**Model Development Phase Template**

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| 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**

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| **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. |