



Pi Gate

Pied Piper Program

7th March 2018

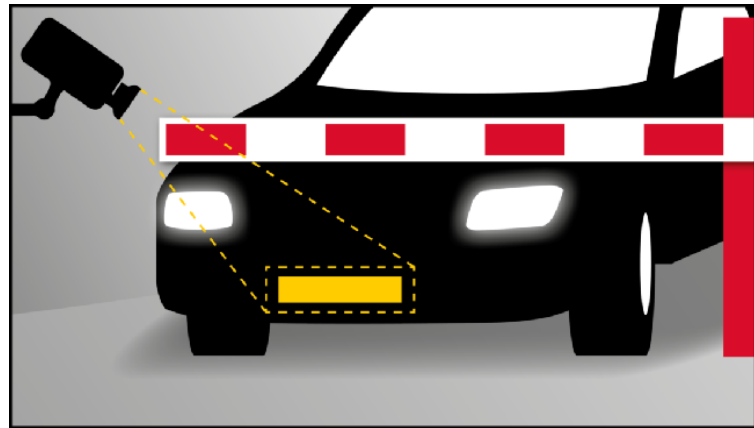
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@thangndu

DELLEMC

Pi Gate System

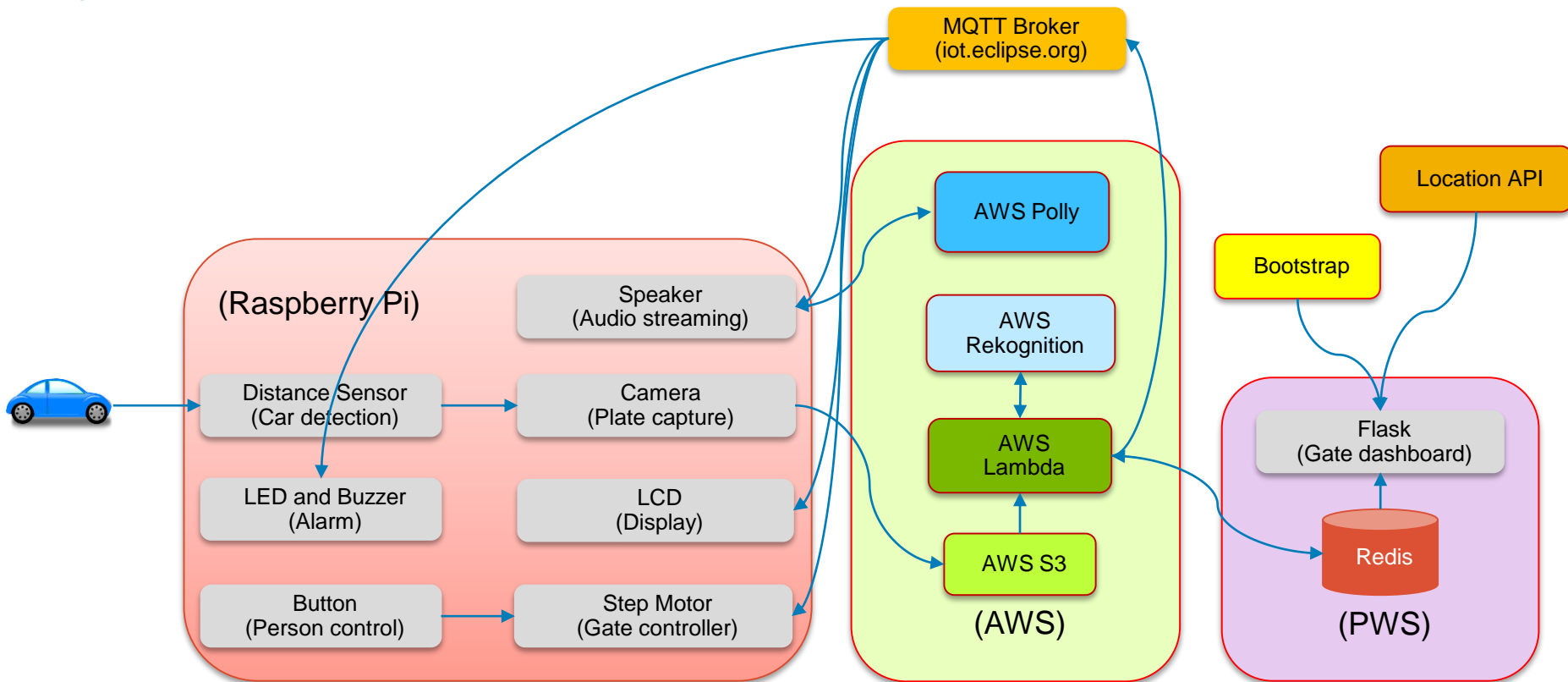
- Automated Gate System (Pi Gate)
 - Automatic detect plate number
 - Automatic display plate number
 - Automatic/manual gate control
 - Automatic alarm system (Light and Sound)
 - Access gate system dashboard anywhere
- Github repository
 - <https://github.com/thangndu/pigate>



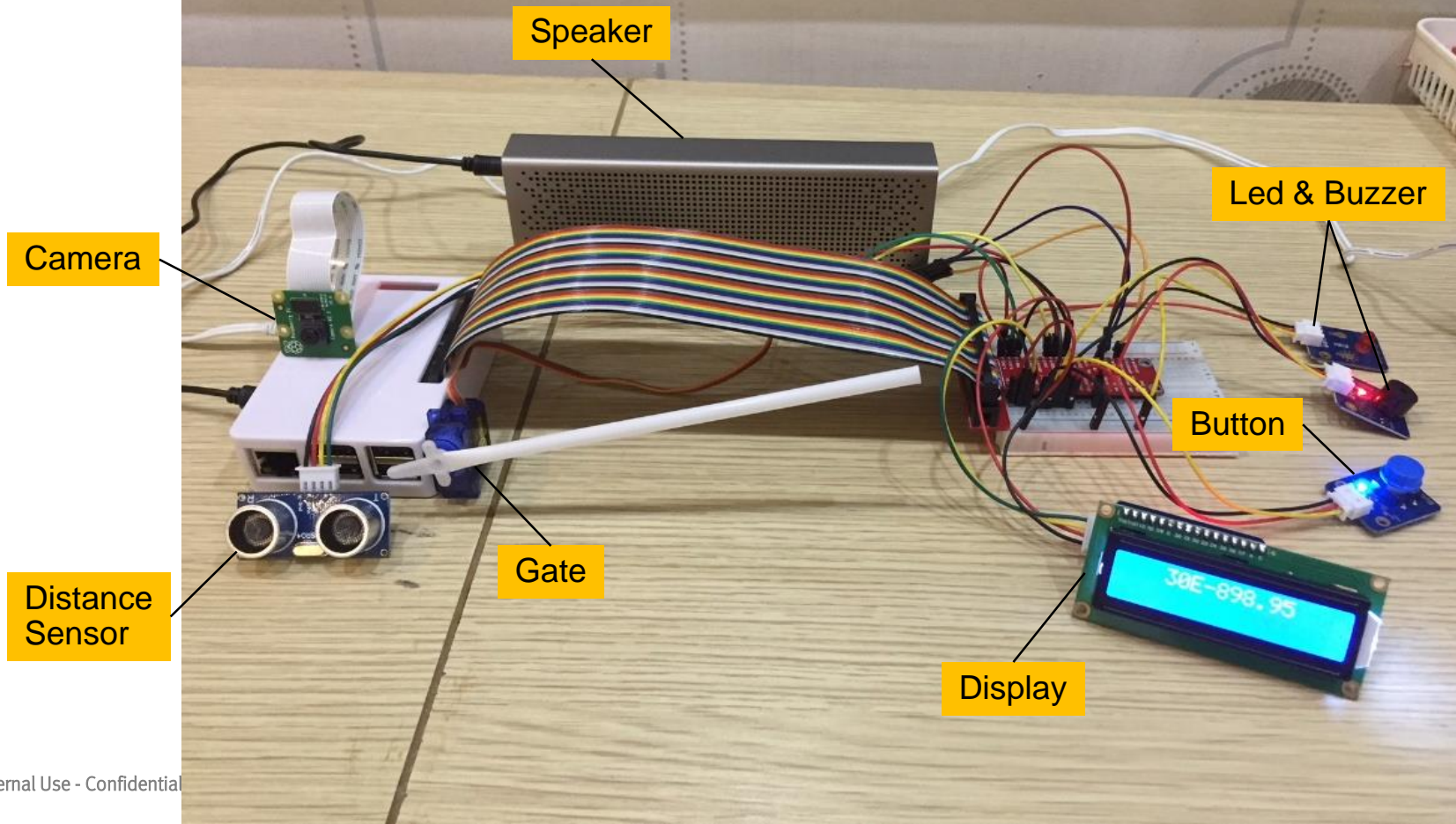
Bill of Materials

ITEM	QUANTITY
Raspberry PI 3 Model B	1
Raspberry PI Camera V2	1
Distance Sensor	1
Step Motor (Micro Servo SG90)	1
LCD 1602 + I2C Interface Module	1
Speaker	1
LED Module	1
Buzzer Module	1
Button Module	1

System Architecture



Pi Gate

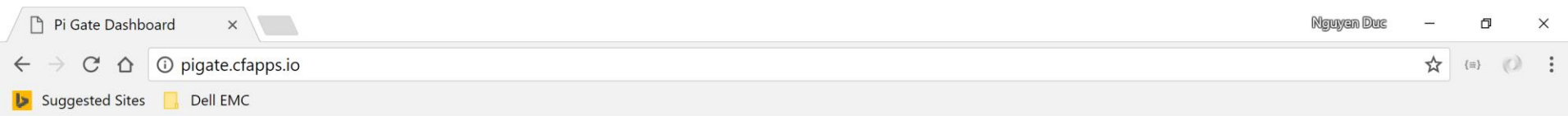


The image displays six terminal windows from a Raspberry Pi, each showing the output of a different project. The projects are:

- Detect car:** The terminal shows a sequence of "car leaving" and "car coming" messages.
- Capture plate number:** The terminal shows a sequence of "completed", "capture", and "uploading image to S3" messages.
- Display plate number:** The terminal shows a sequence of license plate numbers and distances, such as "30E-898.95", "30A-137.53", and "29A 137.53".
- Led & Buzzer:** The terminal shows a sequence of "turn off" and "turn on" messages.
- Speaker:** The terminal shows a sequence of "Subtitle count: 0, state: off, index: 1, delay: 0", "have a nice day ;)", and "welcome" messages.
- Gate:** The terminal shows a sequence of "close", "0 degree...", "open", and "90 degree..." messages.
- Button:** The terminal shows a sequence of "pressed" messages.

The bottom right corner of the image shows a Windows 10 desktop background.

Dashboard (piper.cfapps.io)



Pi Gate Dashboard



Plate number 30E-898.95

Access time Monday, 05 March 2018 22:20:59

Access location Hanoi, Vietnam

Access status True

Demo



Registered
plate number

Un-registered
plate number

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