

Format for the Weekly Progress Report

Name of the Student 1	Dev Pandya
Roll Number of Student 1	22BCP409
Name of the Student 2 (if any)	Kavya Patel
Roll Number of Student 2 (if any)	22BCP406
Project Title	Smart Energy Consumption Monitoring and Prediction Using Big Data
Name of the Supervisor (Mentor) at PDEU	Dr. Samir Patel
Week Number	Week 10
<p>Progress made in Week 10:</p> <ul style="list-style-type: none"> • Conducted model optimization by minimizing model size and improving inference speed to ensure compatibility with the real-time streaming setup. • Verified model accuracy and response time across multiple test runs to confirm reduced latency. • Integrated optimized LightGBM models into the existing pipeline for near real-time prediction. • Configured Zeppelin notebooks to display prediction outputs in tabular format, allowing clear comparison of actual vs. predicted values. • Implemented functionality to store generated outputs (predicted data tables) as CSV/Parquet files for later analysis and model evaluation. 	

Dev Pandya

Kavya Patel

Dr. Samir Patel

**Name & Signature of
Student 1**

**Name & Signature of
Student 2**

**Name & Signature of
Supervisor (Mentor)**