|  |  |
| --- | --- |
| Date | 15 March 2024 |
| Team ID | xxxxxx |
| Project Title | Human Resource Management: Predicting  Employee Promotions Using Machine  Learning |
| Maximum Marks | 5 Marks |

Model Development Phase Template

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** |
| employee\_id | Unique  identifier for each employee | **No** | Not required for predicting promotions as it doesn't provide predictive value |
| department | Department the employee belongs to | **Yes** | Relevant to determine promotion patterns across different departments |
| region | Region of the employee | **No** | Not important for predicting promotions in this context. |

|  |  |  |  |
| --- | --- | --- | --- |
| education | Employee's education level | **Yes** | Education level can impact performance and promotion eligibility |
| gender | Employee's gender | **No** | Not important for predicting promotions in this  context |
| recruitment\_ch annel | Recruitment channel through which hired | **No** | Not important for predicting promotions in this context |
| no\_of\_training  s | Number of training sessions attended | **Yes** | Additional training sessions can improve promotion readiness |
| age | Age of the employee | **Yes** | Age can indicate experience and influence promotions |
| previous\_year\_ rating | Performance rating from the previous year | **Yes** | Direct indicator of past performance, crucial for promotion decisions |
| length\_of\_serv ice | Length of service in the company | **Yes** | Company loyalty and experience are important for promotions |
| KPIs\_met\_abo ve\_80 | KPIs met above 80%  (0/1) | **Yes** | KPI performance is critical for assessing employee performance |
| awards\_won | Whether the employee has won any awards (0/1) | **Yes** | Awards indicate high performance and recognition, influencing promotion decisions |

|  |  |  |  |
| --- | --- | --- | --- |
| avg\_training\_s core | Average score in training sessions | **Yes** | Training effectiveness can impact the likelihood of promotion |
| is\_promoted | Promotion  status (target variable) | **Yes** | This is the target variable for the predictive model |