

Smart City Tiles

Finale presentatie

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Inhoud

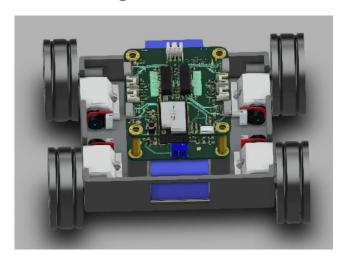
- Analyse
 - o Probleemstelling
 - Abstracte oplossing
 - Software analyse
 - Hardware analyse
- Implementatie
 - o Hardware
 - o Software
- Testing
- Demo

Analyse - Probleemstelling

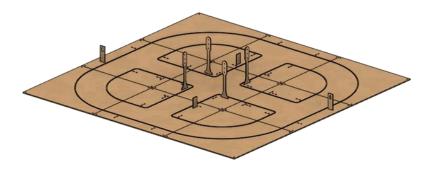
- IoT Platform voor 1e leerjaarstudenten
- Simpel om te gebruiken
- Programma upgradebaar vanop afstand
- USB-C PD-powered mogelijkheid

Analyse - Abstracte oplossing

Smart Wagen

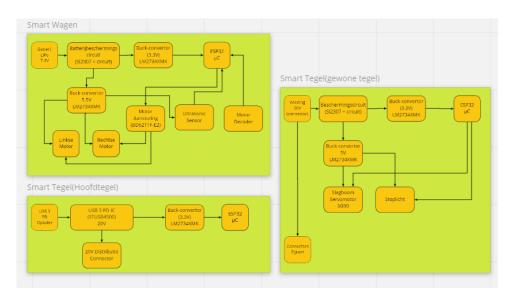


Smart Tegel



Analyse - Hardware analyse

• Hardware blokdiagram



• In- & Outputs

NodeRed	(carvar)
1100001700	13017011

Database (MYSQL)

Hoofd tegel (ESP32)

neven tegels (atmega328p)

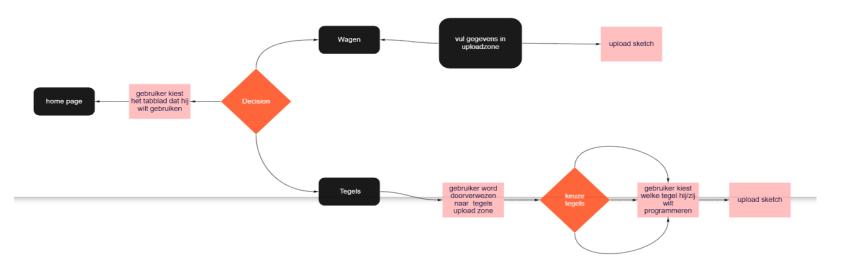
Wagen (ESP32)

Protocols

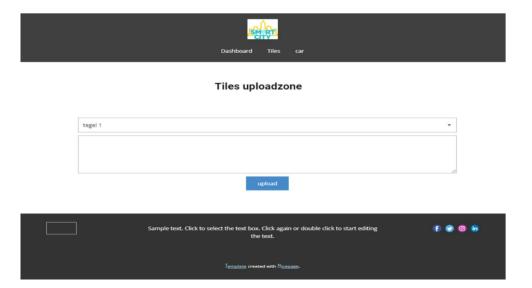
Http methods

Mqtt messages

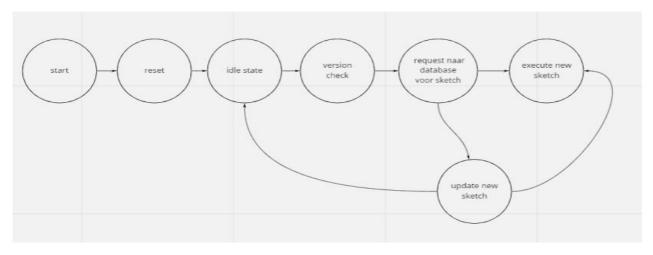
Software Flow web interface



Mock-Up

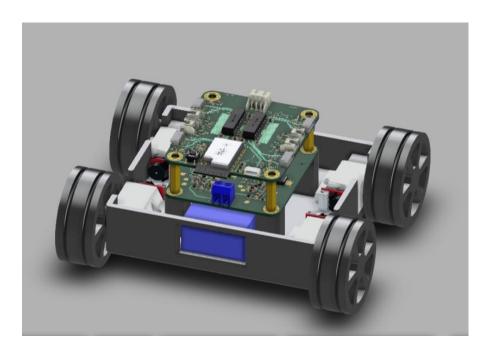


State Diagram



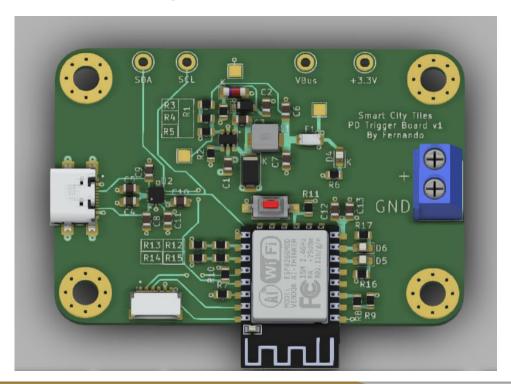
Implementatie - Smart Wagen

• Smart-wagen



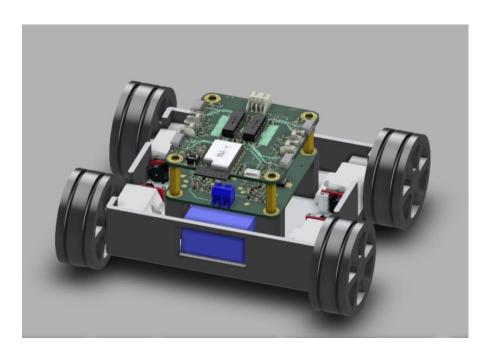
Implementatie - Smart Tegel

• Smart-tegel



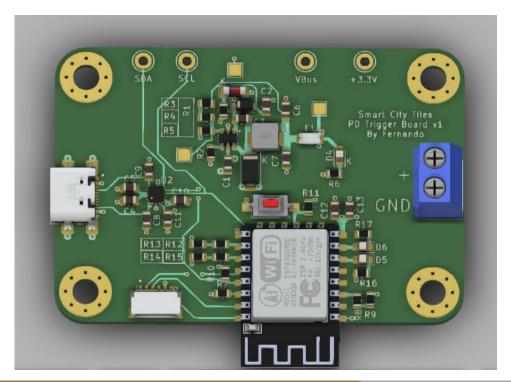
Testing - Smart Wagen

- SW Voeding
- SW Main board



Testing - Smart Tegel

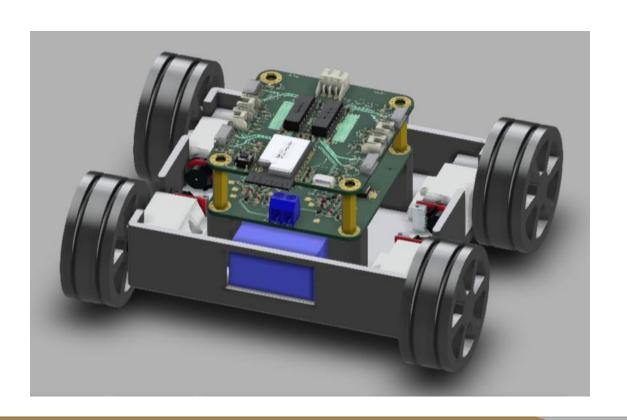
• Smart Tegel



Zijn er vragen?



Demo time!



Bedankt voor uw aandacht!

