

## Model Development Phase Template

|               |  |
|---------------|--|
| Date          | June 20,2024   |
| Team ID       | team-739679  |
| Project Title | Hospital Readmission Prediction 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  |
|---------|------------------|-------------------|--|
| Gender  | Patient's gender | Yes               | Relevant for assessing diversity and potential bias in hospital readmission. |
| Age     | Patient's Age    | Yes               | Patient's age at the time of admission.                                      |
| Race    | Patient's Race   | No                | Indicates patient's race or ethnicity.                                       |

|                  |                     |     |  |
|------------------|---------------------|-----|--|
| time_in_hospital | Amount of time      | Yes | The amount of time the patient is in hospital for treatment. |
| diag_1           | Primary diagnoses   | Yes | The primary diagnosis code for the current admission.        |
| diag_2           | Secondary diagnoses | Yes | List of secondary diagnosis codes.                           |
| Number_diagnoses | diagnoses           | Yes | The total number of diagnosis the patient has undergone.     |
| number_inpatient | inpatients          | Yes | The total number of inpatients.                              |

|                   |                    |     |   |
|-------------------|--------------------|-----|---|
| number_outpatient | outpatients        | Yes | The total number of outpatients.        |
| number_emergency  | Emergency patients | Yes | The total number of emergency patients. |