

# THE NATIONAL INSTITUTE OF ENGINEERING, MYSORE

(An Autonomous institution, affiliated to VTU)

## DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

A.Y. 2023-24

### PROJECT SYNOPSIS

**Subject/ Sub. Code:** Major Project Phase-1/IS7C04

**Semester:** 7 B

**Batch No:** B14

**Date:** 01-11-2023

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**Project Title :** Online System For On Demand Household Services.

**Broad Area:** Full stack development, Blockchain and Machine Learning.

**Type of Project :** Application type.

#### **Objectives:**

1. To develop a platform that connects skilled workers with customers, offering a straightforward registration process, efficient appointment booking and scheduling process.
2. To create an integrated location-based system that enables customers and service professionals to locate each other and access maps and directions for service appointments.
3. Implement blockchain to securely store sensitive information, enhancing trust and transparency.
4. Utilize machine learning to develop intelligent chatbots which improves user interactions.

#### **Brief description:**

This full stack web application will serve as a bridge, connecting skilled service professionals and customers, making it easy for users to discover and connect with skilled workers such as electricians, plumbers, computer repair technicians, painters, carpenters, cleaners, and more. It will simplify the process for both workers and customers, allowing workers to showcase their skills and enabling customers to search for nearby service professionals, book appointments, leave reviews, and track the location during appointments. The platform will also aim to provide business management tools for service professionals, helping them efficiently manage bookings and track earnings. The project aims to incorporate blockchain technology to securely store ID verification documents, work records, and other sensitive information, enhancing the trust and transparency of the platform. Machine learning will be used to create chatbots equipped with natural language processing for real-time user assistance. Overall, the application aims to transform the skilled workforce connection system, making it efficient, secure, and engaging for all users.

**Software requirements:**

Programming Languages : JavaScript (Framework : React.js and Express.js), Python (scikit-learn).  
Runtime Environment : Node.js  
Database : MongoDB, MongoDB Atlas.  
Tools : VS-Code, Git, GitHub, Jupyter notebook.

**Hardware Requirements:**

Processor : Quad-core processor or higher.  
Memory : At least 8 gb of RAM.  
GPU : A dedicated GPU with a minimum of 4 GB of VRAM.

**Guide**

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