Team: Aminatou

Client: Fontys University

Project Overview

The newly constructed student complex consists of 10 apartments, each housing at least three ICT students. The project aims to establish a secure and efficient network infrastructure that supports the academic and personal needs of the residents.

Goals and Objectives

The goal is to create a scalable, maintainable, and user-friendly network infrastructure that not only ensures data security but also fosters an engaging environment for students. This infrastructure should facilitate seamless communication between apartments while maintaining individual autonomy over each LAN. This problem statement clearly outlines the context, identifies the core problem, and sets specific objectives for your project. You can adapt this structure further based on the specific requirements of your Figma template.

The Problem

- Each apartment must have its own Local Area Network (LAN) with a dedicated router.
- Each apartment should host a representative web server providing tenant information and available services.
- An advertisement blocker must be implemented to enhance the browsing experience for students.
- All apartments need to be interconnected to allow access to each other's websites.
- The entire complex will share a single internet connection, which must be managed effectively.
- The security level of the infrastructure must be measurable and validated.
- Each apartment should monitor realtime electricity consumption to promote energy awareness.
- Additional features should be included to attract more students and enhance their engagement with the apartment's services.

Brand Competitors

- WannaSmile
- Packet Masters
- Undefined
- Blank
- The LANIords

Guidelines

- 1. Team Collaboration: Work in groups of 4 students to design and implement a secure LAN for your assigned apartment, ensuring inter connectivity with other apartments in the complex.
- 2. Deliverables and Documentation: Submit all required deliverables, including project plans, design documents, and code configurations, to the project git repository and Canvas by specified deadlines to ensure reproducible of your work.
- 3. Regular Meetings and Attendance: Attend weekly meetings with your mentor to monitor progress; more than one unexcused absence may result in removal from the group and failure to complete the project successfully.

Target Audience

Students form Fontys ICT

Timeline

- Project starts at the end of week 11 with a kick-off session
- Ends in the assessment week with a presentation and demo
- Weekly meetings with mentors to monitor progress

Deliverables

- 1. Project Plan
- 2. Design Document
- 3. Test Report
- 4. Project planboard
- 5. Code and Configuration files
- 6. Documentation for:
- Local Webserver
- IoT Service (energy usage monitoring)
- LAN Configuration (internal and external routing)
- Additional services
- Security measures

Brand Messaging and Tone

Brand Messaging:

- Inclusive and Engaging
- Innovative and Modern
- Supportive and Collaborative

Tone:

- Friendly and Approachable
- Informative and Clear
- Motivational and Inspiring