Project Design Phase

Problem – Solution Fit Template

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| Date | 22 June2025 |
| Team ID | LTVIP2025TMID37335 |
| Project Name | pattern sense: classifying fabric patterns using deep learning |
| Maximum Marks | 2 Marks |

Problem–Solution Fit for Pattern Sense

Problem

Fashion designers, textile manufacturers, and quality control teams face major challenges when trying to identify and classify fabric patterns accurately and consistently. Manual inspection is slow, subjective, and error-prone, often requiring expert knowledge and resulting in high operational costs. Traditional computer vision methods struggle with the complexity and variation in fabric textures and patterns. As a result, businesses experience quality issues, production delays, and increased waste.

Solution

This project delivers a deep learning-based fabric pattern classification system designed to automate and standardize the identification of textile patterns. Using advanced AI models, Pattern Sense can accurately classify complex designs, enabling faster quality checks, better inventory management, and more reliable production workflows. This empowers fashion and textile businesses to improve efficiency, reduce costs, and ensure consistent product quality at scale.

Template:

