

My Portfolio

WEB DEVELOPER - IOT ENGINEER - MOBILE DEVELOPER

Presentation by

**Septian
Na'im**



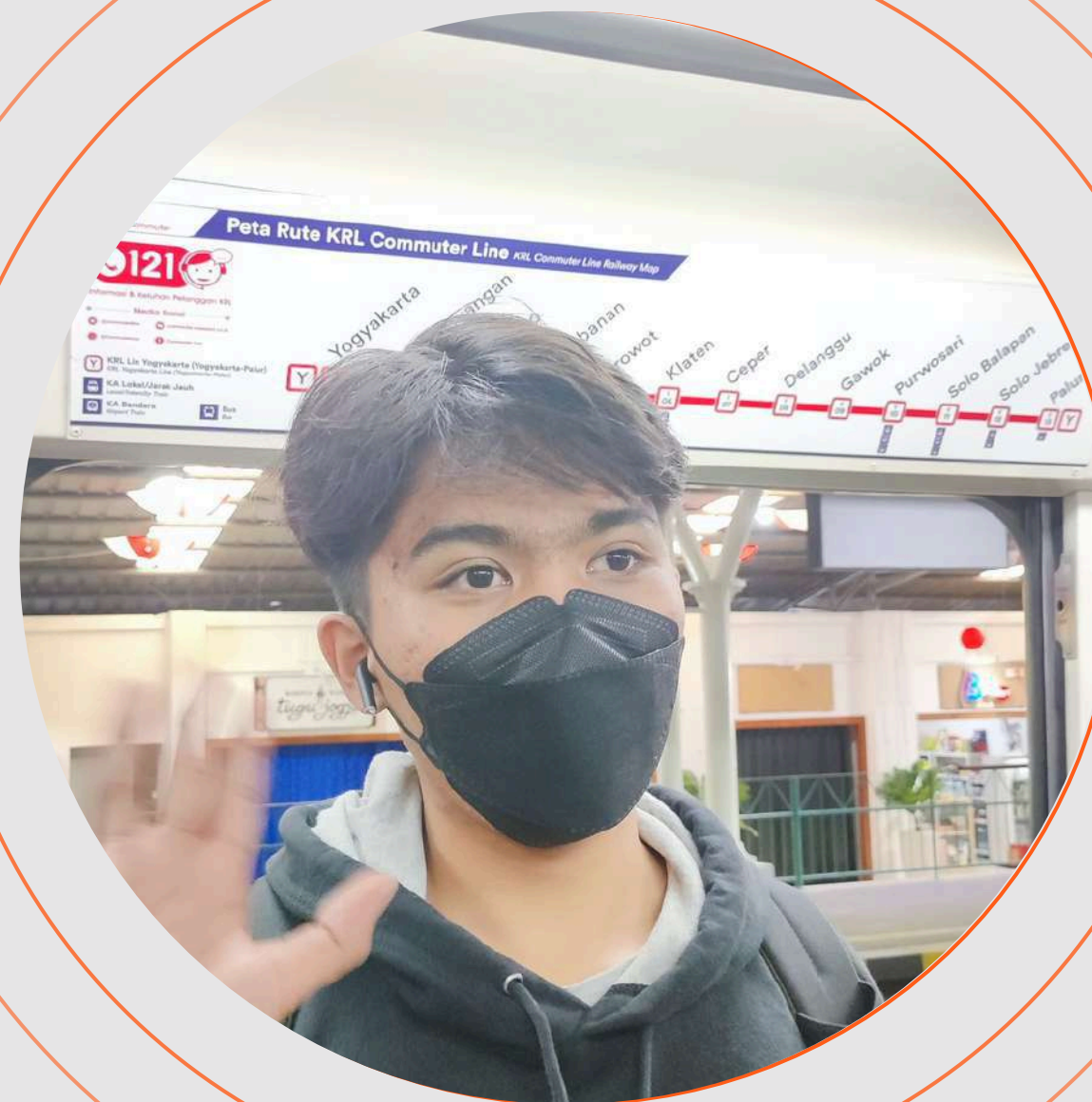


HELLO, I'M

Septian Ghuslal Nur Na'im

ABOUT ME

I am a Diploma III student in Information Technology at Brawijaya University, specializing in Software Engineering with a focus on Back-end Development & IoT Engineer. I enjoy collaborating in team environments, leveraging diverse perspectives to drive innovative solutions. My involvement in numerous training programs and projects has expanded my expertise across the technology landscape. I am eager to advance my professional career as a Software Development, with a particular interest in IoT, Machine Learning, web, and mobile development.





Education

SMA NEGERI 1 SRAGEN,
2019 - 2022



BRAWIJAYA UNIVERSITY,
2022 - 2025



Work Experience





Experience

Mobile Development Learning Path – Independent Study

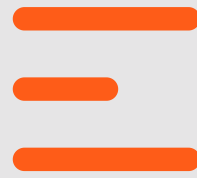
Feb 2024 – Jul 2024

- Developed Skills in Mobile Development: Gained hands-on experience in building mobile applications using Kotlin for Android development. Worked on projects involving both frontend and backend development.
- Capstone Project: Contributed as a Mobile Developer in a team project focusing on creating a tourism app for East Java. The project integrated Machine Learning and Google Cloud for enhanced user experiences, such as real-time recommendations and cloud storage.
- Team Collaboration & Agile Methodology: Practiced working in a collaborative environment with cross-functional teams of Machine Learning, Cloud Computing, and Mobile Development students using Agile methodologies and tools like Scrum.
- Professional Certifications: Completed certifications and training from Google Cloud, GoTo, and Traveloka in Mobile App Development, Google Cloud, and more.



**Bangkit Academy
2024**





Experience

Laboratory Assistant – Internet of Things & Human Centered Design

Brawijaya University | Feb 2024 – Juli 2024

- Facilitated IoT Practical Sessions: Assisted students in practical labs focusing on Internet of Things (IoT), including working with devices like ESP32, sensors, and microcontrollers, guiding them through real-world IoT applications.
- Human-Centered Design Projects: Helped students implement Human-Centered Design principles in their projects, emphasizing user needs, usability, and accessibility throughout the design and development process.
- Project Mentorship & Technical Support: Supported students in building IoT systems, from sensor integration to data management, while also assisting in the prototyping and design phases of their projects.
- Curriculum Development: Contributed to the preparation of lab materials, tutorials, and assessments, ensuring students developed critical skills in IoT and design thinking.



**Laboratory
Assistant**



Experience

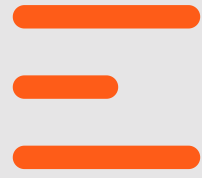
Chairperson – Provoks Programmer Vokasi

Brawijaya University | Jun 2024 – Jan 2025

- **Leadership & Community Development:** Directed a programming community, overseeing the growth of its members through workshops, coding competitions, and collaborative projects.
- **Playground Initiative:** Created a space for members to experiment and develop skills in areas like web, mobile, IoT, and multimedia by organizing peer-to-peer learning sessions and hands-on workshops.
- **Contest Management:** Led the organization of competitive events, such as hackathons and coding contests, which fostered healthy competition and showcased members' skills in problem-solving and programming.
- **Project Incubation:** Established the "Project Space," where students worked collaboratively on real-world software projects, receiving mentorship and technical support from industry professionals and alumni.
- **Target Achievements:** Initiated and executed plans to reach community goals, including creating professional portfolios for members, hosting guest lectures, and guiding final-year projects.



Provoks
(Programmer Vokasi)



Experience

IoT Engineer – PT Connecting Dots Nusai

Sep 2024 – Jan 2025

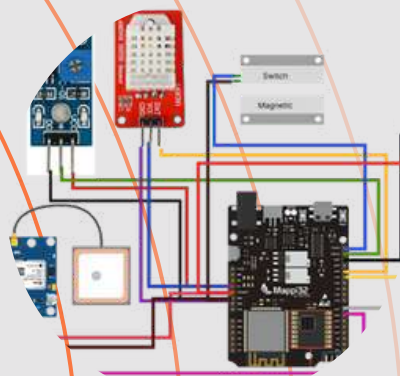
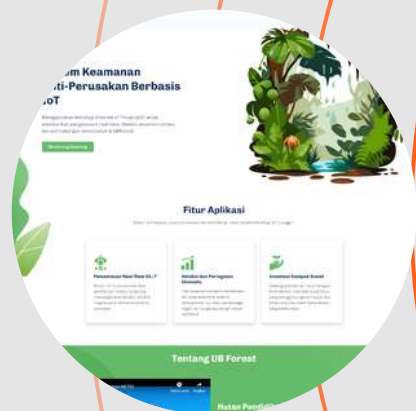
- Collaborated with the team to design and develop Internet of Things (IoT) solutions using LoRa and MQTT for remote monitoring applications.
- Developed Arduino and ESP32-based devices to connect sensors to a LoRa network, ensuring real-time data transmission to the server via MQTT.
- Integrated cloud platforms and visualization tools for live monitoring and data analytics.
- Optimized system performance and stability to ensure efficient and secure data transmission.
- Troubleshoot hardware and software issues in IoT communication, enhancing overall system reliability.



**PT Conneting Dots
Nusa**



Project Portfolio



PROJECT 01

Jatim Journey

Jatim Journey is a mobile application developed as part of the capstone project for Bangkit Academy 2024. This project aims to simplify travel planning for users, focusing particularly on local, lesser-known, yet attractive destinations in Indonesia. The application integrates mobile development, machine learning, and cloud computing technologies to provide a personalized and user-friendly service.

Roles and Responsibilities

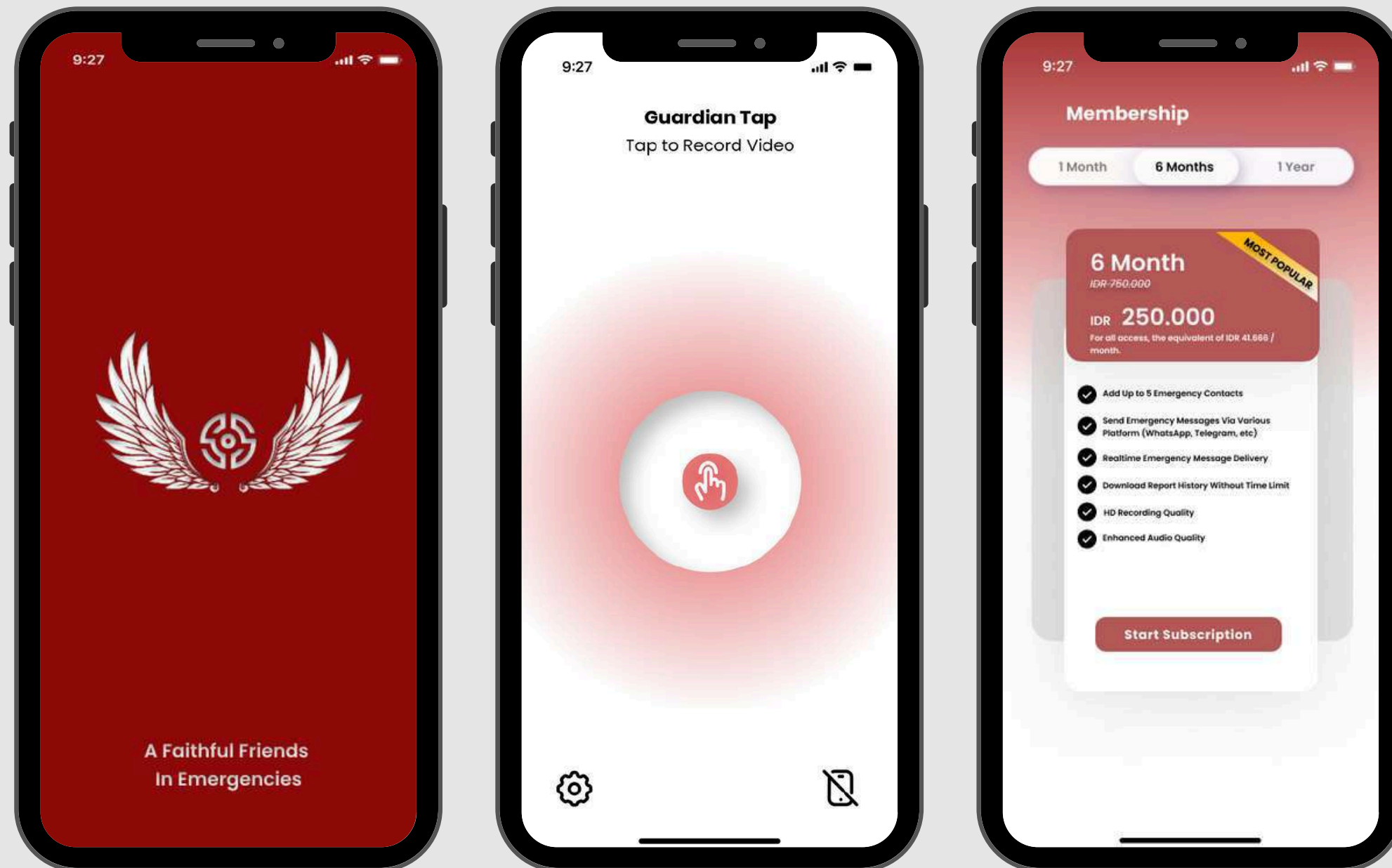
- Served as a Mobile Developer focusing on user interface development and API integration.
- Developed destination recommendation features utilizing trained machine learning models.
- Integrated the mobile application with Google Cloud services to ensure optimal operation.

Source Code



Technologies Used





Source Code



PROJECT 02

Guardian Tap

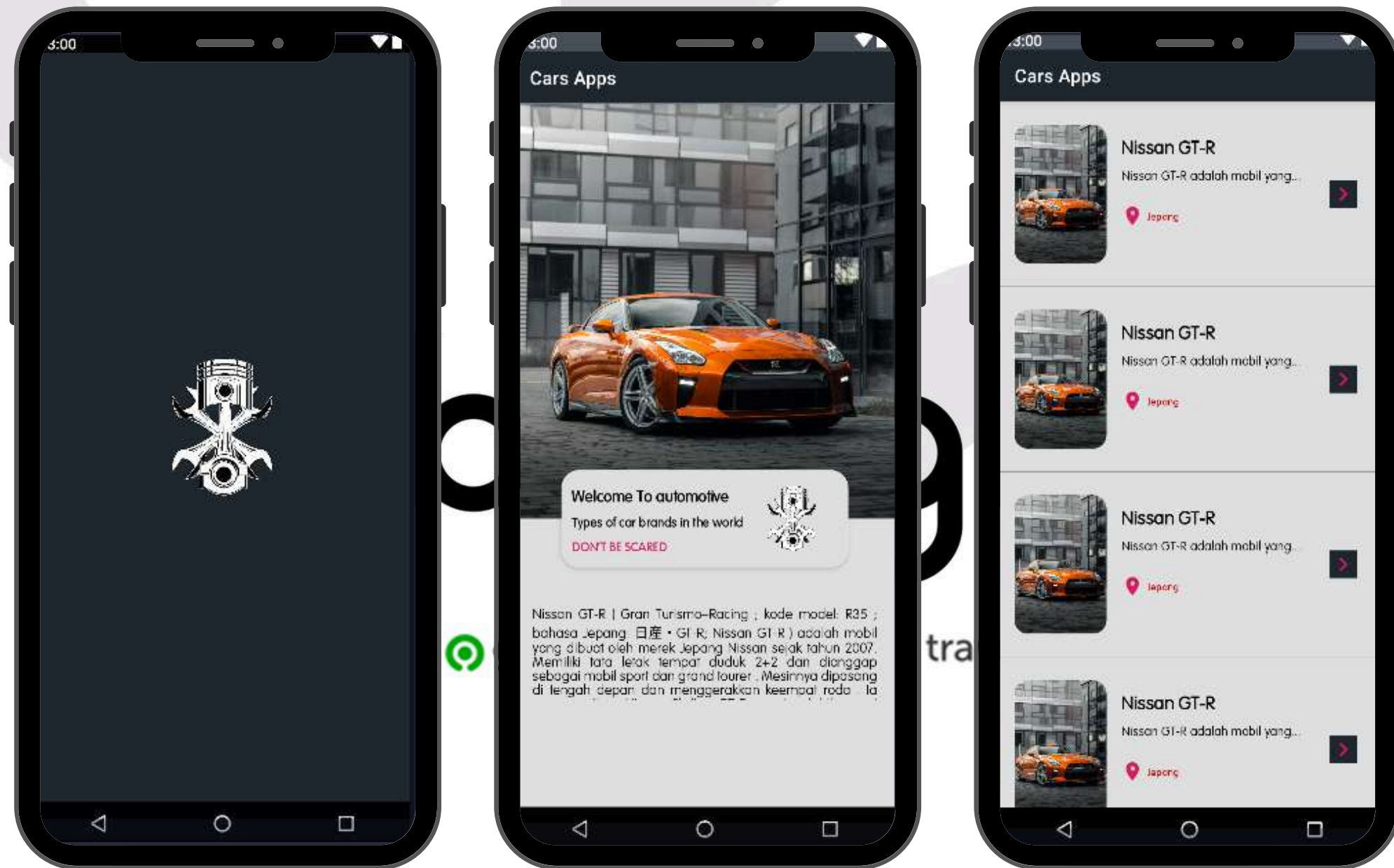
Jatim Journey is a mobile application developed as part of the capstone project for Bangkit Academy 2024. This project aims to simplify travel planning for users, focusing particularly on local, lesser-known, yet attractive destinations in Indonesia. The application integrates mobile development, machine learning, and cloud computing technologies to provide a personalized and user-friendly service.

Roles and Responsibilities

- Served as a Mobile Developer focusing on user interface development and API integration.
- Developed destination recommendation features utilizing trained machine learning models.
- Integrated the mobile application with Google Cloud services to ensure optimal operation.

Technologies Used





PROJECT 03

Cars Apps

This project is a simple Android application developed to display a list of 10 sports cars along with their descriptions and origins using Android's RecyclerView. The main objective of this project is to enhance my Android Development skills while working on concepts such as Activities, RecyclerView, Intent, and UI design. The project also serves as an update for my Android Basic Programming Certification on Dicoding.

Features Added:

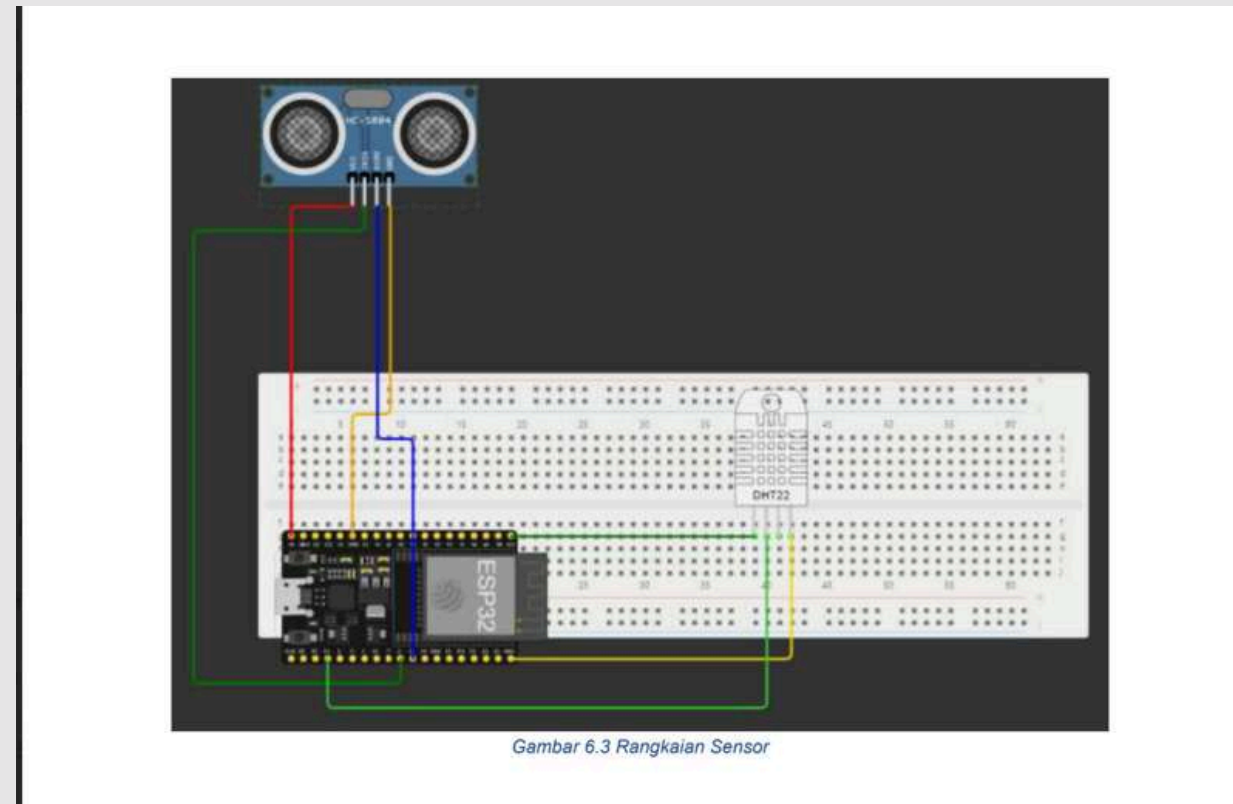
- Main Activity with List Display: Shows a list of 10 sports cars using RecyclerView, displaying each car's name, description, and origin.
- Item Detail Activity: Displays additional details of a selected car with images and facts, implemented using Intent.
- About Activity: Includes personal information like my profile picture, name, and email.
- Splash Screen: A brief splash screen with the app's logo shown when launched.
- Favorite Button: Allows users to mark and revisit favorite cars.
- Sharing Feature: Users can share their favorite car item via a Share Button, linking to the Genshin Impact character page.

Source Code



Technologies Used





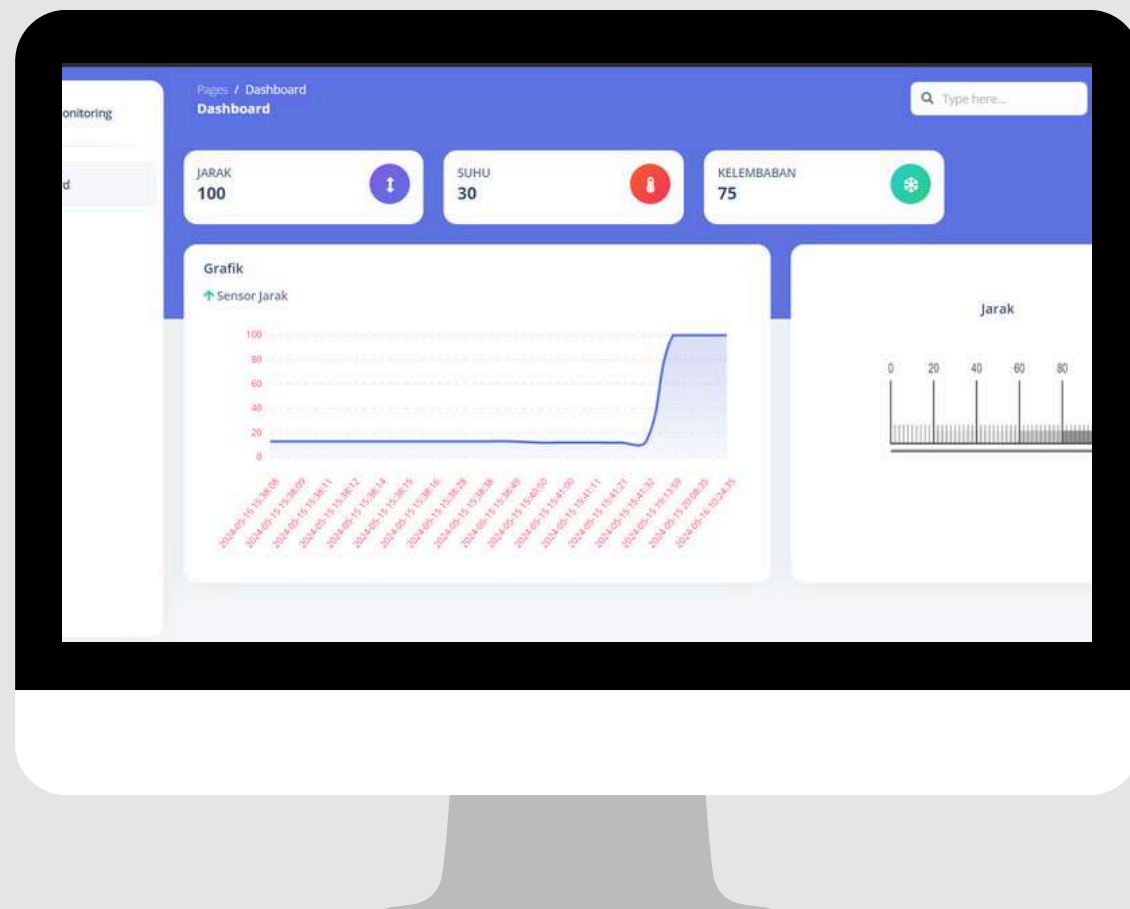
Souce Code



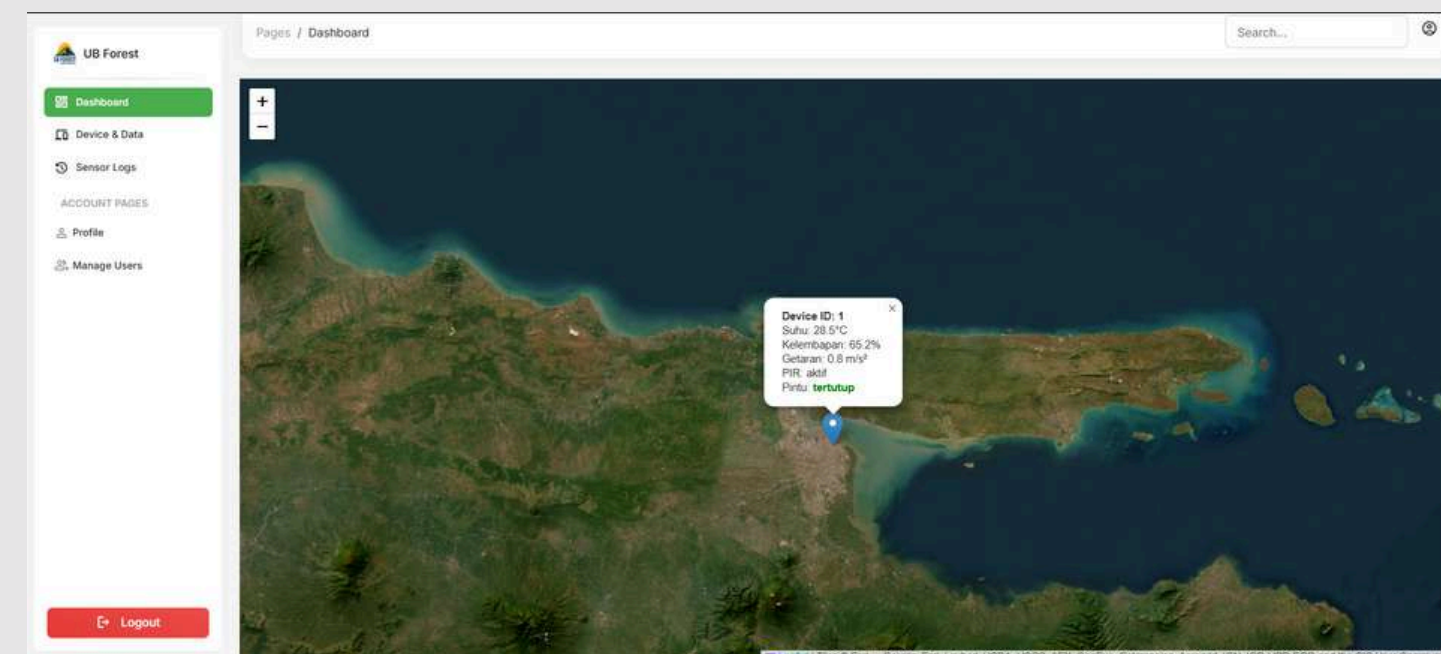
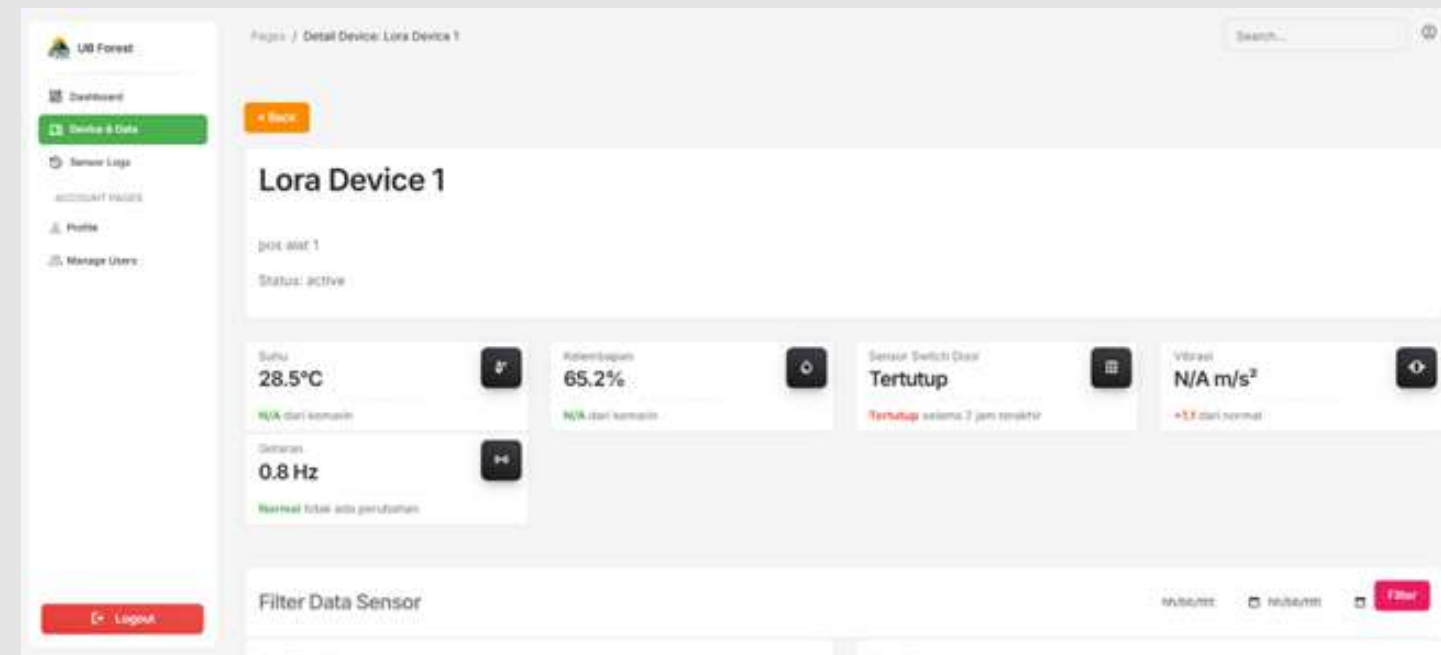
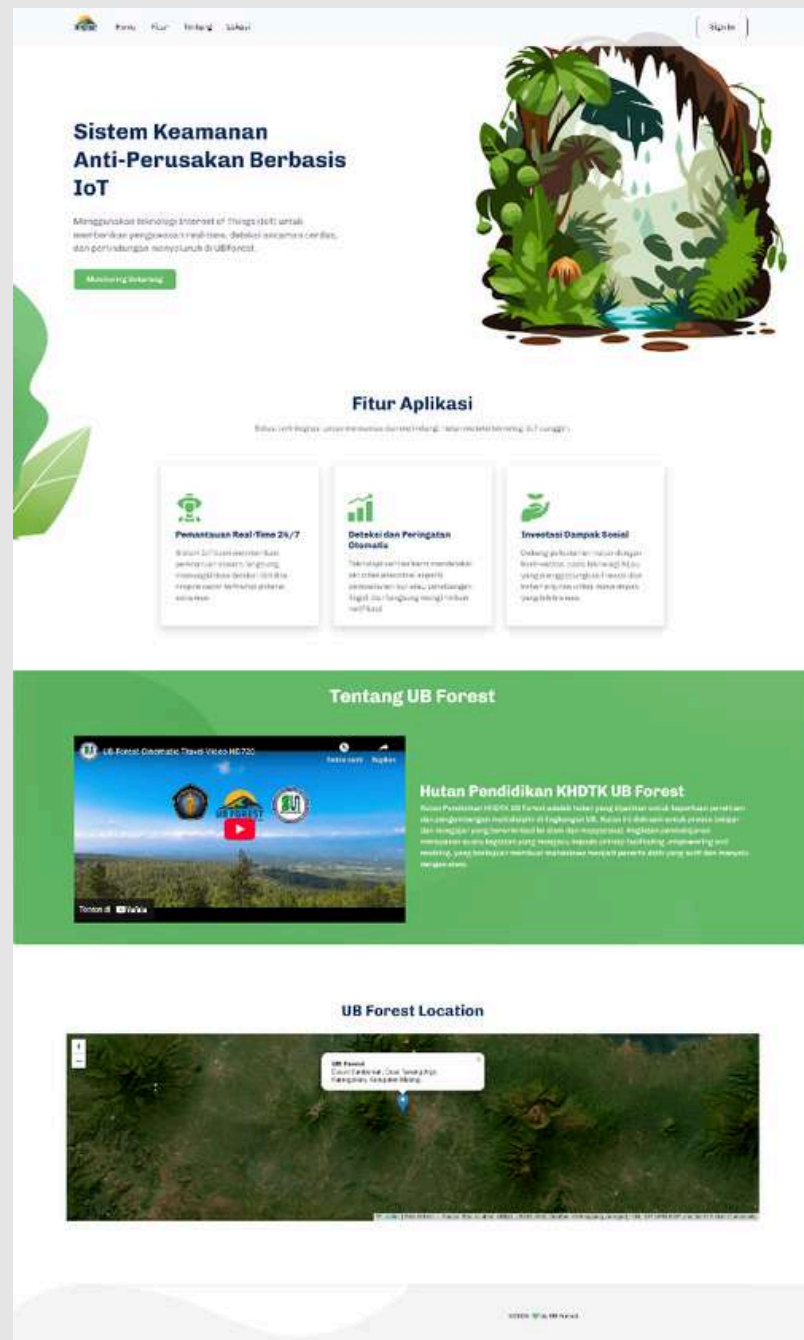
PROJECT 04

Website Dashboard IoT Framework CI 3

This project is an IoT Dashboard developed using the CodeIgniter 3 (CI3) framework, integrating ESP32 to enable real-time monitoring of environmental data. The dashboard collects data from the DHT22 Humidity Sensor and the Ultrasonic Sensor, providing remote access to measurements of humidity and distance. The ESP32 microcontroller acts as the central device, transmitting data from the sensors via Wi-Fi to the web dashboard, allowing users to monitor the data remotely. The DHT22 sensor measures humidity levels in the environment, while the Ultrasonic Sensor measures the distance to objects, useful for applications such as object detection and proximity sensing. The dashboard updates dynamically, displaying real-time values of humidity and distance, with a clean and user-friendly interface designed for ease of interaction. The dashboard is fully responsive, ensuring compatibility with both mobile and desktop devices, enabling users to monitor their IoT devices from anywhere with internet access.

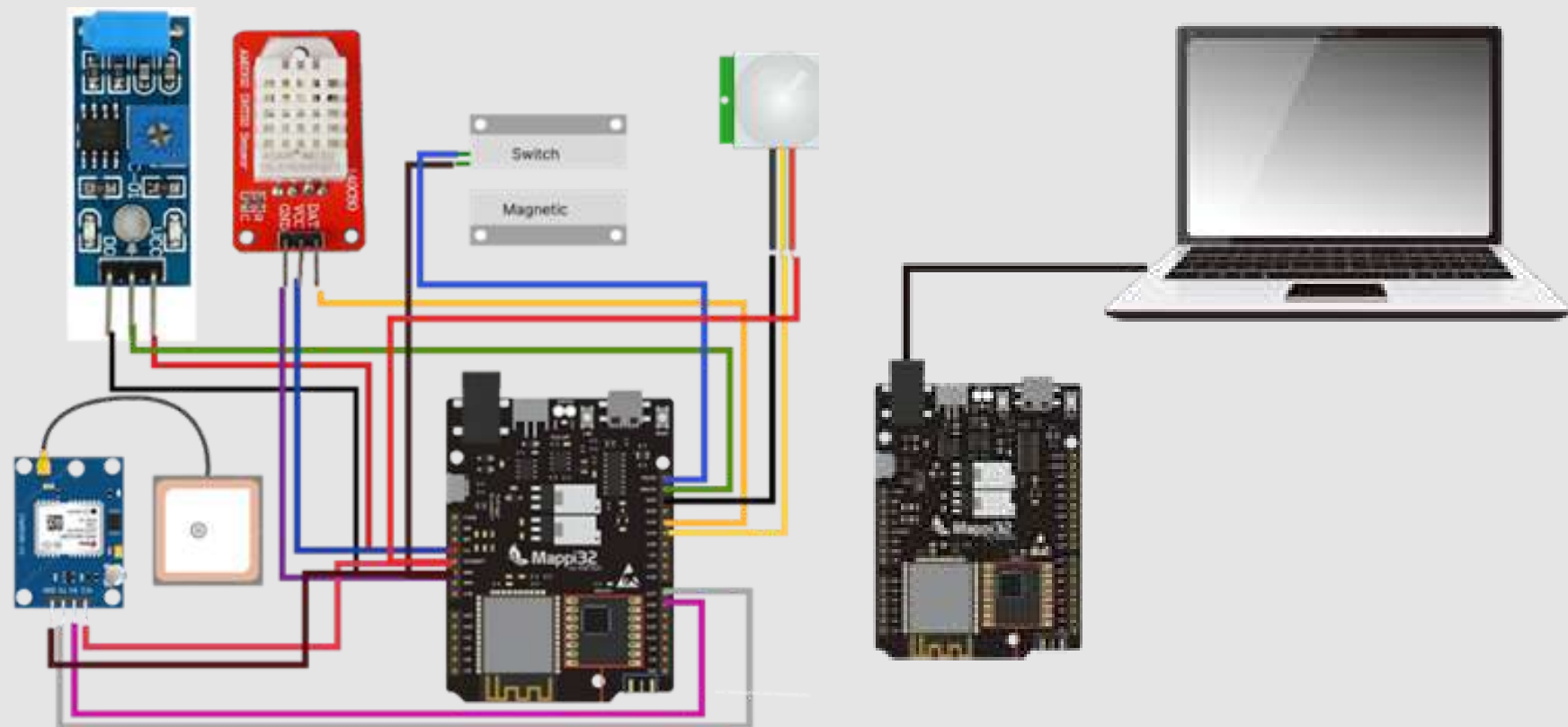


Sistem monitoring keamanan di Ub Forest



Sistem monitoring keamanan di Ub Forest

Skema Hardware



Souce Code



PROJECT 05

This project aims to develop an IoT-based security monitoring system at UB Forest, Universitas Brawijaya, to protect surveillance infrastructure such as cameras, solar panels, and communication devices from damage or theft. The system uses LoRaWAN for long-range communication and PHP Laravel to display sensor data in real-time. Various sensors are used, including a PIR sensor for motion detection, DHT22 for measuring temperature and humidity, SW-420 for detecting vibrations, GPS Ublox Neo-6M for determining device location, and a Switch Door for monitoring door access. This system is expected to improve operational efficiency, accelerate damage detection, and reduce dependence on physical inspections, thereby ensuring device security and supporting the sustainability of conservation efforts at UB Forest.

Technologies Used



Aplikasi Pengelolaan Hutan Berbasis IoT untuk UB Forest

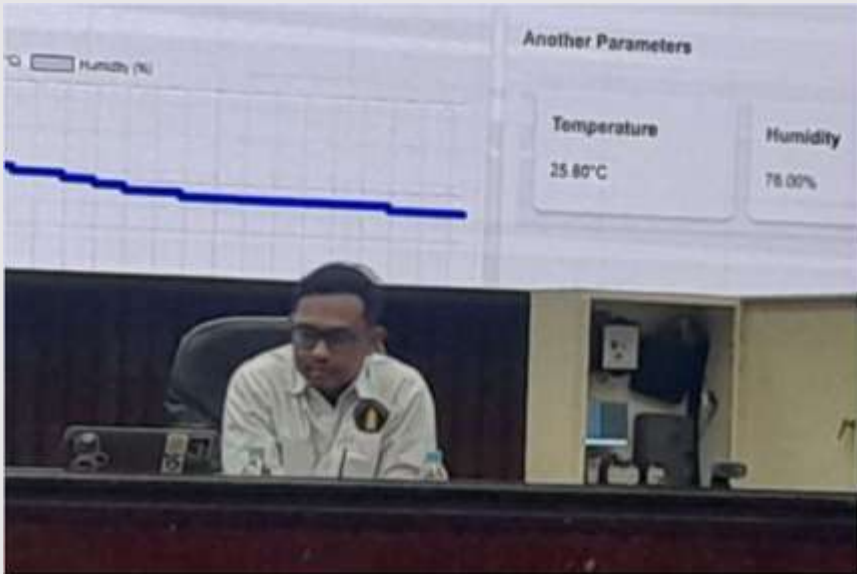


Aplikasi Pengelolaan Hutan Berbasis IoT untuk UB Forest

PROJECT 06



UB Forest Gunakan Teknologi IoT, Bisa Deteksi Hewan Langka
Universitas Brawijaya dalam pengelolaan UB Forest kini telah memanfaatkan teknologi Internet of Thing (IoT) yang dirancang oleh
ketik media / Dec 11, 2024



Universitas Brawijaya memanfaatkan AI dan IoT untuk pengelolaan hutan
Universitas Brawijaya (UB) memanfaatkan teknologi kecerdasan buatan (AI) dan Internet of Things (IoT) dalam meningkatkan efektivitas pengelolaan hutan yang ...
ANTARA News Jawa Timur / Dec 11, 2024

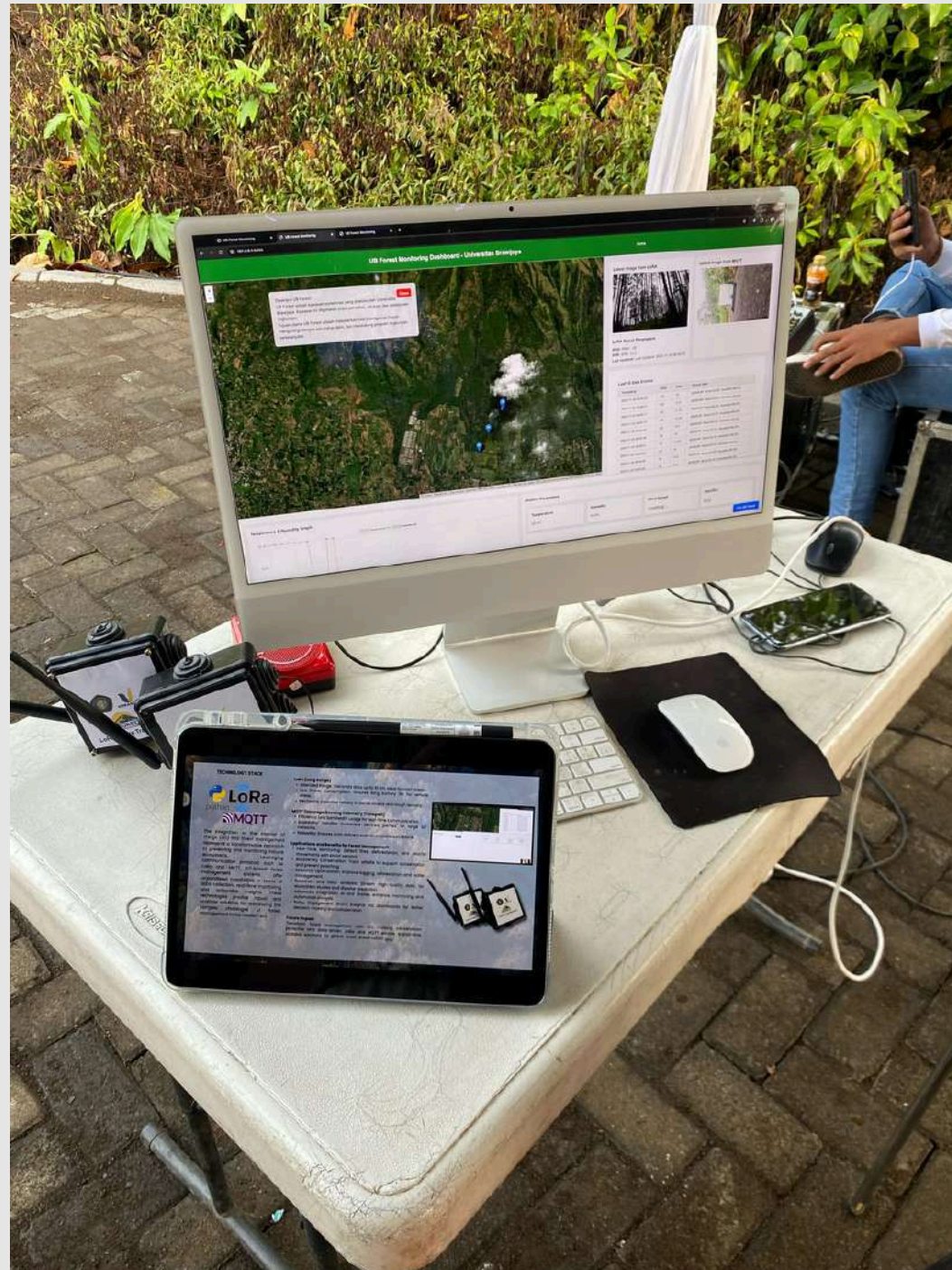


Universitas Brawijaya Perkenalkan Alat Pengawasan Hutan Berbasis AI dan IoT
Integrasi AI dan IoT menggunakan teknologi You Only Look Once (YOLO) untuk mendeteksi objek dengan cepat.
Bisnis.com / Dec 12, 2024



Dosen Brawijaya Ciptakan Alat Pengelolaan Hutan Berbasis AI, Mampu Mitigasi Kebakaran dan Banjir
Dosen Universitas Brawijaya (UB) Malang, Jawa Timur menciptakan alat berbasis Internet of Thing (IoT) untuk pengelolaan hutan. Dosen Universitas Brawijaya (UB)... | Halaman 3
SINDOnews.com / Dec 22, 2024

Aplikasi Pengelolaan Hutan Berbasis IoT untuk UB Forest

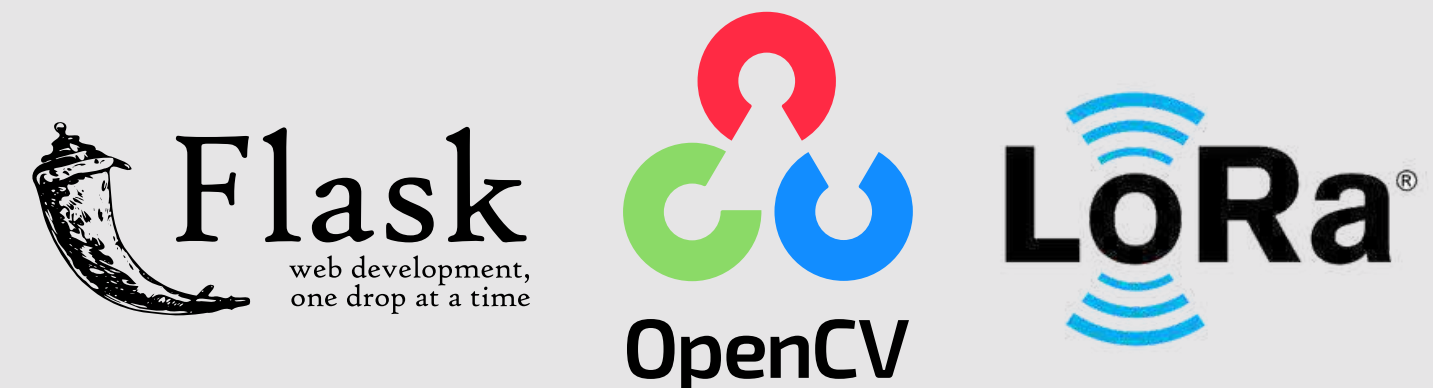


PROJECT 06

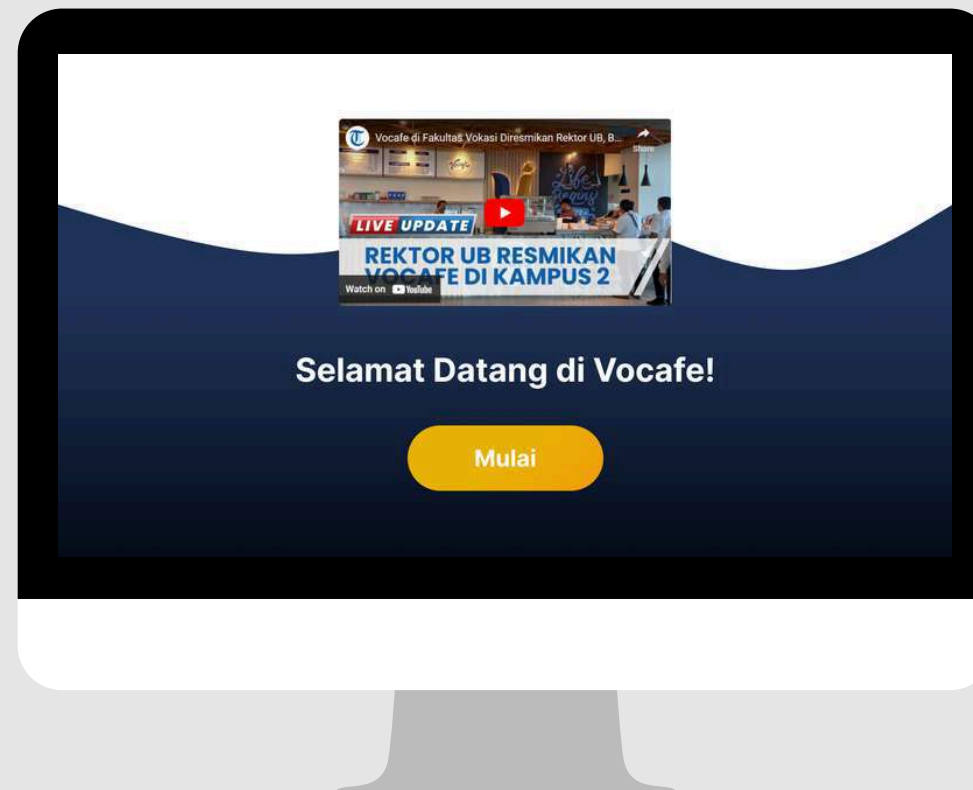
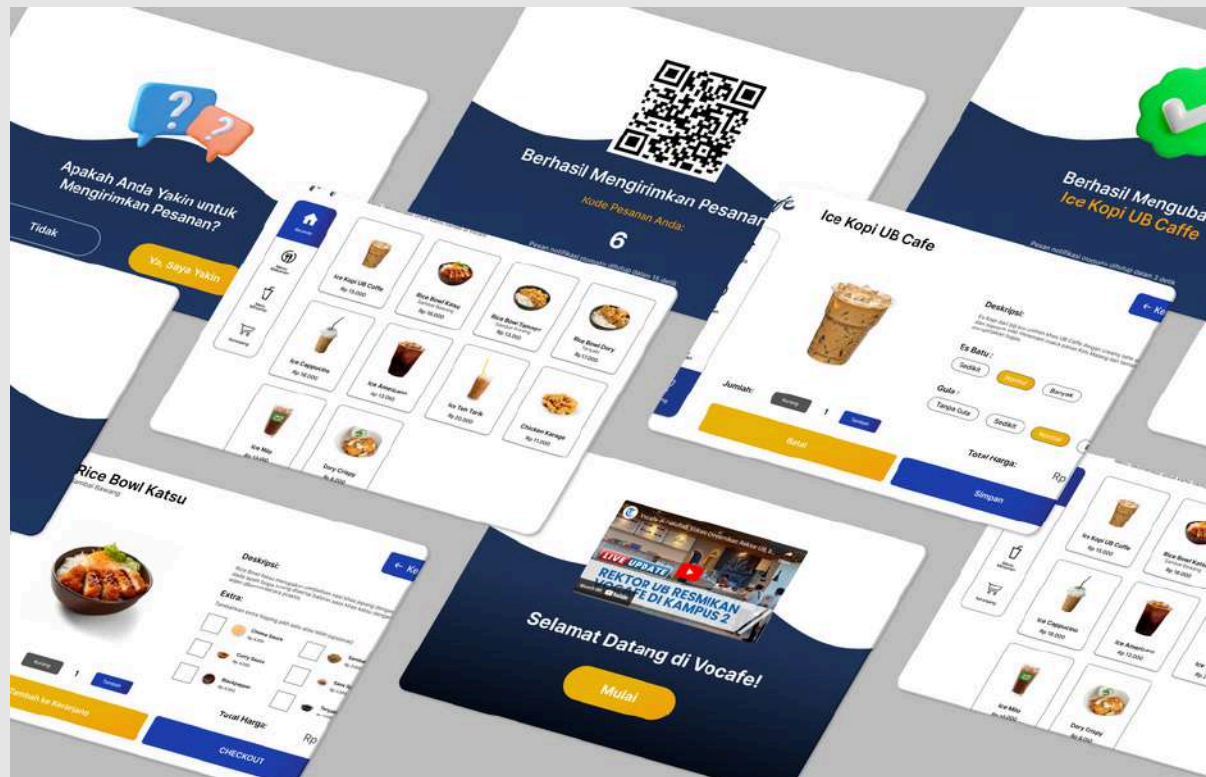
This project is a development of Internet of Things (IoT) and Artificial Intelligence (AI) technology applied in UB Forest, an educational forest owned by Brawijaya University. This system is designed to monitor biophysics, climate, wildlife, and detect forest and land fires in real time. In addition, this system is equipped with sensors that can detect the movement of rare animals, humans, and vehicles passing through certain areas.

One of the main challenges in forest management today is effective and efficient monitoring. The use of satellites to detect forest fires is often used, but has weaknesses in terms of information speed because the satellites are constantly moving. As a solution, this system uses the LoRa (Long Range) network which has a wide range, although data transfer is slightly slower than 3G or 4G networks. However, LoRa is very effective in remote areas such as forests, which are difficult to reach by internet signals.

Technologies Used



Sistem kontrol gestur interaktif untuk kiosk pemesanan mandiri menggunakan Leap Motion Controller





PROJECT 06

This research aims to design and develop a Self-Ordering Kiosk (SOK) using Leap Motion Controller (LMC) for touchless, interactive gesture control. The system is designed for restaurants and public kiosks, addressing the need for hygiene and safety in the post-COVID-19 era. By utilizing the Leap Motion Controller, the system allows users to interact with the kiosk interface through hand gestures, such as pointing, swiping, and selecting menu items, without touching the screen. This enhances user experience while minimizing contamination risks.

The project involves developing the interface using NextJS, integrated with Leap Motion for hand gesture detection. The system aims to provide a more intuitive and hygienic alternative to traditional touchscreens. Usability testing was conducted to evaluate the system's effectiveness, focusing on user satisfaction, response time, and accuracy.

The test results show that the system improves user experience by reducing interaction time and providing a cleaner alternative. However, challenges remain, such as Leap Motion's responsiveness and the user's adaptation to gesture control. Overall, this system contributes positively to the development of touchless technology, offering a user-friendly solution for future applications in public spaces like restaurants.

Technologies Used

LEAP MOTION NEXT.js



Source Code



SERTIFIKAT MAGANG



Link Sertifikat



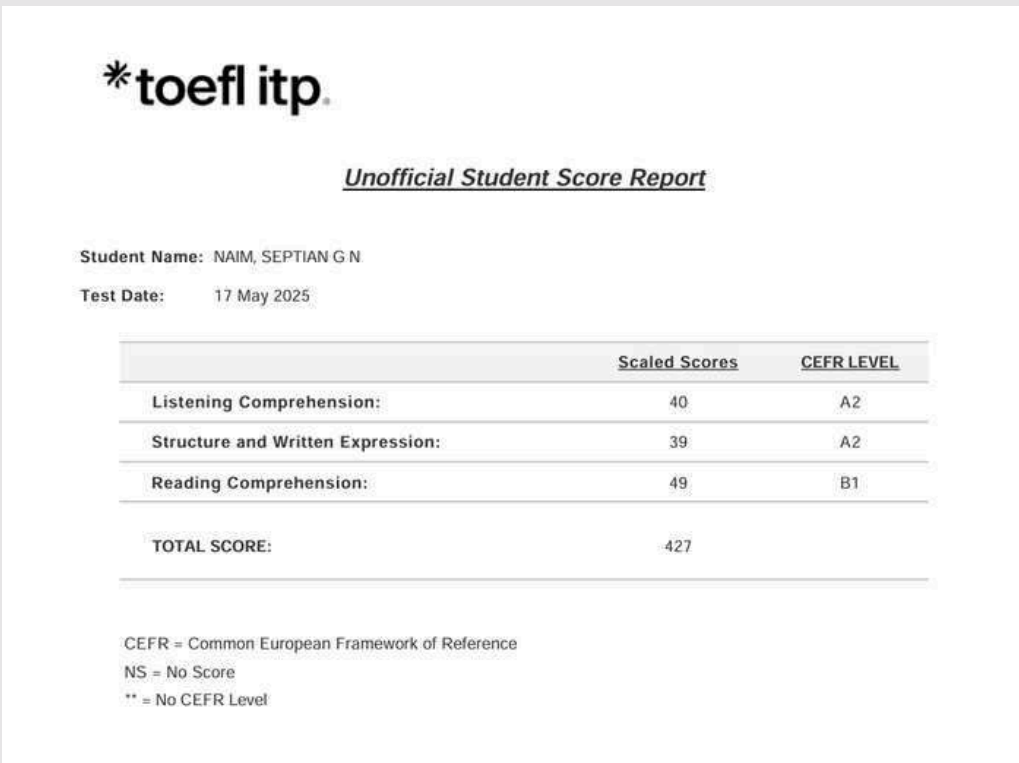
SERTIFIKAT LOMBA



Link Sertifikat



SERTIFIKAT SKILL



Link Sertifikat



HAK CIPTA KARYA

REPUBLIK INDONESIA
KEMENTERIAN HUKUM DAN HAK ASASI MANUSIA

SURAT PENCATATAN CIPTAAN

Dalam rangka perlindungan ciptaan di bidang ilmu pengetahuan, seni dan sastra berdasarkan Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta, dengan ini menerangkan:

Nomor dan tanggal permohonan : EC090202474796, 31 Juli 2024

Pencipta
Nama : **Rachmad Andri Atmoko, SST, MT, Muhammad Izani N'iam dkk**
Alamat : **Di. Bendojulang RT 04 RW 01 Saanukulon, Saron Kulon, Hilir, Jawa Timur, 66151**
Kewarganegaraan : **Indonesia**

Pemegang Hak Cipta
Nama : **Direktorat Inovasi dan Kewasan Sains dan Teknologi Universitas Brawijaya**
Alamat : **Gedung Layanan Bersama Lantai 2, Ketawanggede, Lowokwaru, Malang, Jawa Timur 65145**
Kewarganegaraan : **Indonesia**
Jenis Ciptaan : **Buku**
Judul Ciptaan : **MEMBANGUN WEB IOT DASHBOARD MENGGUNAKAN FRAMEWORK CODEIGNITER**
Tanggal dan tempat diumumkan untuk pertama kali di wilayah Indonesia atau di luar wilayah Indonesia : **24 Mei 2024, di Malang**
Jangka waktu perlindungan : **Berlaku selama 50 (lima puluh) tahun sejak Ciptaan tersebut pertama kali dilakukan Pengumuman.**
Nomor pencatatan : **000655141**

adalah benar berdasarkan keterangan yang diberikan oleh Pemohon.
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a.b.
Direktur Hak Cipta dan Desain Industri

IGNATIUS M.T. SILALAH
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Nomor dan tanggal permohonan : 60/00202489431, 21 Agustus 2024

Pencipta
Nama : **Ir. I Dewa Made Widia, MT, Muhammad Izan N'iam, S.Kom, M.Eng dkk**
Alamat : **Jl. Karsanari Dalam 39, R1 002 / Rt. 001, Kapanjan Blimbing, Hilir, Malang, Jawa Timur, 65121**
Kewarganegaraan : **Indonesia**

Pemegang Hak Cipta
Nama : **Direktorat Inovasi dan Kewasan Sains dan Teknologi Universitas Brawijaya**
Alamat : **Gedung Layanan Bersama Lantai 2, Ketawanggede, Lowokwaru, Malang, Jawa Timur 65145**
Kewarganegaraan : **Indonesia**
Jenis Ciptaan : **Program Komputer**
Judul Ciptaan : **Sistem Pemrosesan Menu Makanan Digital Dengan Interaksi Hand Gesture**
Tanggal dan tempat diumumkan untuk pertama kali di wilayah Indonesia atau di luar wilayah Indonesia : **4 Juni 2024, di Malang**
Jangka waktu perlindungan : **Berlaku selama 50 (lima puluh) tahun sejak Ciptaan tersebut pertama kali dilakukan Pengumuman.**
Nomor pencatatan : **000661747**

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Dalam rangka perlindungan ciptaan di bidang ilmu pengetahuan, seni dan sastra berdasarkan Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta, dengan ini menerangkan:

Nomor dan tanggal permohonan : 14/002024216443, 23 Oktober 2024

Pencipta
Nama : **Rachmad Andri Atmoko, SST, MT, Rizki Rahmat Hidayatullah, S.Hut., M.Si, dkk**
Alamat : **Di. Bendojulang RT 04 RW 01, Kal. Saron Kulon, Saron Kulon, Hilir, Jawa Timur, 66151**
Kewarganegaraan : **Indonesia**

Pemegang Hak Cipta
Nama : **Direktorat Inovasi dan Kewasan Sains dan Teknologi Universitas Brawijaya**
Alamat : **Gedung Layanan Bersama Lantai 2, Ketawanggede, Lowokwaru, Malang, Jawa Timur 65145**
Kewarganegaraan : **Indonesia**
Jenis Ciptaan : **Program Komputer**
Judul Ciptaan : **Sistem Keamanan Anti-Perusakan Pada Perangkat Pengawasan Di I-H Forest**
Tanggal dan tempat diumumkan untuk pertama kali di wilayah Indonesia atau di luar wilayah Indonesia : **14 Oktober 2024, di Malang**
Jangka waktu perlindungan : **Berlaku selama 50 (lima puluh) tahun sejak Ciptaan tersebut pertama kali dilakukan Pengumuman.**
Nomor pencatatan : **000782880**

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NIP. 196812301996031001

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Link Sertifikat



ALL SERTIFIKAT



Link Sertifikat





Let's Work Together



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naimplung28@gmail.com

