

**Project Design Phase**  
**Problem – Solution Fit Template**

|                        |  |
|------------------------|--|
| Date                   | 6 March 2025                                 |
| Team ID                | 149297                                       |
| Project Name           | FitFlex                                      |
| Maximum Marks          | 2 Marks                                      |
| Team Leader<br>Mail id | K.Mahalakshmi<br>12378cs22@princescience.in  |
| Team Member<br>Mail id | P. Reshma<br>12202cs22@princescience.in      |
| Team Member<br>Mail id | M.S.Vaishali<br>12354cs22@princescience.in   |
| Team Member<br>Mail id | S.Mariya Nisha<br>12309cs22@princescience.in |
| Team Member<br>Mail id | S.Saranya<br>12128cs22@princescience.in      |

**Problem – Solution Fit Overview:**

The **Problem-Solution Fit** ensures that the identified problem aligns with the needs of users and that the proposed solution effectively addresses it. This concept helps developers, marketers, and business strategists validate the **necessity and effectiveness** of their solution before further development.

**Purpose:**

- Address the **lack of a structured and interactive fitness guidance platform** for users who seek customized exercises based on body parts or equipment.
- Provide an intuitive and engaging experience for users to **discover exercises quickly** without the need for manual research.
- Offer seamless navigation and **real-time data retrieval** from **ExerciseDB API** to enhance user experience.
- Improve accessibility and engagement through an **interactive UI, responsive design, and well-structured data flow**.

**Problem Statement:**

Many users struggle to find **relevant and structured exercise information** online, leading to frustration and inconsistency in their fitness journey. Most available platforms either require paid memberships or provide unstructured exercise listings without filtering options based on equipment or body parts.

**Solution:**

- A **React.js-based Fitness Web Application** that provides users with an easy-to-navigate interface to explore exercises by **body parts and equipment**.
- Integration with **ExerciseDB API** ensures users get **up-to-date and detailed exercise information** with images and descriptions.
- **Axios-powered API requests** ensure smooth data retrieval with minimal delays.

- **Categorization and search functionalities** improve accessibility and user engagement.
- A scalable and **responsive UI design** ensures seamless experience across different devices.