**Model Development Phase Template**

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| --- | --- |
| Date | 09 july 2024 |
| Team ID | SWTID1720193784 |
| Project Title | Early Prediction Of Chronic Kidney Disease Using Machine Learning |
| 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 |
| **Age** | Patient's age in years | **Yes** | |  | | --- | | Age is a significant risk factor for chronic kidney disease. |  |  | | --- | |  | |
| **BP** | |  |  |  | | --- | --- | --- | | |  | | --- | | Blood pressure (mm Hg) |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  |  |  | | --- | --- | --- | | |  | | --- | | High blood pressure is a known risk factor for chronic kidney disease. |  |  | | --- | |  | |  |  | | --- | |  | |
| **SG** | |  |  |  | | --- | --- | --- | | |  | | --- | | Specific gravity of urine |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  |  |  | | --- | --- | --- | | |  | | --- | | Indicates kidney's ability to concentrate urine; important for diagnosis. |  |  | | --- | |  | |  |  | | --- | |  | |
| **AL** | |  |  |  | | --- | --- | --- | | |  | | --- | | Albumin levels in urine |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | |  | | --- | | High albumin levels in urine can be a sign of kidney disease. |  |  | | --- | |  | |  |  | | --- | |  | |  |  | | --- | |  | |
| **SU** | |  |  |  | | --- | --- | --- | | |  | | --- | | Sugar levels in urine |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  |  |  | | --- | --- | --- | | |  | | --- | | High sugar levels can be associated with diabetes, a risk factor. |  |  | | --- | |  | |  |  | | --- | |  | |
| **RBC** | |  |  |  | | --- | --- | --- | | |  | | --- | | Presence of red blood cells in urine |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  |  |  | | --- | --- | --- | | |  | | --- | | Can indicate kidney damage. |  |  | | --- | |  | |  |  | | --- | |  | |
| **PC** | |  |  |  | | --- | --- | --- | | |  | | --- | | Pus cells in urine |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  |  |  | | --- | --- | --- | | |  | | --- | | Indicates infection or inflammation in the urinary tract. |  |  | | --- | |  | |  |  | | --- | |  | |
| **PCC** | |  |  |  | | --- | --- | --- | | |  | | --- | | Pus cell clumps in urine |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  |  |  | | --- | --- | --- | | |  | | --- | | Indicates infection or inflammation in the urinary tract. |  |  | | --- | |  | |  |  | | --- | |  | |
| **BA** | |  |  |  | | --- | --- | --- | | |  | | --- | | Bacteria in urine |  |  | | --- | |  | |  |  | | --- | |  | | **No** | |  |  |  | | --- | --- | --- | | |  | | --- | | Bacteria presence alone is not a strong predictor in this context. |  |  | | --- | |  | |  |  | | --- | |  | |
| **BGR** | |  |  |  | | --- | --- | --- | | |  | | --- | | Blood glucose random |  |  | | --- | |  | |  |  | | --- | |  | | **Yes** | |  | | --- | | High glucose levels can indicate diabetes, a risk factor. |  |  | | --- | |  | |