**Project Development Phase**

**Model Performance Test**

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| Date | 24 JUNE 2025 |
| Team ID | LTVIP2025TMID59973 |
| Project Name | Citizen AI – Intelligent Citizen Engagement Platform |
| Maximum Marks | 10 Marks |

**Model Performance Testing:**

Project team shall fill the following information in model performance testing template.

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| --- | --- | --- | --- |
| **S.No.** | **Parameter** | **Values** | **Screenshot** |
|  | Metrics | **Regression Model:** MAE – 2.51 hours,  MSE – 10.32,  RMSE – 3.21 hours,  R2 score – 0.89  **Classification Model:** Confusion Matrix –  [[45 3 2]  [ 4 41 5]  [ 1 2 52]] ,  Accuracy Score- 0.91  & Classification Report –  Precision Recall F1-Score Support  ---------------------------------------  Water 0.90 0.91 0.91 50  Electricity 0.89 0.82 0.85 50  Road 0.92 0.96 0.94 55  ---------------------------------------  Avg / Total 0.91 0.91 0.91 155 |  |
|  | Tune the Model | Hyperparameter Tuning -   |  | | --- | |  |  |  | | --- | | n\_estimators,  max\_depth,  min\_samples\_split |   C, penalty, solver |  |