**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 | 6 Marks |

**Model Selection Report**

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

**Model Selection Report:**

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| **Model** | **Description** | **Hyperparameters** | **Performance Metric (e.g., Accuracy, F1 Score)** |
| Logistic Regression | Logistic Regression is a popular and widely used statistical model for binary classification tasks. Despite its name, it's a classification algorithm rather than a regression one. | C,penalty,solver | Accuracy is : 0.975  Precision is : 0.6601307189542484  Recall is : 0.6486364660806851  F1 socre is 0.6542827657378741 |
| Support Vector Classifier  (SVC) | The model being tuned in this GridSearchCV process is a Support Vector Machine (SVM) classifier, as indicated by the parameters used (C, kernel, and gamma). SVM is a supervised learning algorithm that is widely used for classification tasks. It works by finding the optimal hyperplane that separates data into different classes with the maximum margin. | C, gamma, kernel | Accuracy is: 0.975  Precision is : 0.6601307189542484  Recall is: 0.6486364660806851  F1 score is 0.654282765737874 |