

## Model Development Phase Template

Date	08 August 2025
Skill Wallet ID	<b>SWUID20250188325</b>
Project Title	Predictive Pulse: Harnessing Machine Learning for Blood Pressure Analysis
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
C (Gender)	Patient's gender (Male/Female)	Yes	Gender can influence hypertension risk due to hormonal and lifestyle factors.
Age	Age category of the patient	Yes	Age is a major risk factor for hypertension, with prevalence increasing over time.
History	History of hypertension (Yes/No)	Yes	Past medical history directly impacts current hypertension risk.
Patient	Whether the individual is a known patient (Yes/No)	Yes	Identifies returning patients whose prior health data may be relevant.
TakeMedication	Whether patient is currently on BP medication	Yes	Medication use influences current BP readings and stage classification.
Severity	Severity of symptoms (Mild/Moderate/Severe)	Yes	Symptom severity can indicate the urgency and stage of

			hypertension.
BreathShortness	Presence of shortness of breath (Yes/No)	Yes	Symptom often associated with severe hypertension or related complications.
VisualChanges	Visual disturbances (Yes/No)	Yes	Vision issues can be a symptom of advanced hypertension or related damage.
NoseBleeding	Incidence of nosebleeds (Yes/No)	Yes	Nosebleeds may indicate elevated blood pressure levels.
Whendiagnosed	When the patient was diagnosed (Recently/Long ago)	Yes	Time since diagnosis helps assess disease progression.
Systolic	Systolic blood pressure reading	Yes	Primary input for determining BP stage.
Diastolic	Diastolic blood pressure reading	Yes	Primary input for determining BP stage.
ControlledDiet	Whether patient follows a controlled diet	Yes	Dietary habits significantly affect BP control and management.