**EXERCISE 04 – ROI FOR USABILITY IN PROJECT 01**

**NAME: MD MAMUN**

**PURPOSE**

**The purpose of this exercise is to outline a justification for usability in Project 01 by showing its return on investment (ROI). Usability ensures that users can easily understand, navigate, and interact with the system, leading to measurable and long-term benefits for both users and developers.**

**USABILITY BENEFITS FOR PROJECT 01 (StudyMate – E-Learning App)**

**1. Tangible Benefits (Measurable)**

1. **Reduced Training Time**
   * Students and teachers require less time to learn how to use the app.
   * *Measurement:* Compare the average onboarding time before and after usability improvements.
2. **Fewer Errors and Support Requests**
   * Clear navigation reduces mistakes in taking quizzes, accessing content, or submitting assignments.
   * *Measurement:* Track reduction in error rates or number of support tickets.
3. **Faster Task Completion**
   * Learners can find courses, complete quizzes, and track progress quickly.
   * *Measurement:* Measure task time (e.g., seconds/minutes saved per action).
4. **Increased Retention and Engagement**
   * A usable interface keeps students returning to the platform.
   * *Measurement:* Track user retention rates and daily/weekly active users.
5. **Improved Academic Performance**
   * Easy access to learning materials and progress tracking boosts student results.
   * *Measurement:* Compare quiz/test scores before and after usability changes.

**2. Intangible Benefits (Not Directly Measurable)**

1. **Higher User Satisfaction**
   * Students enjoy using the app because it feels simple, attractive, and intuitive.
2. **Improved Trust and Reputation**
   * Teachers and institutions are more likely to adopt and recommend the app.
3. **Increased Motivation to Learn**
   * Clean design and interactive features encourage continuous learning.
4. **Positive Brand Image**
   * A user-friendly app strengthens the credibility of StudyMate in the education market.

**REFLECTION (Engineering Notebook Entry)**

**This exercise helped me understand how usability creates both direct and indirect value for my project. By focusing on usability in StudyMate, I can ensure faster adoption, fewer errors, and higher satisfaction for students and teachers. It also affects my future design choices, reminding me to prioritize simplicity, clarity, and accessibility. Usability is not just a design choice but an investment that increases the success and impact of the project.**