidance on supporting children's education and skill **development at home**.

Innovation and Uniqueness:

- **AI-driven personalised learning** experiences tailored to individual needs.
- **Community sections** for fostering interaction and support among students, teachers, and parents.
- **AI-integrated attendance system** for teachers.
- Educational **Resource Management** System and Data Analytics for Infrastructure Planning.
- **Live classes** and recording available for future references.
- Using **Web3**, protecting the data of users and content of our website.
- **Anonymous Feedback/Complaint system** for students.

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TECHNICAL APPROACH

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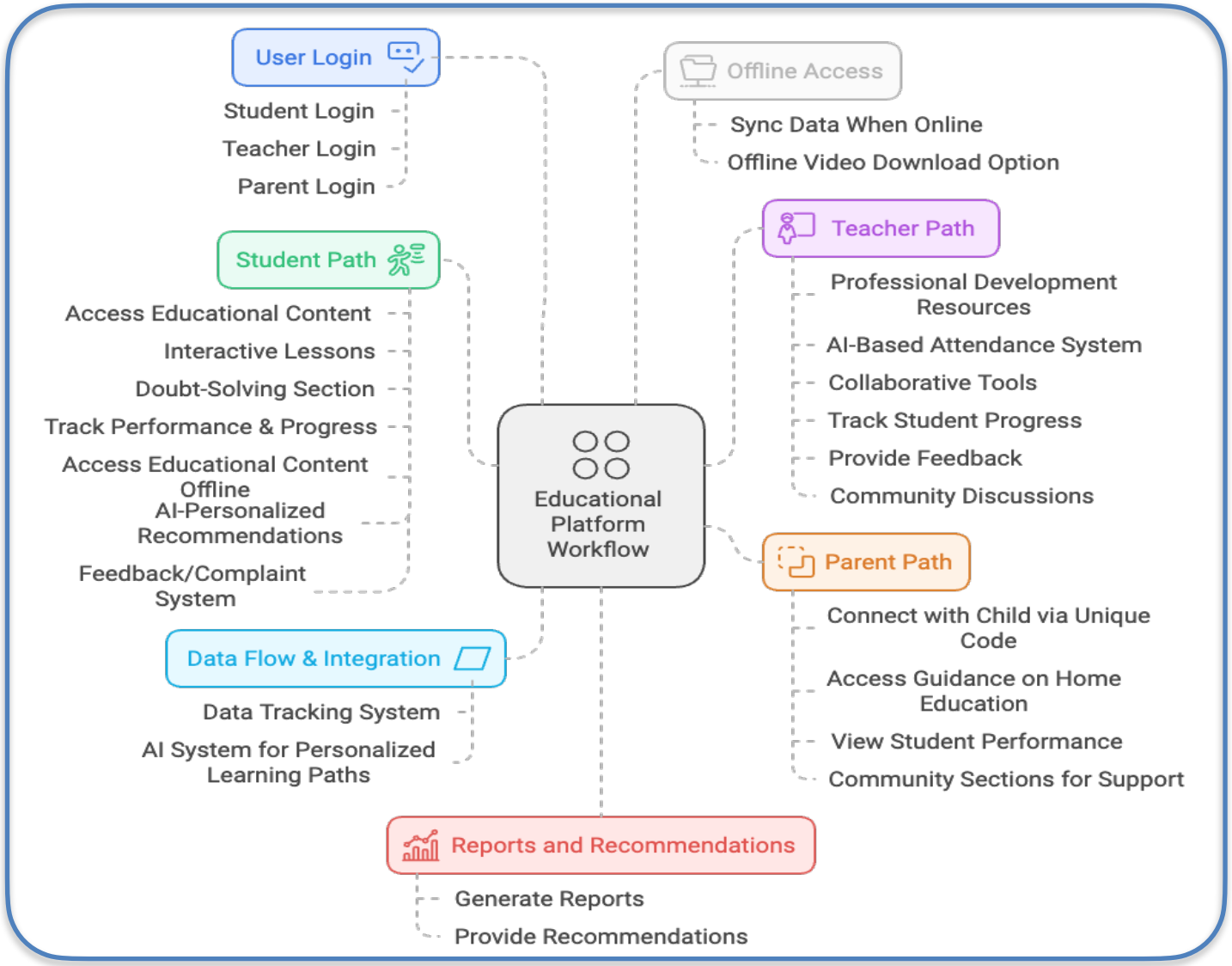
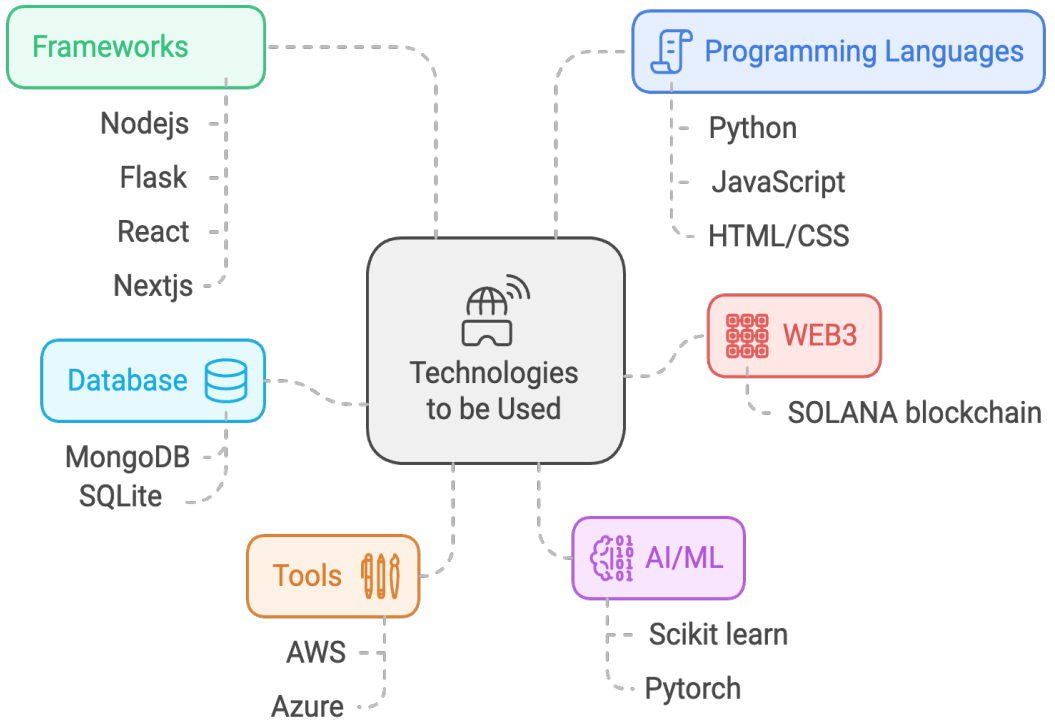


Tech-Stack



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FEASIBILITY AND VIABILITY

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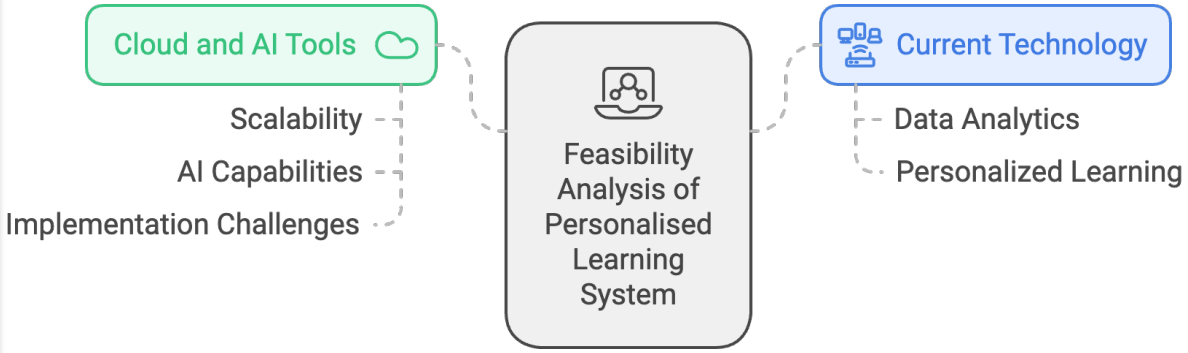
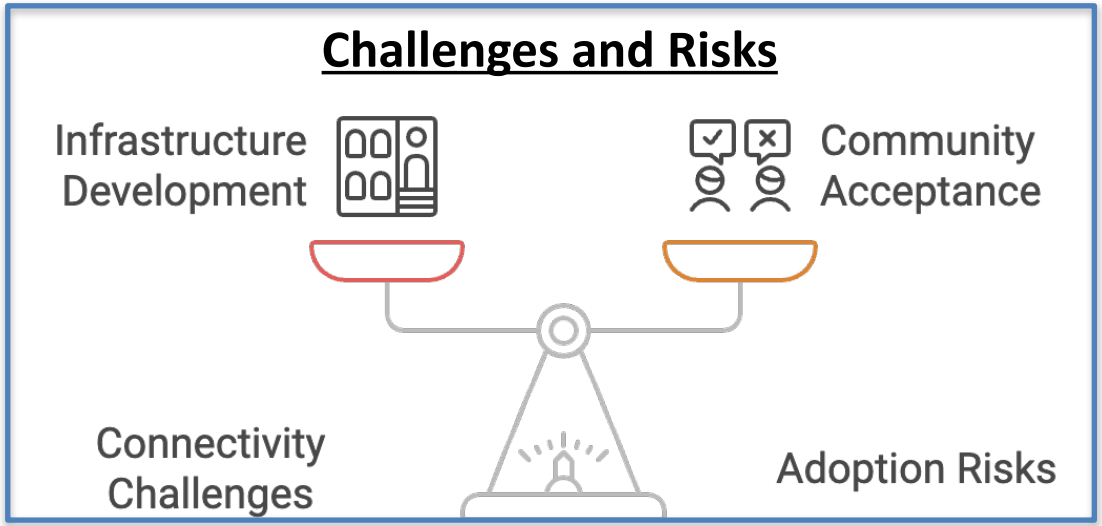
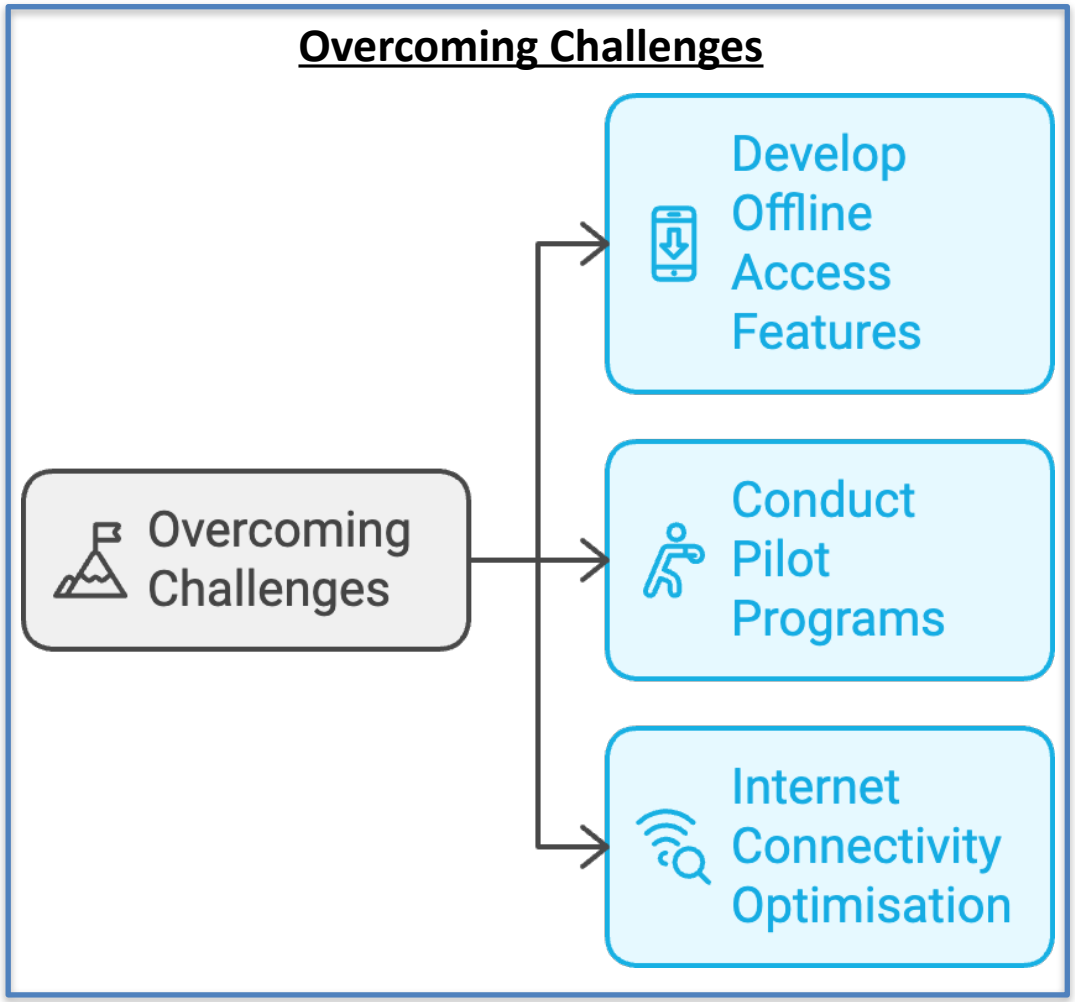
Feasibility



Challenges and Risks



Overcoming Challenges



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IMPACT AND BENEFITS

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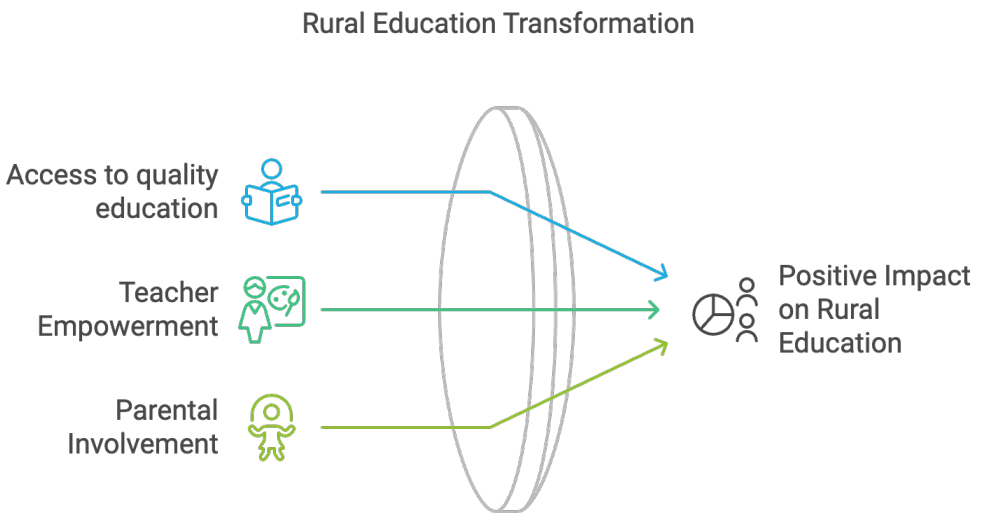
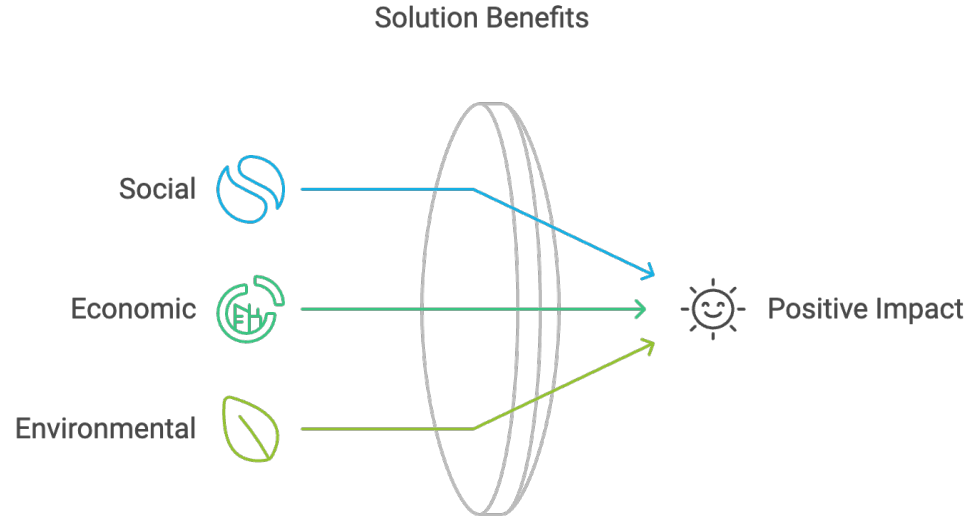
- **Potential Impact on the Target Audience**:
  - Improved educational outcomes and access to quality education for rural students.
  - Empowerment of teachers through continuous professional development.
  - Enhanced parental involvement in the educational process, fostering a supportive home environment.



- **Benefits of the Solution**:
  - **Social**: Bridges the urban-rural education gap, promotes inclusive education.
  - **Economic**: Prepares students for better job opportunities, enhances community growth.
  - **Environmental**: Reduces paper usage with digital learning materials.



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RESEARCH AND REFERENCES

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Condition of Rural Education in India

- **ASER Report 2022**
  Highlights low literacy and numeracy skills in rural India.
  https://www.pratham.org/programs/education/aser/

Technology in Rural Education

- **UNESCO Report on ICT**
  Explores ICT's role in improving education in rural areas with mobile learning solutions.
  https://unesdoc.unesco.org/ark:/48223/pf0000373479
- **World Economic Forum: Digital Learning**
  Shows how digital initiatives are transforming education in rural India.
  https://www.weforum.org/agenda/2021/01/think-education-is-a-matter-for-governments-alone-think-again/

Pilot Projects and Case Studies

- **EkStep Foundation**
  Open learning platforms for rural schools with interactive content and teacher training.
  https://ekstep.org/

Benefits of Educational Technology

- **Brookings Report**
  Highlights how e-learning enhances education in low-resource settings.
  https://www.brookings.edu/articles/realizing-the-promise-how-can-education-technology-improve-learning-for-all/
- **J-PAL Study**
  Evidence of low-cost digital tools improving literacy and numeracy in rural India.
  https://www.povertyactionlab.org/sites/default/files/2019.11.07-JPAL-Mindspark-BWEducation.pdf