

Commencement of Live Project

To,
The Head of Department,
Artificial Intelligence and Data Science,
SBJITMR, Nagpur.

Subject: Commencement of Live Project on **"Intelligent Home Automation System Using Gen AI and IoT for Personalized Energy Management"**

Respected Sir,

We are pleased to inform you that the live project titled "Intelligent Home Automation System Using Gen AI and IoT for Personalized Energy Management to Reduce Carbon Footprint" has officially commenced under the collaboration between LGPS Hybrid Energy Pvt. Ltd. and SBJITMR, Nagpur.

This project, which forms a critical part of the students' academic curriculum, aims to provide hands-on experience in emerging technologies, particularly in the fields of Artificial Intelligence (AI), Machine Learning (ML), and the Internet of Things (IoT). The project is being undertaken by the following students from the Emerging Technologies (AI & DS) Department:

- Vaishnavi Rahamatkar
- Vaishnavi Dhekwar
- Ayush Roy
- Atharva Wakdikar

Project Overview:

The primary goal of this project is to develop a smart home automation system that optimizes energy management through the integration of Generative AI and IoT. Utilizing

the ESP8266 microcontroller and various environmental sensors, the system will collect real-time data, which will be analyzed by a Gen AI model to predict user behavior and automate appliance control, thereby reducing energy consumption and minimizing the carbon footprint.

Project Timeline:

Start Date: 13 August 2024

Expected Completion Date: 11 October 2024

The students have begun working on both the software and hardware aspects of the project, with regular updates and guidance provided by our team. We believe that this project will significantly enhance their understanding and practical skills in these cutting-edge technologies.

We appreciate your continued support and collaboration in this endeavor. Should you have any suggestions or additional requirements, please do not hesitate to reach out.

Thank you for your cooperation.

Prizanka Pande

Yours sincerely,

L&D Manager,

LGPS Hybrid Energy Pvt. Ltd., Nagpur

