Slide 1: Title Page

• **Problem Statement ID:** [Insert ID]

• **Problem Statement Title:** [Insert Title]

• Theme: [Insert Theme]

• **PS Category:** Software

• **Team ID:** [Insert Team ID]

• **Team Name:** [Insert Team Name]

Slide 2: IDEA TITLE

Proposed Solution (Describe your Idea/Solution/Prototype):

• Detailed explanation of the proposed solution:

The solution is a comprehensive learning dashboard designed to track various reading statistics such as reading time per topic and the total time required to complete a specific skill. It allows instructors to create customized learning paths that incorporate multiple educational resources, including PDFs, Word documents, videos, and hyperlinks to academic literature. The system continuously updates the learner's progress in real-time, ensuring a personalized and efficient learning experience.

• How it addresses the problem:

 This solution addresses the need for a centralized platform that integrates various educational resources and provides real-time progress tracking. By allowing instructors to easily create and manage learning paths, and by providing learners with continuous feedback on their progress, the solution significantly enhances the learning process.

Innovation and uniqueness of the solution:

 Key innovations include real-time tracking of student engagement with specific resources, ML-based analysis of student progress, Al-powered doubt resolution through an integrated chat feature, and Al-driven task evaluation. These features provide a unique and interactive learning experience, setting this solution apart from traditional learning platforms.

Slide 3: TECHNICAL APPROACH

Technologies to be used:

- Frontend: React.js for the user interface, CSS for responsive and modern design.
- Backend: Node.js and MongoDB for managing data, Firebase for real-time updates and storage.

- Machine Learning: Scikit-learn and TensorFlow/PyTorch for predictive analytics and Al tasks.
- o AI: GPT APIs

Methodology and process for implementation:

The project will follow an Agile development process with iterative prototyping. Initial stages will focus on designing the user interface, particularly the roadmap structure, followed by backend development and the integration of machine learning models for progress tracking and prediction. All features such as the chat assistant and task evaluation will be developed and integrated in parallel.

Slide 4: FEASIBILITY AND VIABILITY

Analysis of the feasibility of the idea:

The solution is technically feasible using widely available technologies and frameworks. The integration of multiple file formats and real-time progress tracking is achievable with current tools like Firebase, and the AI/ML features are supported by well-established libraries.

Potential challenges and risks:

- Developing an intuitive and user-friendly UI for the roadmap structure.
- Implementing and fine-tuning ML models for accurate progress analysis and prediction.
- Ensuring that the AI chat feature is responsive and accurately addresses student queries.

Strategies for overcoming these challenges:

- Employ UX design principles to ensure the UI is intuitive and accessible.
- Conduct iterative testing and validation of ML models to ensure accuracy and reliability.
- Regularly update the AI models with new data to improve performance and relevance.

Slide 5: IMPACT AND BENEFITS

• Potential impact on the target audience:

 The solution has the potential to significantly enhance the educational experience by providing a centralized platform that not only tracks progress but also offers personalized insights and support. This can lead to improved learning outcomes and more efficient use of educational resources.

• Benefits of the solution:

- Social: Facilitates better educational outcomes by providing personalized and realtime feedback to learners.
- Economic: Streamlines the process of resource management and progress tracking, reducing the time and cost associated with manual monitoring.
- Environmental: Digital management of resources reduces the need for physical materials, contributing to sustainability efforts.

Slide 6: RESEARCH AND REFERENCES

- Details / Links of the reference and research work:
 - o UX Design Principles: [Include relevant links]
 - o Case Studies on Educational Dashboards: [Include relevant links]
 - Libraries and Frameworks Used: React.js, TensorFlow, PyTorch, GPT APIs, Firebase, etc.