Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation:
Ministry of Environment

PS Code: 1392

Problem Statement Title: E-Waste Facility Locator

Team Name: **Shadows**

Team Leader Name: **VIGNESHNATHAN R**

Institute Code (AISHE): **C-61962**

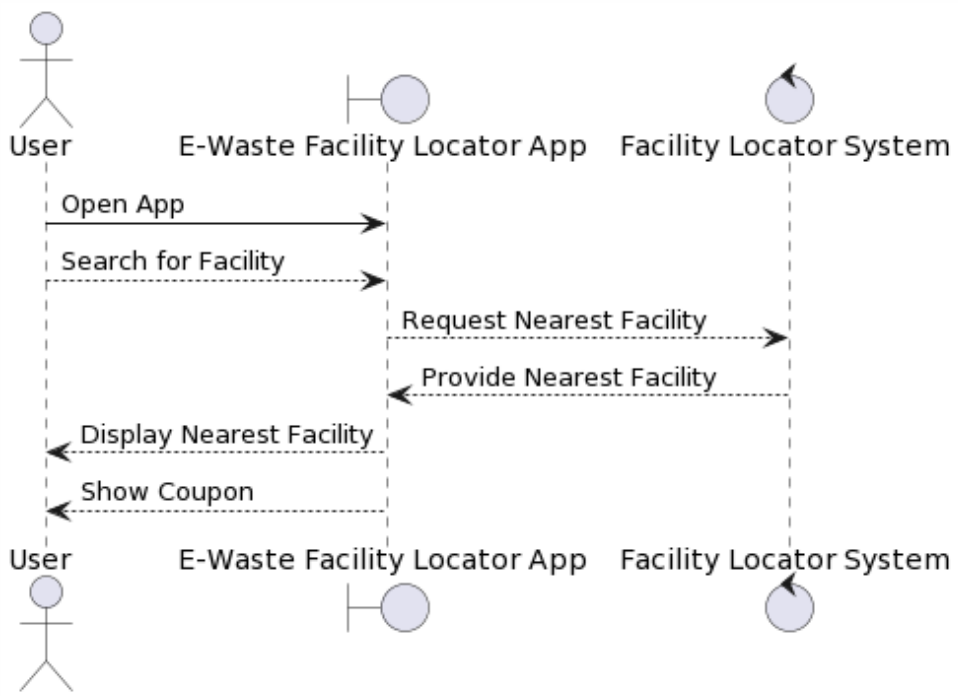
Institute Name: **CARE COLLEGE OF ENGINEERING**

Theme Name: **SMART AUTOMATION**

Idea/Approach Details

Describe your idea/Solution/Prototype here:

- Find local e-waste centers easily on our website.
- We'll use Google Maps API to show nearby e-waste centers, complete with **markers for easy identification**. Get address, contacts, business hours and accepted items in one glance.
- Access engaging **educational materials** like info-graphics, blogs, and articles to promote **responsible e-waste disposal**.
- We employ **Python Flask for API integration**, while AWS cloud services like **RDS (Relational Database Service) and Dynamo DB handle our database needs**.
- Earn credits for eco-friendly e-waste disposal, **redeemable for discounts or environmental donations**.
- Use our device model input form to **calculate disposal credits** and **precious metal content**.
- Our AI chatbot, powered by NLP, assists with your e-waste questions.



Describe your Technology stack here:

- HTML5, CSS, JavaScript
- FLASK
- AWS (RDS & Dynamo DB)
- Google Maps
- Amazon Lex

Idea/Approach Details

Describe your Use Cases here

- Find E-Waste Centers: Users visit the website to easily locate e-waste centers on a map.
- Educational Resources: Users access engaging materials to promote responsible e-waste disposal.
- API Integration: Flask (Python) handles various functionalities.
- Database Management: AWS RDS and DynamoDB manage user profiles, credits, and data.
- Earn Credits: Users earn credits for eco-friendly practices, redeemable for discounts or donations.
- Device Assessment: Users input device details to calculate disposal credits and precious metal content.
- AI Chatbot: An NLP-powered chatbot assists users with e-waste questions..

Describe your Dependencies / Show stopper here

Web Development Skills: Essential web development skills include HTML5, CSS, JavaScript, and Python.

Python and Flask Expertise: Proficiency in Python and the Flask framework is necessary for building the backend and handling API integrations.

AWS Account: You need an AWS (Amazon Web Services) account to utilize services like RDS and Dynamo DB.

Google Maps API Key: Obtain an API key from Google Maps to integrate the mapping functionality. This key is required to access the Google Maps API.

Amazon Lex Configuration: Setting up Amazon Lex and configuring it for the chatbot requires familiarity with Amazon Web Services.

Database Design: Expertise in database design is crucial for structuring and managing user profiles, credits, and other data effectively.

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Content Creation: Creating engaging educational materials like infographics, blogs, and articles requires content creation skills or collaboration with content creators.

User Authentication: If your application involves user accounts and credits, implementing user authentication and security measures is essential.

Team Member Details

Team Leader Name: **VIGNESHNATHAN R**

Branch : BE Stream : CSE Year : IV

Team Member 1 Name: **VIJAYKRISHNA B**

Branch : BE Stream : CSE Year : IV

Team Member 2 Name: **MAHESH E**

Branch : BE Stream : CSE Year : IV

Team Member 3 Name: **DEREK JOEL SAM M**

Branch : BE Stream : CSE Year : IV

Team Member 4 Name: **REENA A R**

Branch : BE Stream : CSE Year : III

Team Member 5 Name: **SHAMRIN NISHA H**

Branch : BE Stream : CSE Year : III

Team Mentor 1 Name: Type Your Name Here

Category : Academic Expertise (AI/ML/Blockchain etc): Domain Experience (in years):

Team Mentor 2 Name: Type Your Name Here

Category : Academic Expertise (AI/ML/Blockchain etc): Domain Experience (in years):