Smart Home Lighting System

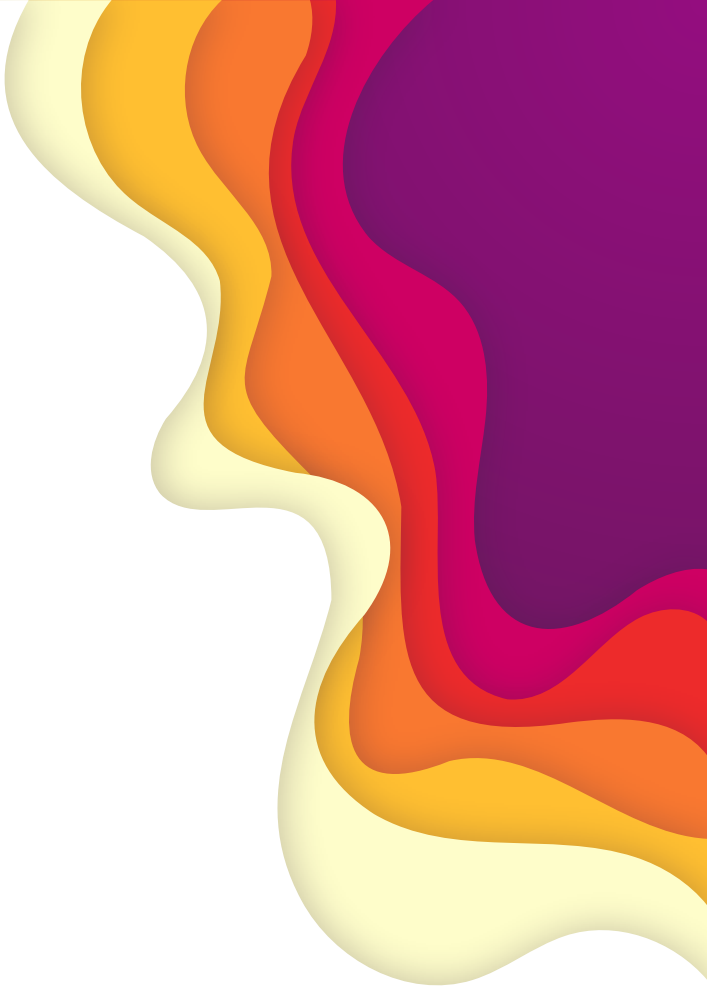
Team 22

Overview

What did we do?

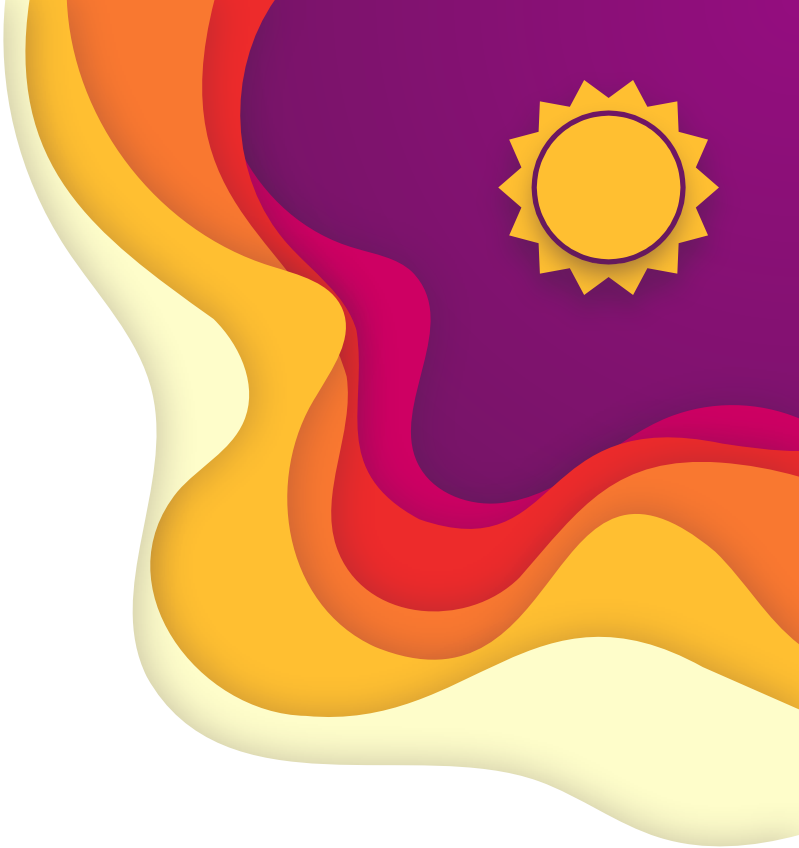
Demo

What are we going to do?



What did we do?

- Dark theme
- Security
- Optimized loading sequences
- Set up database
- Established a connection between front-end and back-end
- Java program for LDR
- Set up a library for LED strip
- Generated SWIG



User Interface

Dark theme

Optimized loading sequence

Security

LDRData graph

Change theme on color update

Google Single Sign On

Established connection with a Back-end

Bug fixes

Settings page

DEMO

Database

Stores:

1. Display parameters
2. RGB values and brightness
3. Animation and preset information
4. Data from the LDR sensor

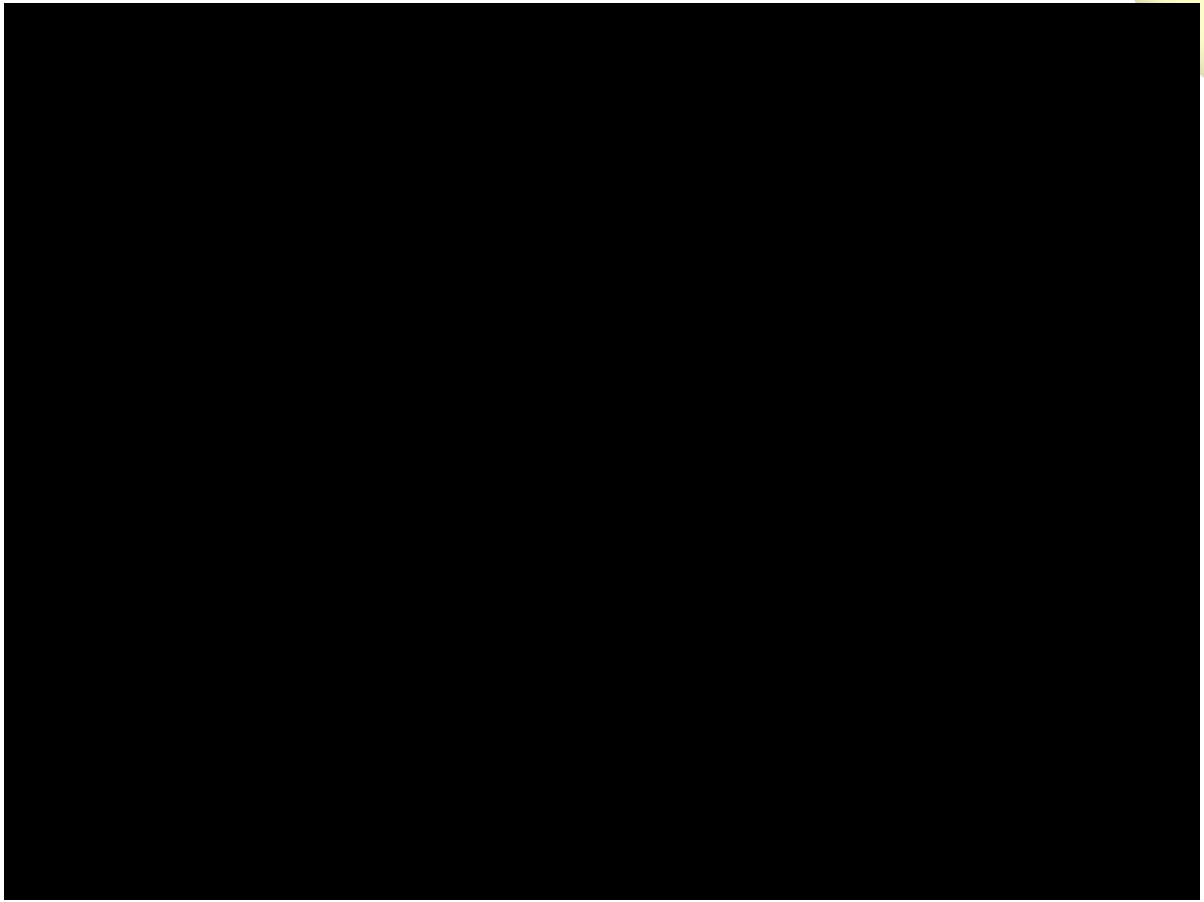
System testing

- GET and POST requests
- Front-end to Back-end
- LDR sensor to Back-end
- Back-end to Database

Hardware

- LDR sensor
- SWIG
- PI4J

LDR



What are we going to do?

- Develop the Java code to light up LED strip with different modes
- Establish data flow between LED strip and UI

Thanks!
Any questions?