**Project Design Phase**

**Problem – Solution Fit Template**

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| Date | 6 March 2025 |
| Team ID | SWTID1741320231146087 |
| Project Name | FitFlex |
| Maximum Marks | 2 Marks |

**Team Members:**

* **Kamalesh. K – Lead Developer**
* **Aaron. K – Frontend Developer**
* **Gokul. S – API Integration & Backend Support**
* **Kumaran. M – Testing & Debugging Specialist**

**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.