

## Model Development Phase Template

Date	10 July 2024
Team ID	SWTID1720174640
Project Title	Early Prediction of Chronic Kidney Disease
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 Selection for CKD Prediction

Feature	Description	Selected (Yes/No)	Reasoning
id	Identifier for the patient	No	Used only for identification, not relevant to predicting CKD.
age	Age of the patient (years)	Yes	Age is a crucial demographic factor influencing CKD risk.
bp	Blood pressure (mm/Hg)	Yes	High blood pressure is a significant risk factor for CKD.
sg	Specific gravity	Yes	Indicates kidney function by measuring urine concentration.

al	Albumin	Yes	Presence of albumin in urine can indicate kidney damage.
su	Sugar	Yes	Indicates sugar in urine, a sign of diabetes or kidney disease.
rbc	Red blood cells	Yes	Presence of RBCs in urine can indicate kidney problems.
pc	Pus cell	Yes	Indicates infection or inflammation in the urinary tract or kidneys.
pcc	Pus cell clumps	Yes	Presence suggests a severe infection or kidney disease.
ba	Bacteria	Yes	Presence of bacteria in urine indicates a urinary tract infection (UTI).
bgr	Blood glucose random	Yes	High levels can indicate diabetes, a risk factor for CKD.
bu	Blood urea	Yes	High levels suggest reduced kidney function.
sc	Serum creatinine	Yes	High levels indicate impaired kidney function.

sod	Sodium	Yes	Abnormal levels can indicate kidney issues.
pot	Potassium	Yes	Abnormal levels can indicate kidney issues.
hemo	Hemoglobin	Yes	Low levels can indicate anemia, common in CKD patients.
pcv	Packed cell volume	Yes	Low levels can indicate anemia or other blood disorders.
wc	White blood cell count	Yes	High levels can indicate infection or inflammation.
rc	Red blood cell count	Yes	Low levels can indicate anemia, often seen in CKD.
htn	Hypertension (yes/no)	Yes	High blood pressure is a major risk factor for CKD.
dm	Diabetes mellitus (yes/no)	Yes	Diabetes is a leading cause of CKD.
cad	Coronary artery disease (yes/no)	Yes	Indicates the presence of heart disease, which is related to CKD.
appet	Appetite (good/poor)	Yes	Poor appetite can be a symptom of advanced CKD.

pe	Pedal edema (yes/no)	Yes	Swelling in the feet and ankles, a common symptom of CKD.
ane	Anemia (yes/no)	Yes	Anemia is a common complication of CKD.
classification	Classification of the patient as having CKD or not	Yes	Target variable for prediction.