**Project Guideline: Idea Proposal Submission**

**Title of Capstone project: Quality Education**

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**1. Project Idea:**

**"EduBridge: A Smart Learning Platform for Inclusive Education"**  
The project aims to address the lack of access to quality education in underserved communities. The goal is to create a platform providing adaptive and interactive learning resources to students, regardless of their location or socioeconomic background.

**2. Relevance to Sustainable Development Goals (SDGs):**

* This project aligns with **SDG 4: Quality Education**, which emphasizes ensuring inclusive and equitable education for all. By providing digital access to quality educational resources and empowering educators, this project directly contributes to achieving sustainable education systems, especially in remote or resource-scarce areas..

**3. Literature Examples:**

1. **Khan Academy**: A free, accessible online learning platform that offers video tutorials and interactive exercises. This inspires the integration of adaptive learning and accessible design.
2. **"AI in Education: Adaptive Learning" (Journal Article, 2022)**: This research highlights the use of AI in creating personalized education plans to improve student outcomes, showcasing the effectiveness of data-driven approaches in education.

**4. Describe Your Data:**

 **Source**: Open datasets like UNESCO’s educational data and local school performance records.

 **Format**: CSV for academic performance, JSON for user activity logs, and video files for educational content.

 **Preprocessing**: Cleaning missing values, normalizing numerical data, and converting multimedia content to standard formats for integration.

**5. Approach (Machine Learning or Deep Learning):**

1. **Approach**: Machine Learning (ML).

Justification: The task involves recommendation systems, student performance prediction, and adaptive learning—tasks well-suited for ML models such as decision trees, support vector machines, and clustering algorithms.

1. Deep Learning may be explored in advanced phases for video content analysis or complex personalization needs.