

# Grain Palette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning

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| Date          | 31 January 2025   |
| Team ID       | LTVIP2025TMID60812  |
| Project Name  | Grain Palette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning |
| Maximum Marks | 4 Marks   |

## Empathy Map Canvas – End-User: Rice Quality Inspector / Farmer

### *SAYS*

- “I need to quickly know what type of rice this is.”
- “Sometimes even I can't tell the difference between two varieties.”
- “Manual checking is tiring and not always accurate.”
- “Technology is great, but it must be simple to use.”

### *THINKS*

- “What if I misidentify this and sell it at the wrong price?”
- “A digital system would help, but I don't want it to be too technical.”
- “I want something reliable even in rural conditions.”
- “This could help me prove quality to buyers.”

### *DOES*

- Physically inspects and compares rice grains by hand.
- Refers to past experience or charts for variety differences.
- Sometimes sends samples to labs for verification.
- Uses smartphones or basic digital tools for communication or trade.

### *FEELS*

- Worried about misjudging quality or being deceived by buyers/sellers.
- Overwhelmed during peak season when fast classification is needed.
- Skeptical about the reliability of new tech.
- Hopeful that automation can reduce stress and workload.

### *PAINS*

- Manual classification is slow and inconsistent.
- Prone to human error, especially when dealing with multiple varieties.
- Difficult to maintain accuracy under pressure or in poor lighting.
- Lack of affordable and accessible tools for quick classification.

### *GAINS*

- Quick, automated, and accurate rice classification.
- Higher confidence in pricing and quality control.
- Time-saving during sorting or purchasing decisions.
- Increased trust and transparency in trade transactions.