

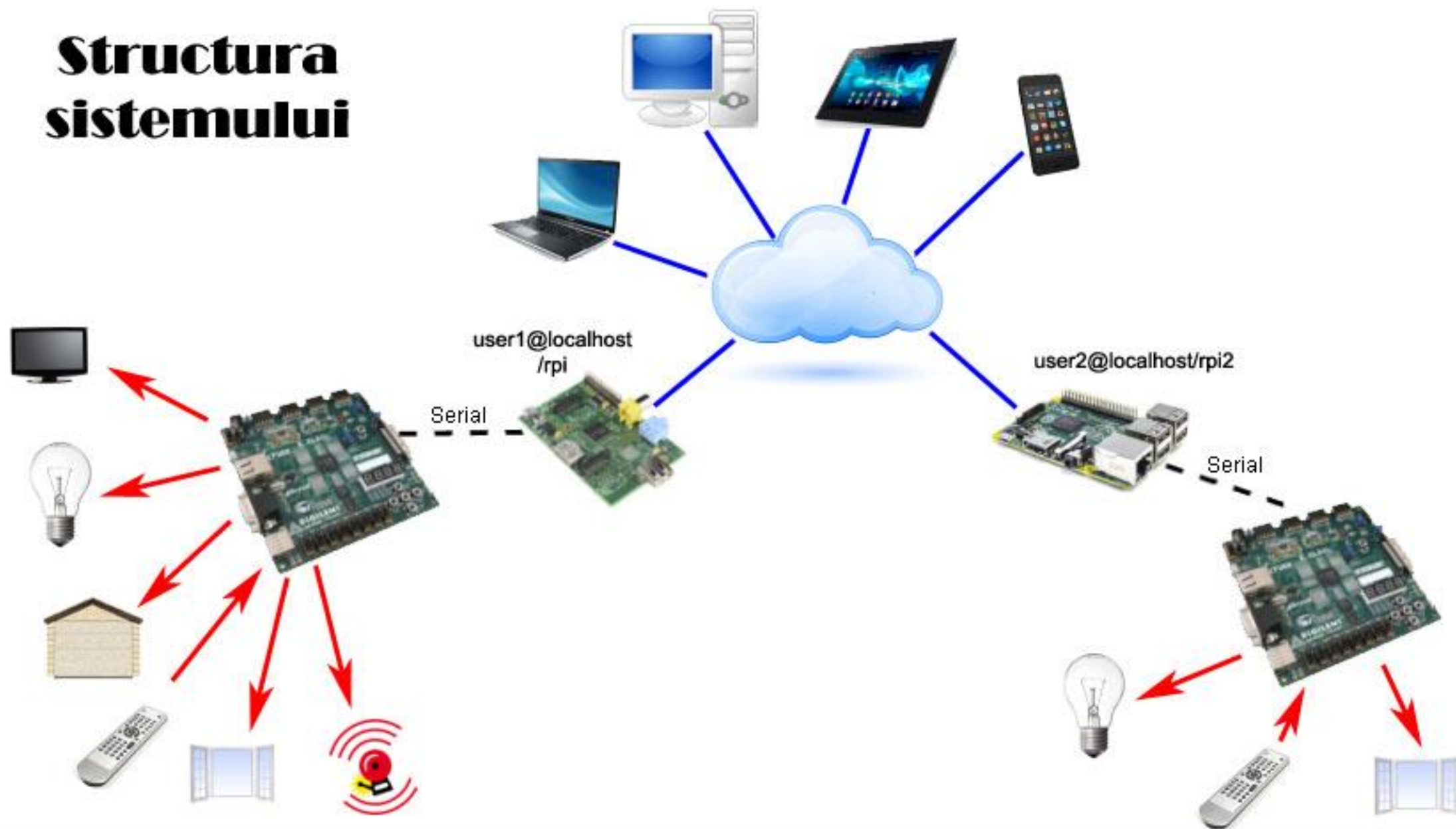
Aplicatie web in sisteme de tip “Casa Inteligenta”

STUDENT :RUSU OANA VALENTINA

CALCULATOARE IV

2015

Structura sistemului



Aplicatia Web

- ▶ Comunica prin XMPP cu ceilalti utilizatori XMPP (Case inteligente);
- ▶ Limbaje folosite : HTML, CSS, Javascript;
- ▶ Librarii folosite : Strophe JS;
- ▶ Structura mesaj XMPP (XMPP stanza) :

```
<message from="skorpyon1992@localhost" to="user1@localhost"> <body> GET devices;</body> </message>
```
- ▶ Protocol control deviceuri :
 - ▶ Set : SET [AdresaDevice]=[Valoare] (e.g. : SET V=01010101;);
 - ▶ Get : GET [AdresaDevice]; (e.g. : GET W;);
 - ▶ Evenimente: EVENT | [Data] [Comanda Set/Get];

Structura aplicatiei web :

► Structura director:

- /imagini/
- /audio/
- /stylesheets/styleSheet.css
- /scripts/script.js
- /scripts/strophe.js
- /index.html

► Structura pagina HTML :

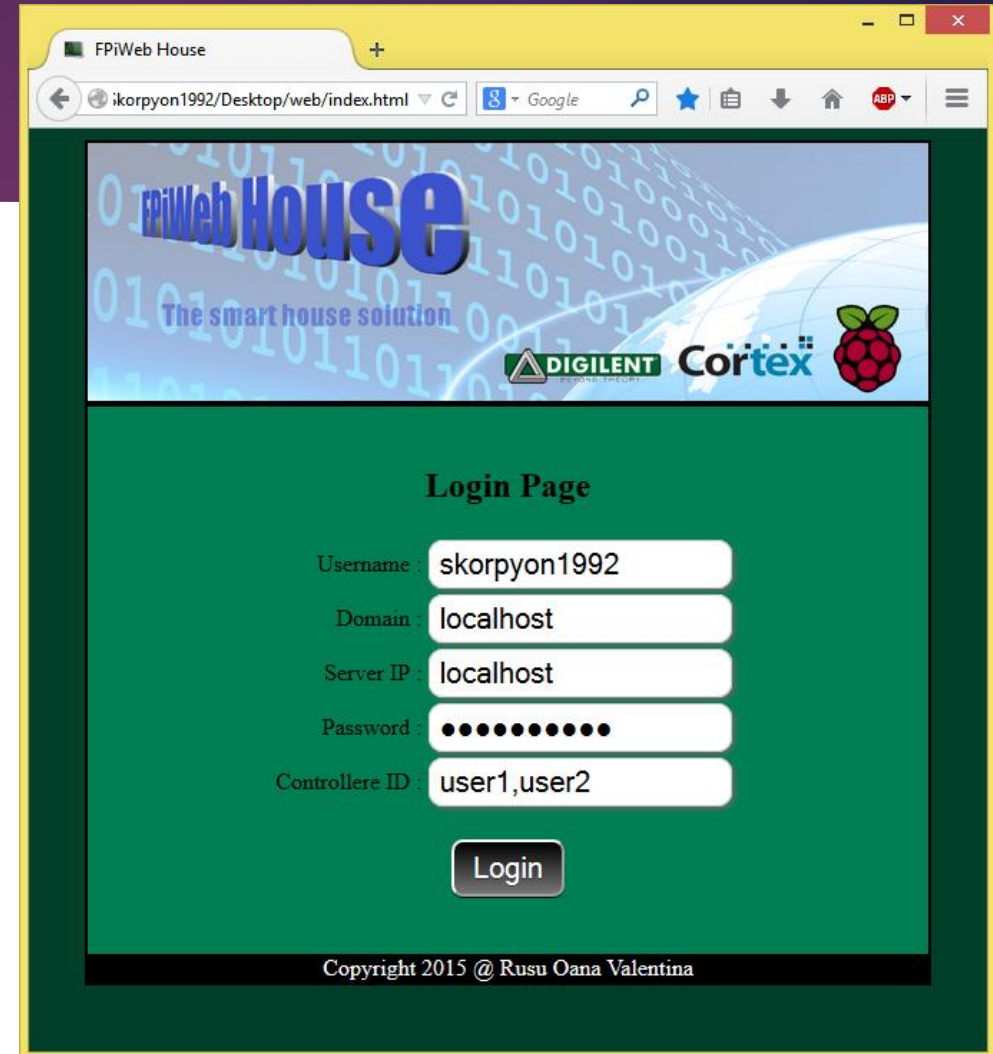
- Div Header (contine logo);
- Div-uri (LoginPage, DeviceList, ControlPage, EventPage);
- Footer;

► Functionalitati script JS :

- Generarea listei cu deviceuri;
- Generare/afisare dinamica div-uri device corespunzator;
- Evenimente stocare valori, generare div-uri la click, transmite comenzi GET/ SET , transmite evenimente catre schedulerul Raspberry PI;

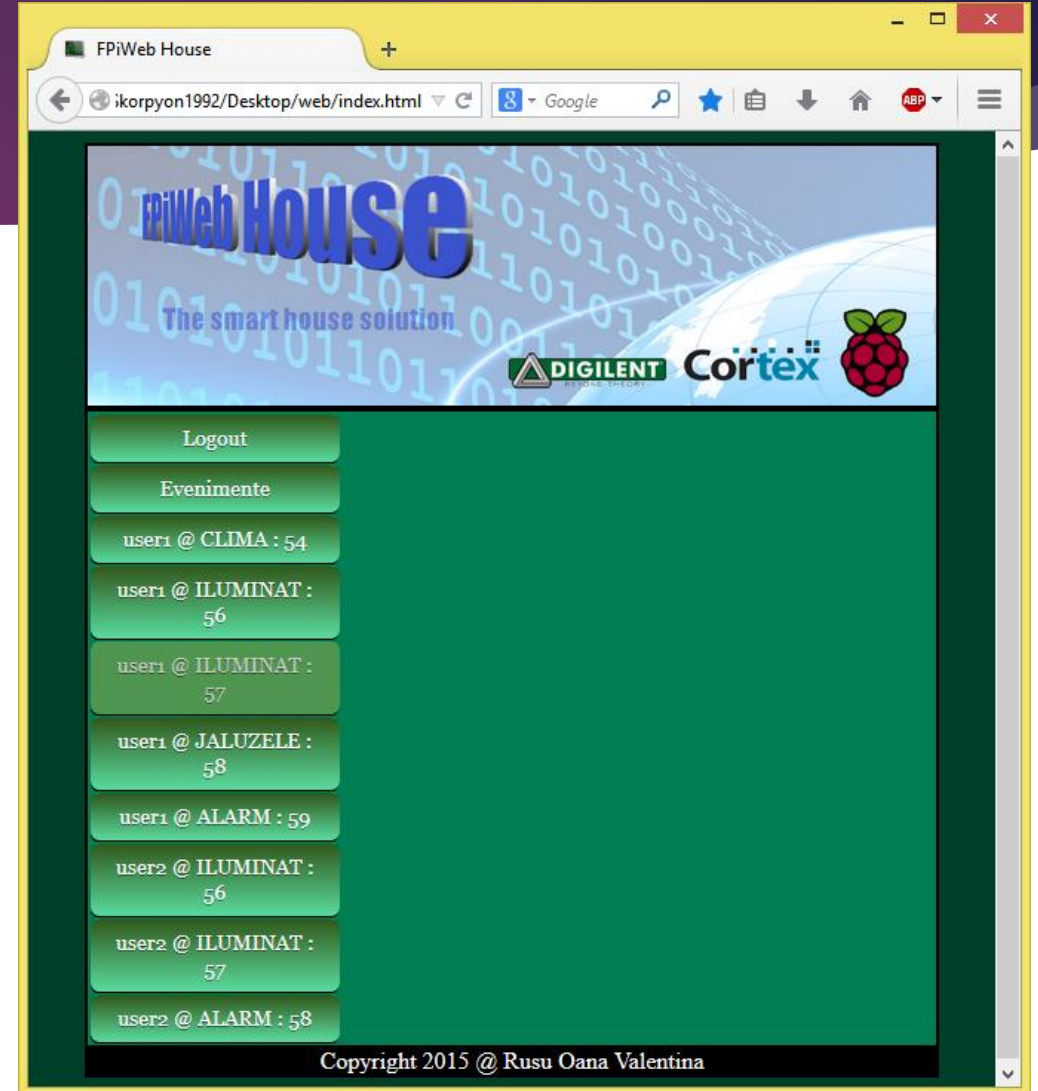
Pagina de logare

- ▶ La logare/delogare este accesibil doar Div-ul LoginPage;
- ▶ S-au folosit input-uri, butoane;
- ▶ In urma logarii apare meniul de control, se transmit comenzile de setare a orei pe Raspberry Pi si cerere lista deviceuri;

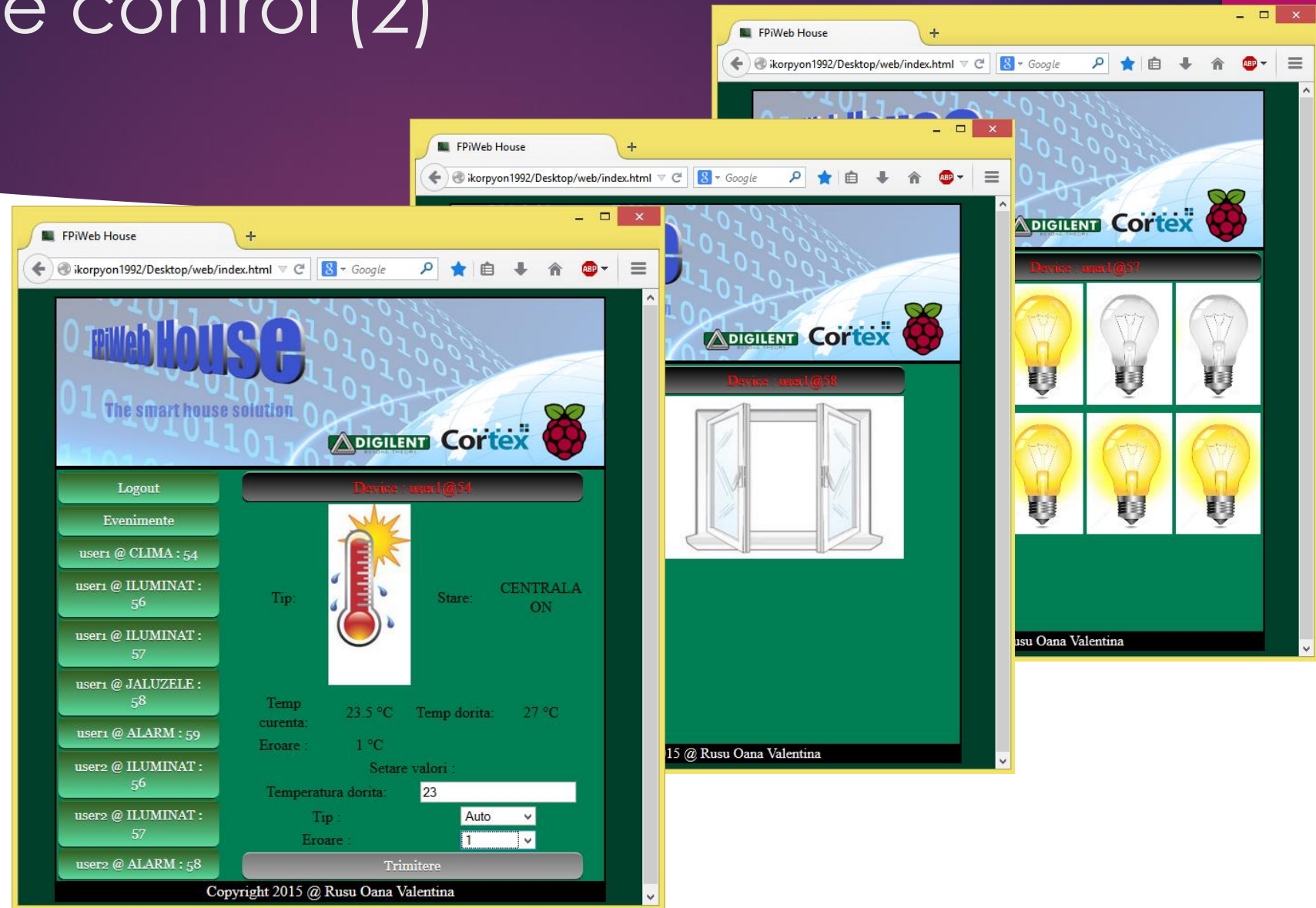


Pagina de control

- ▶ Pagina principal de control;
- ▶ Lista de deviceuri;
- ▶ Posibilitate de transmite evenimente;
- ▶ Generare dinamica div-uri deviceuri;

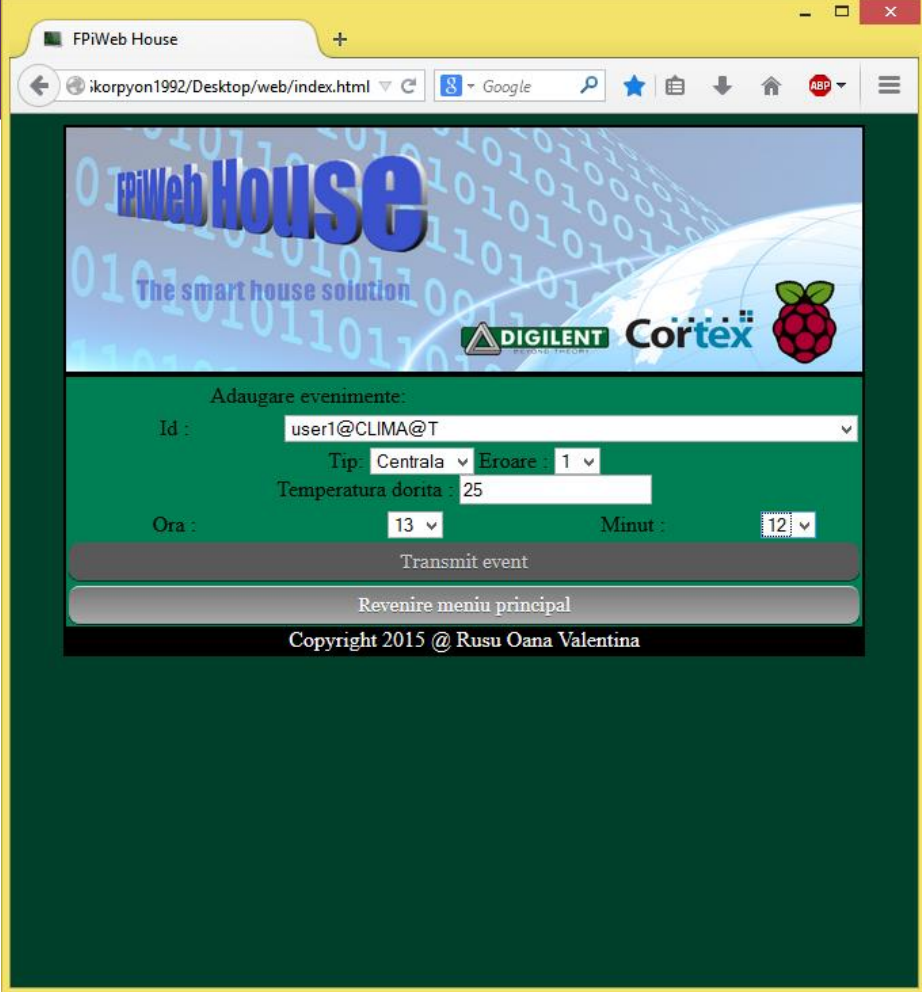


Pagina de control (2)



Pagina de evenimente

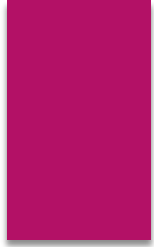
- ▶ Formular evenimente;
- ▶ Completare valori dorite in functie de device;
- ▶ Alegere ora/minut generare efectuare comanda;
- ▶ Transmitere eveniment catre scheduler Raspberry PI;



The screenshot displays a web browser window titled "FPIWeb House" with the address bar showing "ikorpyon1992/Desktop/web/index.html". The page features a header with the "FPIWeb House" logo, the tagline "The smart house solution", and logos for "DIGILENT", "Cortex", and a Raspberry Pi. The main content area is titled "Adaugare evenimente:" and contains a form with the following fields: "Id :" with a dropdown menu showing "user1@CLIMA@T"; "Tip:" with a dropdown menu showing "Centrala"; "Eroare :" with a dropdown menu showing "1"; "Temperatura dorita :" with a text input field containing "25"; "Ora :" with a dropdown menu showing "13"; and "Minut :" with a dropdown menu showing "12". Below the form are two buttons: "Transmit event" and "Revenire meniu principal". The footer of the page reads "Copyright 2015 @ Rusu Oana Valentina".

Concluzii

- ▶ Util pentru 1 sau mai multe case inteligente detinute;
- ▶ Usor de folosit;
- ▶ Consideratii de viitor : imbunatatire design, implementare parte de securitate, etc;



Demo