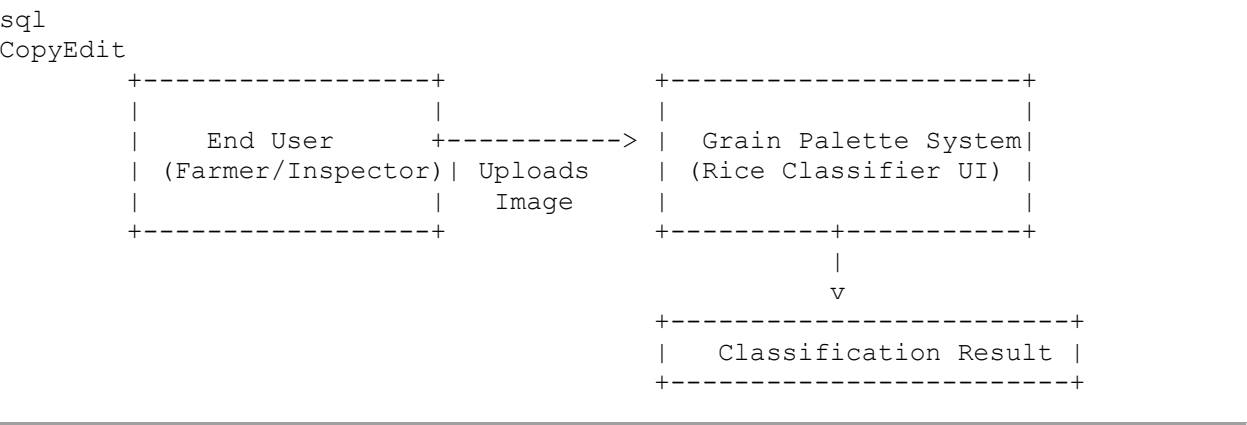


Data Flow Diagrams

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

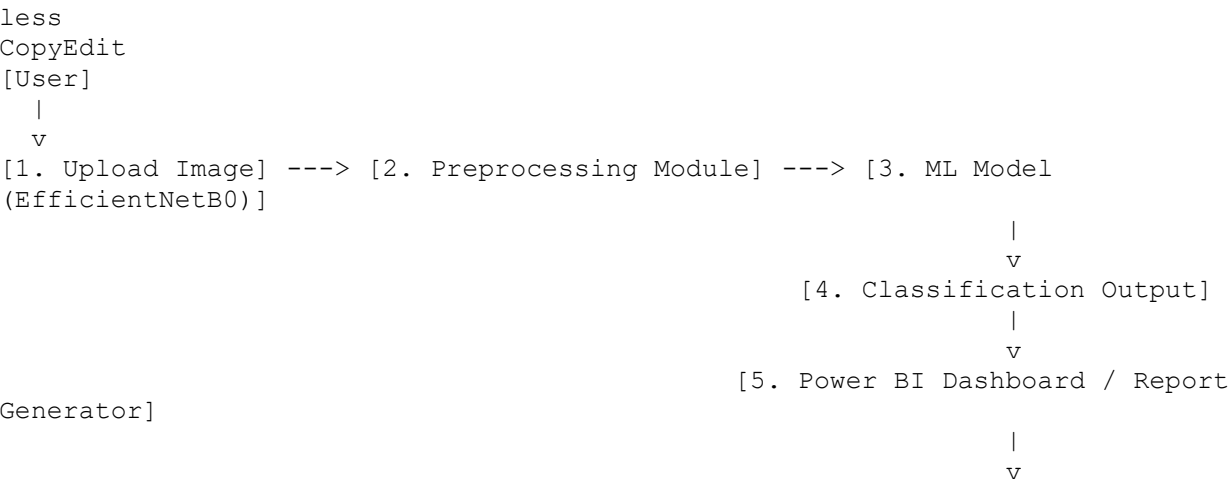
📌 Context-Level DFD (Level 0)

This diagram gives an overview of the entire system as a single process.



📌📌 Level 1 DFD: Internal Components

Shows the key internal processes of the system.



🔗 User Stories

These help define how different users interact with the system in real-world scenarios. Each user story follows this format:

As a [type of user], I want [some goal] so that [some reason].

✅ Key User Stories

1. **Image Upload**
 - *As a farmer, I want to upload an image of rice grains so that the system can classify the variety.*
2. **Get Prediction**
 - *As a rice mill quality inspector, I want to receive the predicted rice type and confidence score so that I can quickly verify grain quality.*
3. **View Classification History**
 - *As a trader, I want to view previous classification results so I can track variety distribution over time.*
4. **Use on Mobile Device**
 - *As a rural user, I want to use the system on a low-end mobile phone so that I can classify rice on the go.*
5. **See Reports and Trends**
 - *As a supply chain analyst, I want to generate visual reports so that I can analyze quality trends by region or supplier.*
6. **Give Feedback**
 - *As a user, I want to give feedback if I disagree with a classification so that the model can improve over time.*
7. **Offline Capability (optional)**
 - *As a user in an area with poor connectivity, I want to use the system offline so that I can classify grains without the internet.*