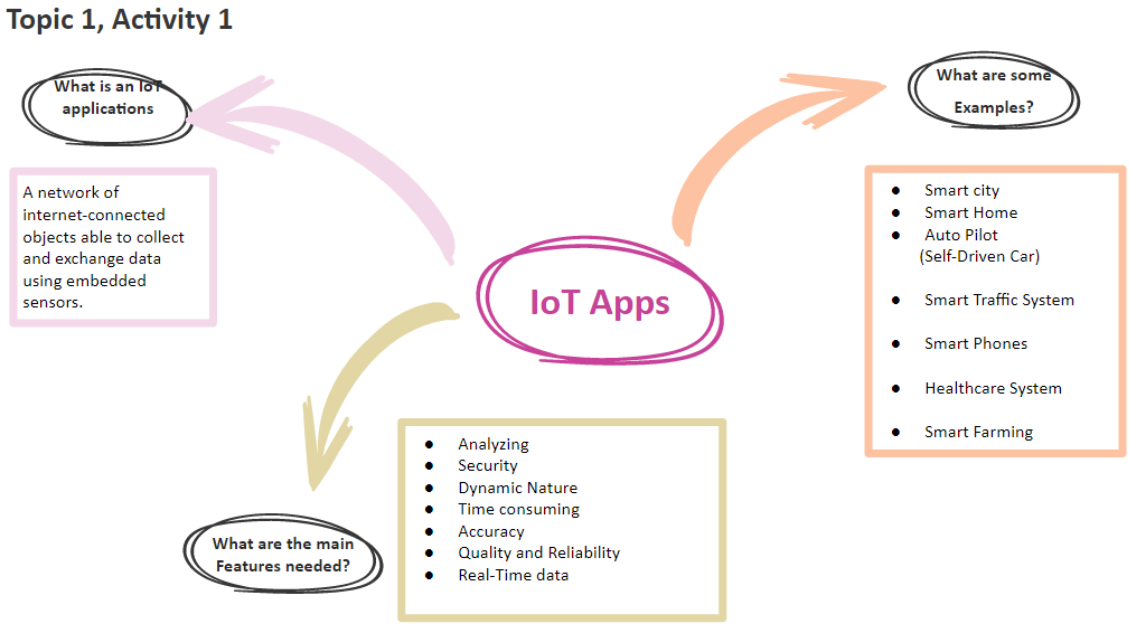
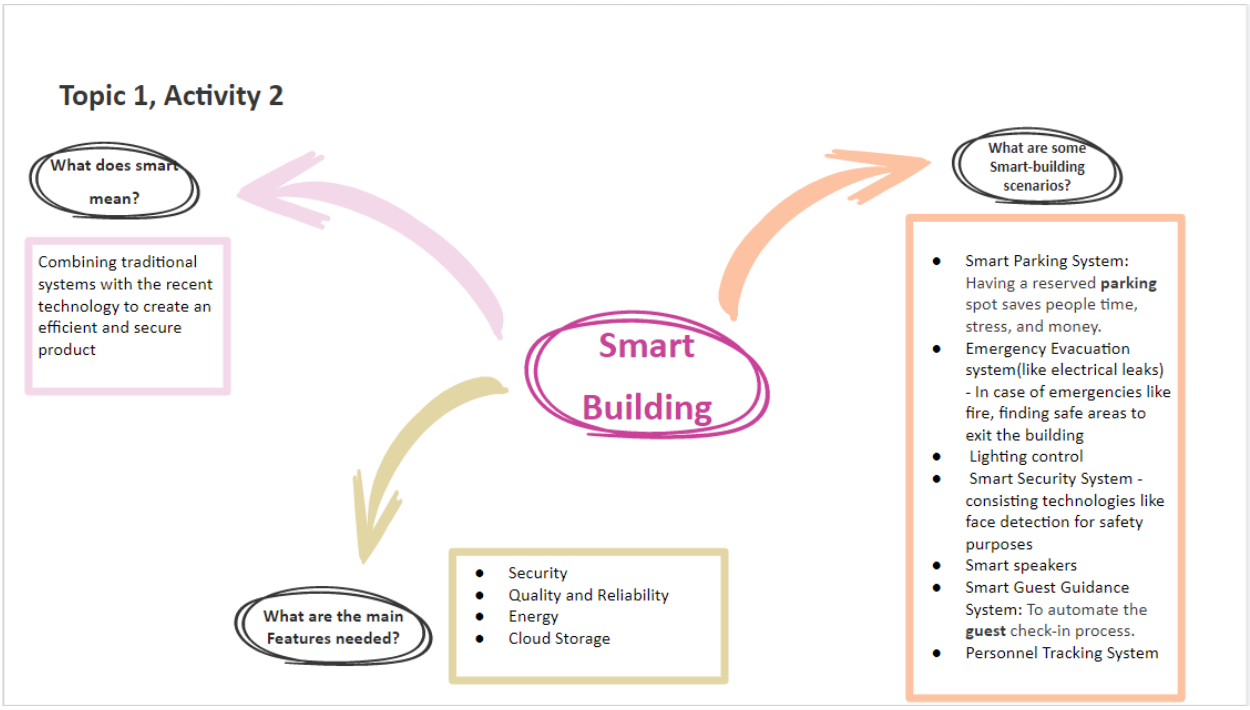
Name: Aaditya `Roll No:2110994838

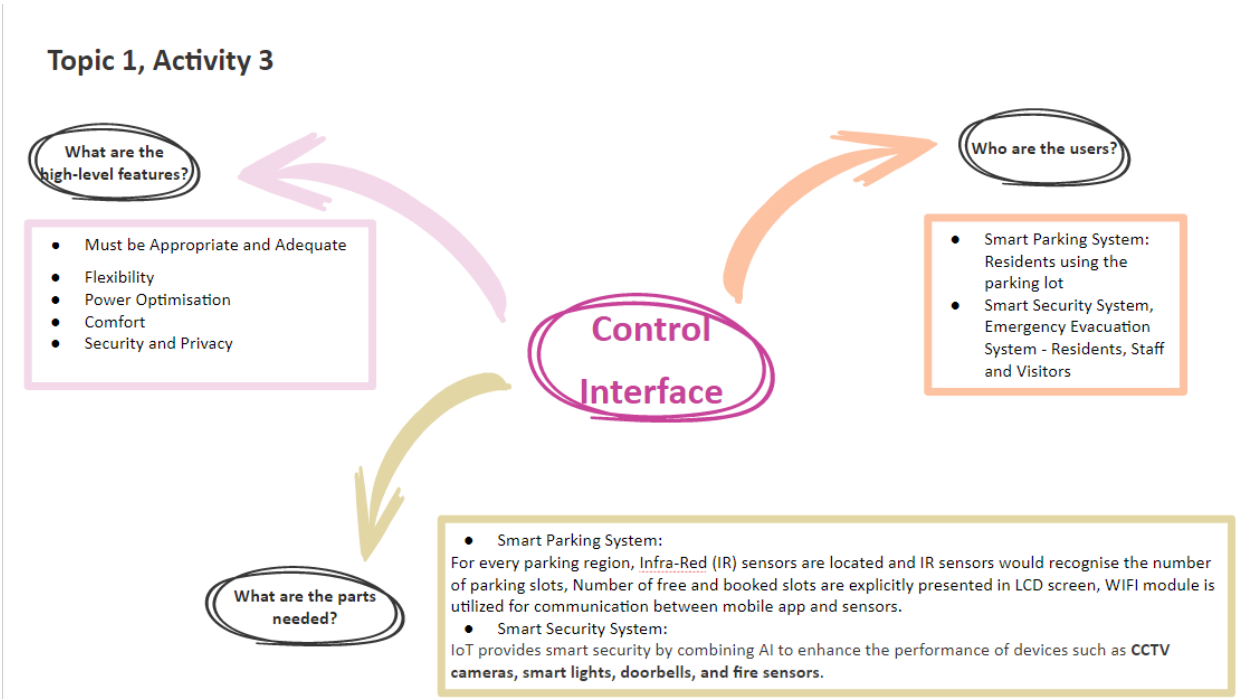
SIT209: Software Engineering 2: Developing Internet of things

Task 1.1P IoT Applications

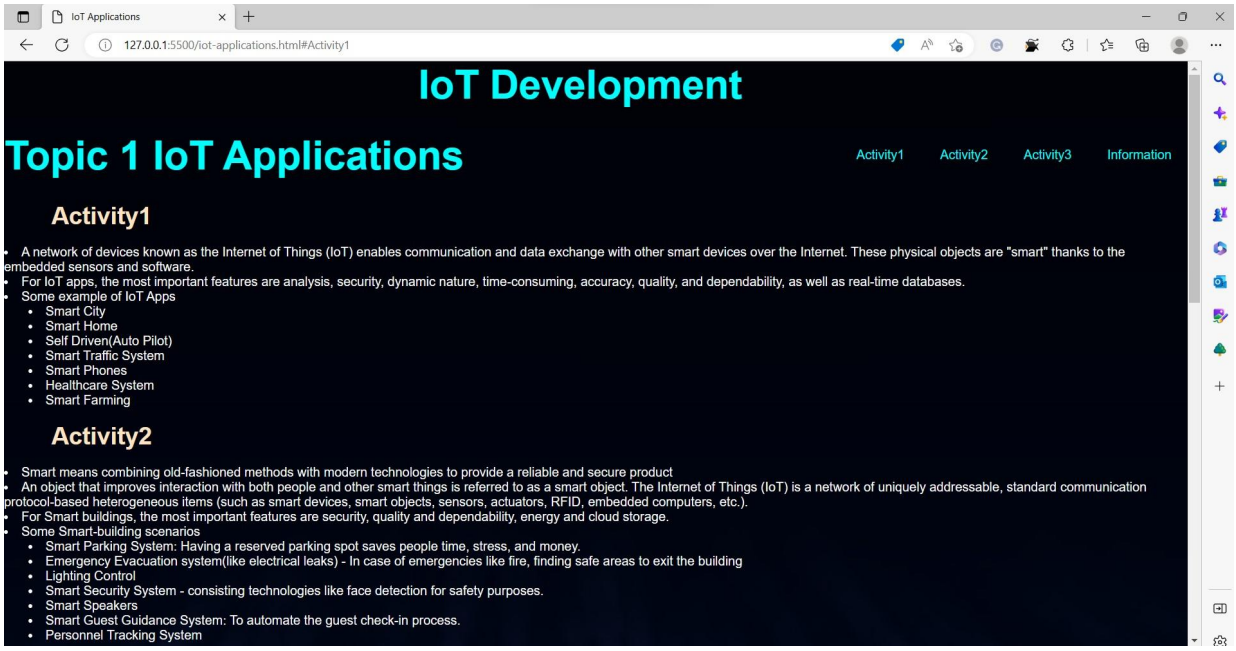
Activity Screenshots:

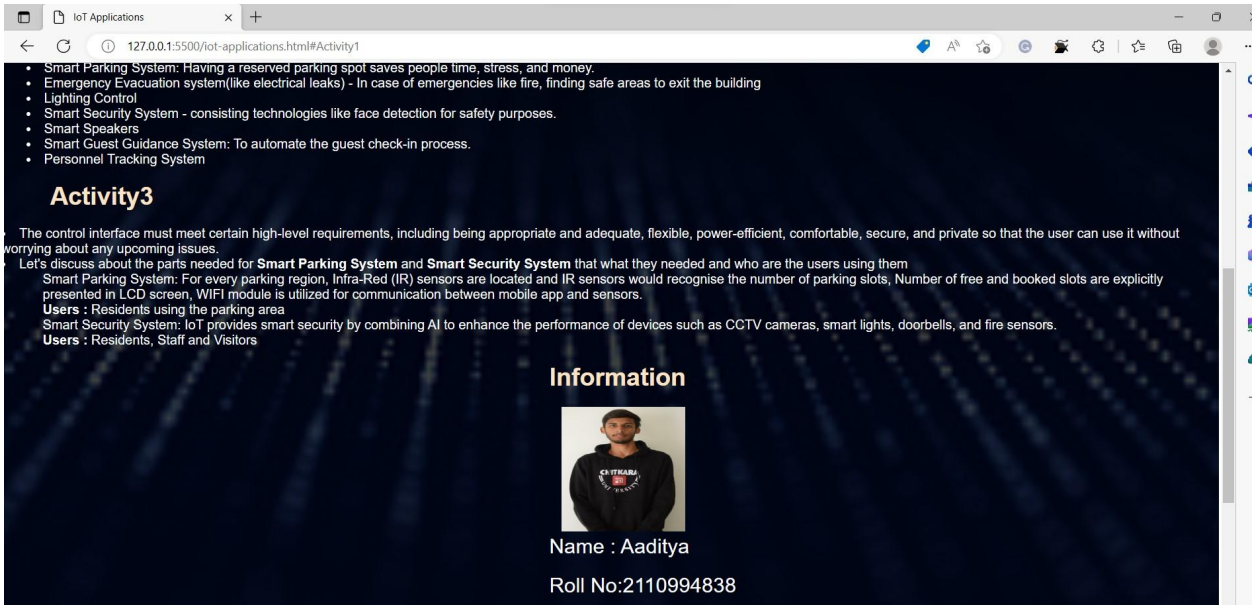


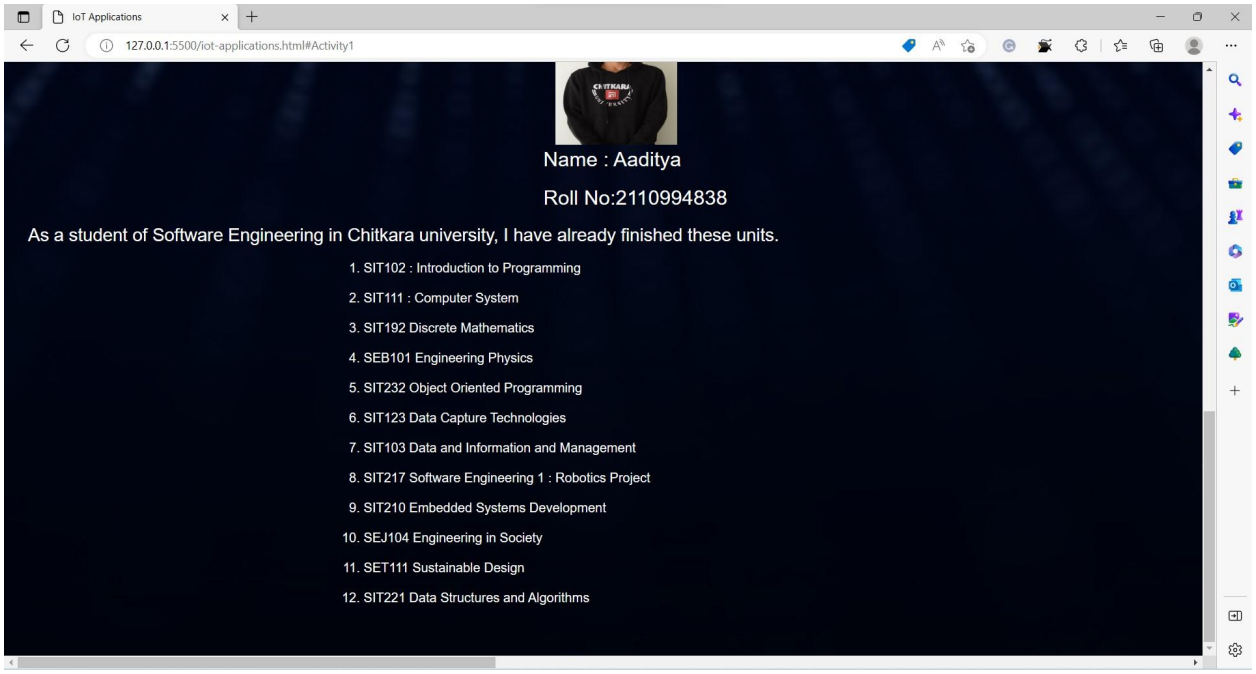




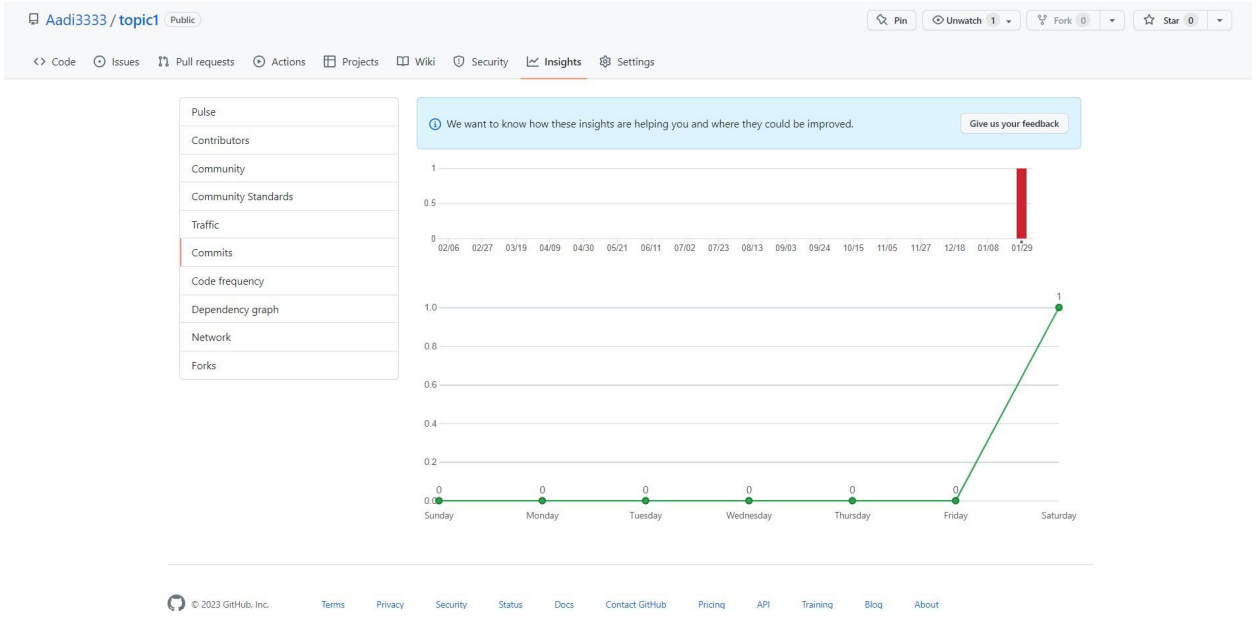
Screenshot of Webpage:


IoT Applications
127.0.0.1:5500/iot-applications.html#Activity1
IoT Development
Topic 1 IoT Applications
Activity1
Activity2
Activity3
Information
Activity1
A network of devices known as the Internet of Things (IoT) enables communication and data exchange with other smart devices over the Internet. These physical objects are "smart" thanks to the embedded sensors and software.
For IoT apps, the most important features are analysis, security, dynamic nature, time-consuming, accuracy, quality, and dependability, as well as real-time databases.
Some example of IoT Apps
Smart City
Smart Home
Self Driven(Auto Pilot)
Smart Traffic System
Smart Phones
Healthcare System
Smart Farming
Activity2
Smart means combining old-fashioned methods with modern technologies to provide a reliable and secure product
An object that improves interaction with both people and other smart things is referred to as a smart object. The Internet of Things (IoT) is a network of uniquely addressable, standard communication protocol-based heterogeneous items (such as smart devices, smart objects, sensors, actuators, RFID, embedded computers, etc.).
For Smart buildings, the most important features are security, quality and dependability, energy and cloud storage.
Some Smart-building scenarios
Smart Parking System: Having a reserved parking spot saves people time, stress, and money.
Emergency Evacuation system(like electrical leaks) - In case of emergencies like fire, finding safe areas to exit the building
Lighting Control
Smart Security System - consisting technologies like face detection for safety purposes.
Smart Speakers
Smart Guest Guidance System: To automate the guest check-in process.
Personnel Tracking System


IoT Applications
127.0.0.1:5500/iot-applications.html#Activity1
Smart Parking System: Having a reserved parking spot saves people time, stress, and money.
Emergency Evacuation system(like electrical leaks) - In case of emergencies like fire, finding safe areas to exit the building
Lighting Control
Smart Security System - consisting technologies like face detection for safety purposes.
Smart Speakers
Smart Guest Guidance System: To automate the guest check-in process.
Personnel Tracking System
Activity3
The control interface must meet certain high-level requirements, including being appropriate and adequate, flexible, power-efficient, comfortable, secure, and private so that the user can use it without worrying about any upcoming issues.
Let's discuss about the parts needed for Smart Parking System and Smart Security System that what they needed and who are the users using them
Smart Parking System: For every parking region, Infra-Red (IR) sensors are located and IR sensors would recognise the number of parking slots, Number of free and booked slots are explicitly presented in LCD screen, WIFI module is utilized for communication between mobile app and sensors.
Users : Residents using the parking area
Smart Security System: IoT provides smart security by combining AI to enhance the performance of devices such as CCTV cameras, smart lights, doorbells, and fire sensors.
Users : Residents, Staff and Visitors
Information
Name : Aaditya
Roll No:2110994838



Screenshot of GitGraph:



Webpage link: [IoT Applications]