

# Project Design Phase

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## Solution Architecture

Team ID: LTVIP2025TMID40690

Project Name: Grainpalatte – Rice Type Classification

Maximum Marks: 4 Marks

### Solution Architecture:

The Rice Type Classification system aims to automate the identification of rice varieties using AI/ML techniques. This architecture bridges the gap between agricultural data problems and intelligent classification solutions. The goals are to:

- Build an accurate, AI-driven system to classify rice types from images or features.
- Design a scalable and accessible software structure for use by farmers, traders, and industries.
- Define modules for data acquisition, preprocessing, model inference, and result visualization.
- Ensure the system is easy to maintain, expand, and deploy across platforms (web/mobile/cloud).

### Example - Solution Architecture Diagram:

