**Chapter 3:**

**Requirement Analysis**

**3.1. Introduction**

The most important aspect of every project's successful implementation is requirements engineering. From the current problem scenarios to determining the functional and non-functional needs of P2P Learning, this chapter includes all the information needed for requirements analysis.

**3.2. Problem Scenarios**

After the completing the market survey, we identified several important difficulties which are stated below in tabular form;

**3.2.1. Problem\_01**

|  |  |
| --- | --- |
| **Element** | **Description** |
| **The problem of** | Inefficient Communication Among Peers |
| **Affect** | Students |
| **The result of which** | Students may feel isolated, making it challenging for them to collaborate or engage in meaningful discussions. In the absence of effective communication, they might be less motivated to participate in collaborative learning activities. |
| **Benefits of** | Implementing effective communication features within the platform can foster a more connected learning environment. Facilitating better communication allows students to share knowledge, resources, and support each other, leading to a more enriching learning experience. |

*Table#1 Problem statement 1*

**3.2.2. Problem\_02**

|  |  |
| --- | --- |
| **Element** | **Description** |
| **The problem of** | Difficulty in Finding Study Partners |
| **Affect** | Students |
| **The result of which** | Students often feel frustrated and anxious when they are unable to find peers for collaboration, which can result in a lack of engagement in their studies. |
| **Benefits of** | An effective system for matching study partners can enhance connections among students, creating a supportive learning community. Engaging in collaborative learning with study partners can result in improved academic performance and heightened motivation. |

*Table#2 Problem statement 2*

**3.2.2. Problem\_03**

|  |  |
| --- | --- |
| **Element** | **Description** |
| **The problem of** | Lack of Motivation for Collaborative Learning |
| **Affect** | Students |
| **The result of which** | The lack of motivation for collaborative learning leads to low engagement and diminished learning outcomes, causing students to miss critical insights from peer interactions and feel disconnected from their learning community. |
| **Benefits of** | Implementing features that enhance motivation for collaborative learning fosters a sense of accountability among students, encouraging them to contribute to group discussions and projects, ultimately resulting in enhanced teamwork skills and better retention of knowledge through shared experiences. |

*Table#3 Problem statement 3*