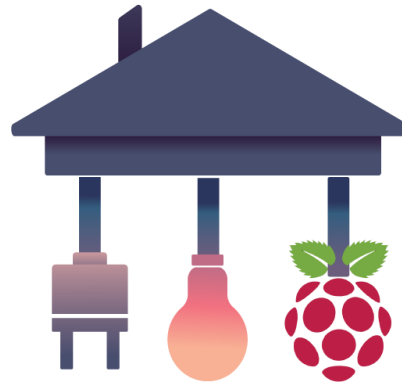


Universitatea “Alexandru Ioan Cuza” Iași  
Facultatea de Informatică



# Implementarea unui sistem software de tip Smart Home



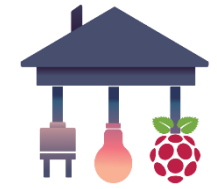
Coordonator științific:  
Lector doctor Cristian FRĂȘINARU

Absolvent:  
Nicușor TURCU

Sesiunea: Iulie 2018

# Cuprins

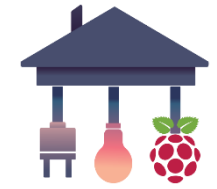
---



1. Introducere
2. Arhitectura sistemului
3. Aplicația web
4. Server REST Java
5. Dispozitive inteligente
6. Dispozitive implementate
7. Direcții de dezvoltare
8. Concluzii

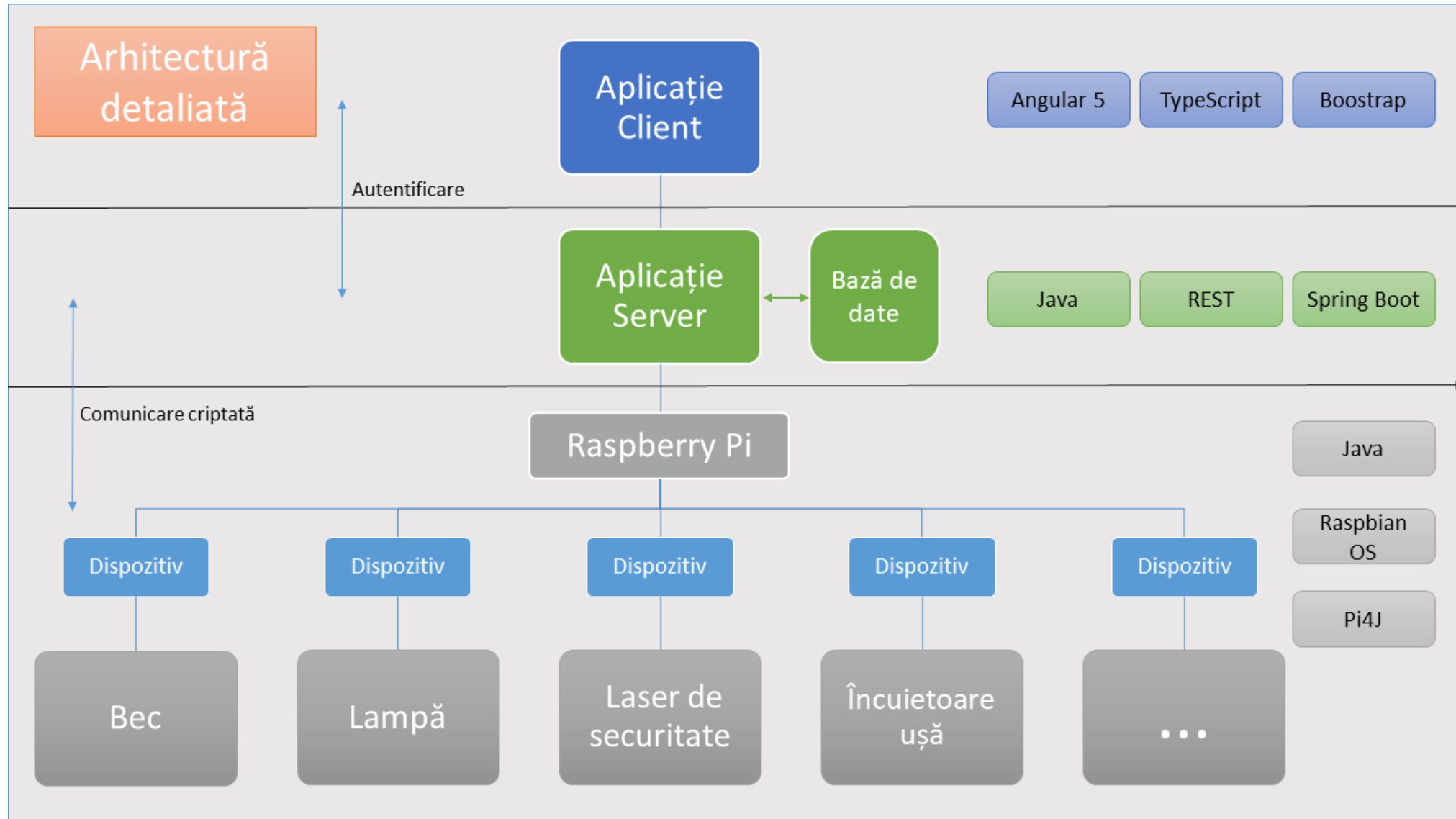
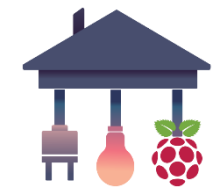
# 1. Introducere

---



- De ce Smart Home?
- etc

## 2. Arhitectura sistemului



# 3. Aplicația web

---

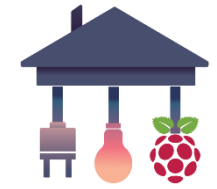
Angular 5

Bootstrap 4

HTML

CSS

Typescript



cuvinte  
cheie

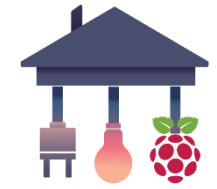
# 4. Server REST Java

---

API REST

SSL/TLS

Java



cuvinte  
cheie

# 5. Dispozitive inteligente

---

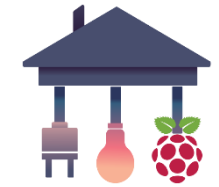
Raspberry Pi

Arduino

PI4J

SSL/TLS

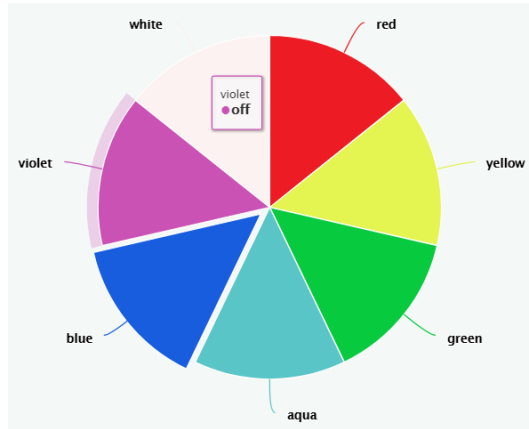
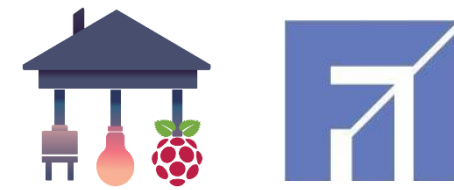
Java



cuvinte  
cheie



# 6. Dispozitive implementate



Lampă



Bec



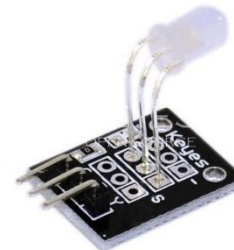
Laser de securitate

Software

Hardware



KY-016, Modul LED cu 3 culori



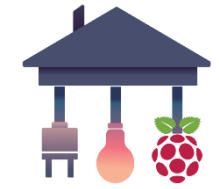
KY-011, Modul LED cu 2 culori



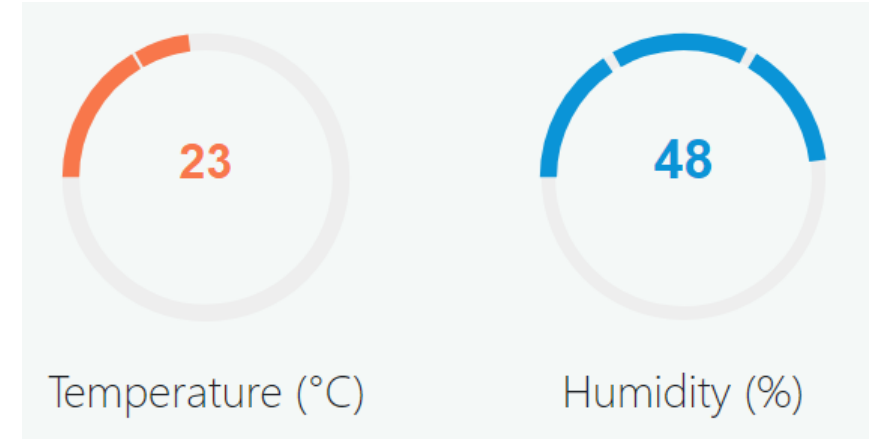
KY-008, Modulul senzor laser



# 6. Dispozitive implementate



Încuietoarea ușii



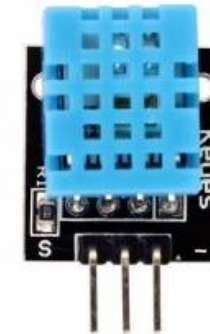
Monitor ambianță locuință

Software

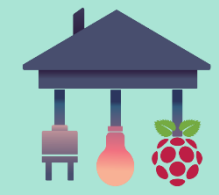
Hardware



KY-019, Modul releu 5V



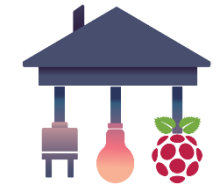
KY-015, Modulul cu senzor de temperatură și umiditate



# Demo

# 7. Direcții de dezvoltare

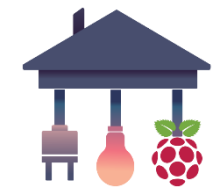
---



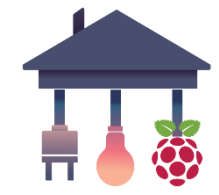
- Creșterea numărului de dispozitive;
- Creare a grupuri de utilizatori;
- Înlocuirea serverului Java cu o arhitectură bazată pe microservicii;
- Folosirea protocolului HTTPS între server și client.

# 8.Concluzii

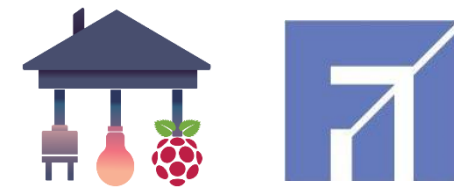
---



- concluzie



Întrebări?



Mulțumesc pentru atenție!