

Model Development Phase Template

Date	12 June 2025
Team ID	SWTID1749618778
Project Title	Rising Waters: A Machine Learning Approach To Flood Prediction
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Temperature	Average temperature (°C) of the region	Yes	Temperature affects evaporation and water levels, influencing flood risk.
Humidity	Humidity percentage of the region	Yes	High humidity contributes to rainfall patterns, critical for flood prediction.
Cloud Cover	Percentage of cloud cover in the region	Yes	Increased cloud cover is often associated with rainfall and potential flooding.
Annual	Annual total rainfall (mm)	Yes	Directly impacts water accumulation and flood risk.

Jan-Feb Rainfall	Rainfall during January-February (mm)	Yes	Seasonal rainfall patterns help identify critical flood periods.
Mar-May Rainfall	Rainfall during March-May (mm)	Yes	Seasonal rainfall influencing regional water accumulation.
Jun-Sep Rainfall	Rainfall during June-September (mm)	Yes	Monsoon season rainfall, highly relevant for flood occurrence.
Oct-Dec Rainfall	Rainfall during October- December (mm)	Yes	Seasonal rainfall, contributes to late- year flood events.
avg june	Average rainfall during June	Yes	Captures monsoon intensity, a key indicator for flood risk.
sub	Sub-basin rainfall value	Yes	Provides localized rainfall information, useful for flood hotspot detection.
flood	Flood occurrence label (0 = No flood, 1 = Flood)	Yes	Target variable indicating flood occurrence.