**Project Design Phase**

**Problem – Solution Fit Template**

|  |  |
| --- | --- |
| Date | 20 June 2025 |
| Team ID | LTVIP2025TMID38838 |
| Project Name | Pattern Sense: Classifying Fabric Patterns Using Deep Learning |
| Maximum Marks | 2 Marks |

**Problem – Solution Fit Template:**

The Problem-Solution Fit in the Pattern Sense project means we have identified a real challenge faced by fashion designers, textile manufacturers, and e-commerce platforms—manual classification of fabric patterns is inefficient, inconsistent, and prone to human error.

Our proposed solution, a deep learning-based fabric pattern classification system, directly addresses this problem by offering speed, accuracy, and automation. This fit helps researchers, developers, and industry professionals recognize key behavioral patterns, streamline processes, and ensure that the solution is not only technically sound but also genuinely solves the users' day-to-day pain points.

**Purpose:**

☑ Solve complex fabric classification challenges in a way that aligns with the needs of designers, manufacturers, and e-commerce platforms.

☑ Accelerate adoption and results by integrating deep learning into existing workflows and tools already used in the textile and fashion industries.

☑ Sharpen model communication and user onboarding with clear triggers, intuitive interfaces, and pattern recognition insights tailored to industry users.

☑ Build trust and increase interaction with your system by addressing frequent classification issues, costly labeling errors, and production delays.

☑ Understand the current pattern classification processes to develop a solution that truly improves accuracy, efficiency, and user satisfaction.

**Template:**

Calendar

Description automatically generated