Model Development Phase Template

Date	18 JUNE 2025
Team ID	SWTID1749825524
Project Title	Deepfruitveg: Automated Fruit and Veg Identification
Maximum Marks	5 Marks

Feature Selection Report Template

Feature	Description	Selected (Yes/No)	Reasoning (Testing Phase)
Colour Histogram	Distribution of colors across the image	Yes	Helped distinguish produce classes during testing; remained highly informative.
Shape	Geometric structure of the object	Yes	Useful in separating similar-coloured fruits like apples and tomatoes.
Texture	Surface pattern and smoothness	Yes	Helped distinguish items like kiwi (fuzzy) vs potato (smooth).
Size	Relative size of the object in the frame	No	Images were resized uniformly to 64x64, making size uninformative.
Background	Image background details	No	Background noise sometimes confused predictions; excluded for clarity.
Edge Features	Contours and edge sharpness	Yes	Improved accuracy by helping the model detect object boundaries.