

FridgePI

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A smart fridge for lazy people

Mobile and Cyber-physical System
25/05/18

Alessandro Fagnani, Federico Rossetto e Silvia Severini

According to the *Time Use Institute*, you spend in the supermarket:

More than an **hour** a week

110 days of your lifetime!!



.. and who knows about the time you spend thinking about what to eat!

What's in my fridge?

What can I eat for dinner?

Do I need to go to the market?



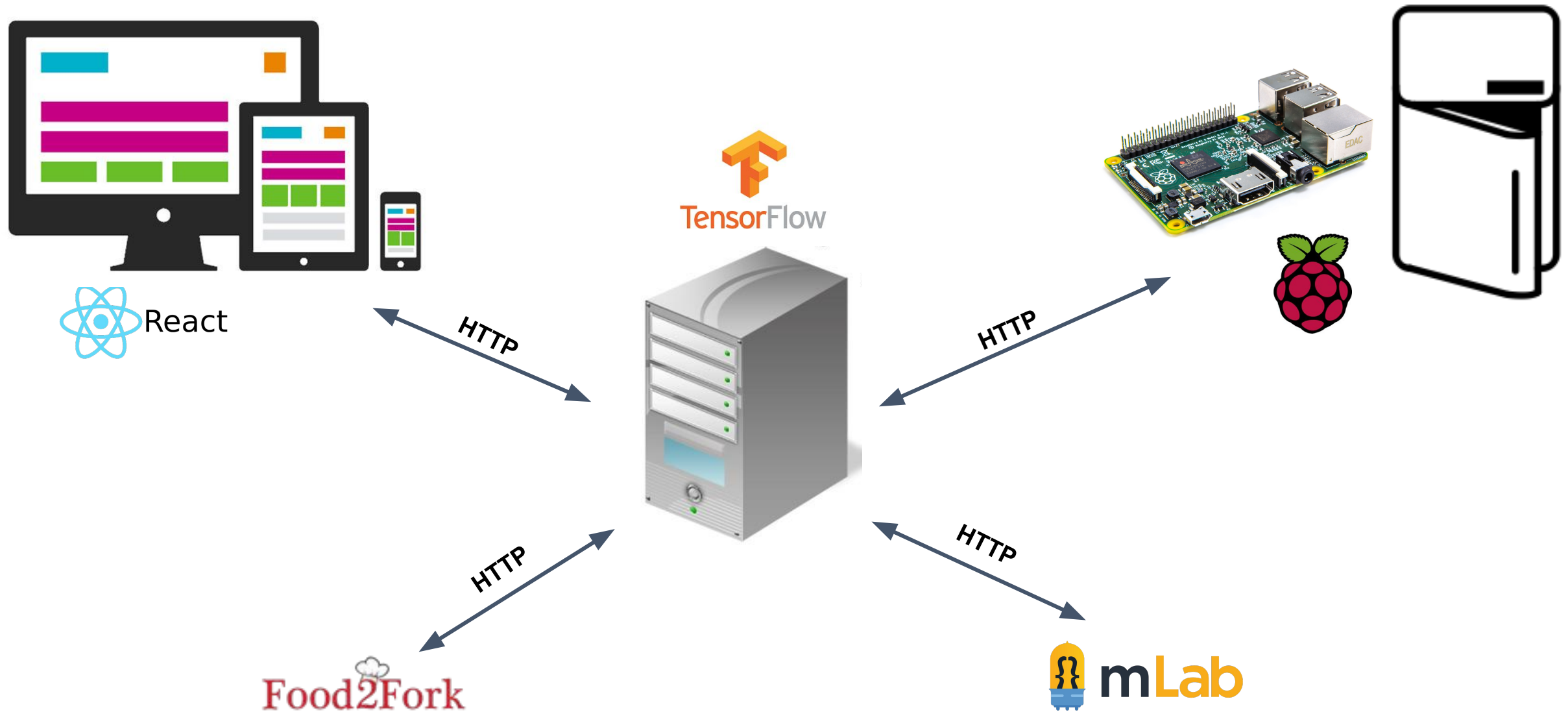
So what?

A fully automated monitoring system!

- No overhead for you
- Always available everywhere
- Always up-to-date
- A lot of possible extensions



System architecture



A closer look

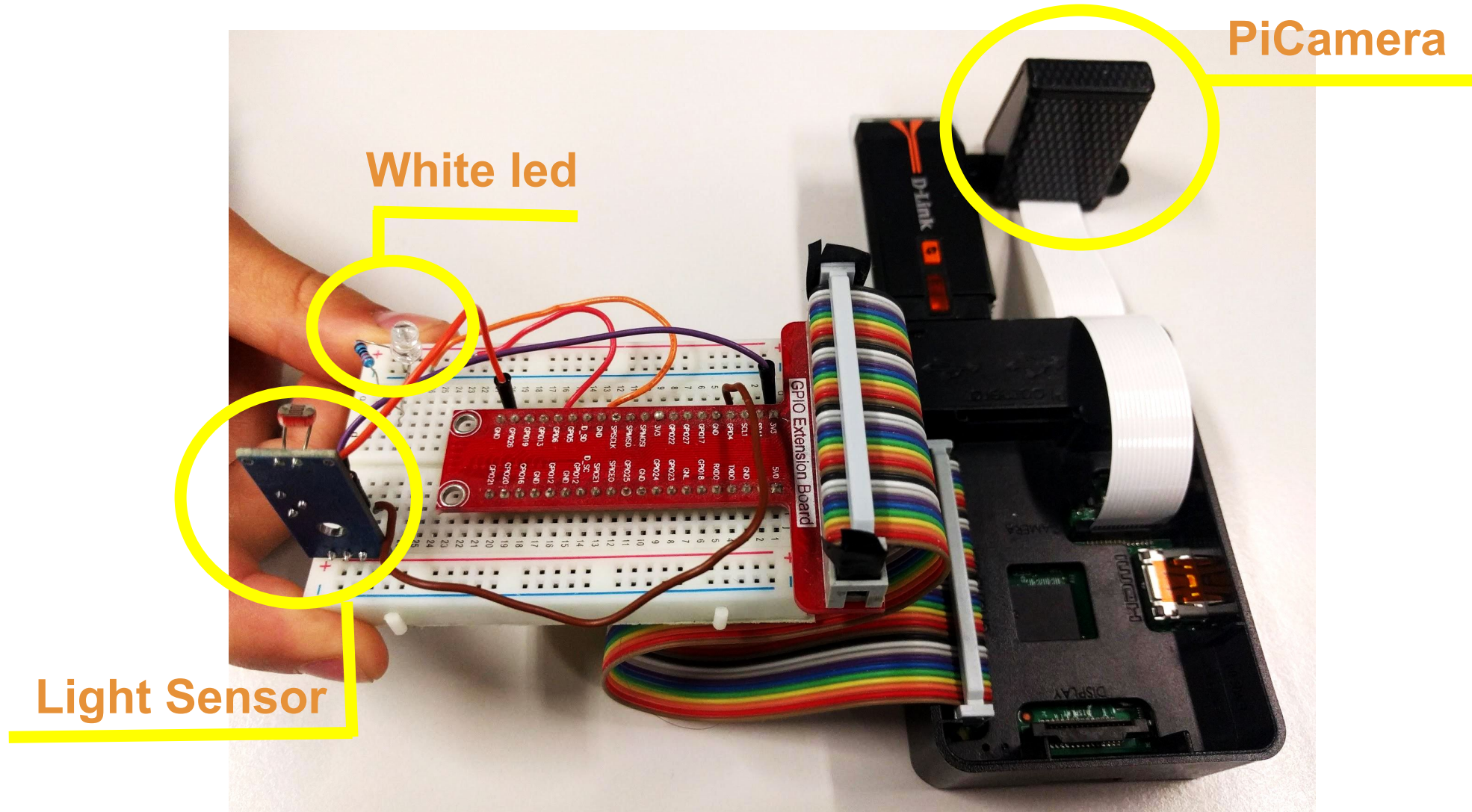


Image segmentation and recognition



Generated List:

- 'beans': 0.7679
- 'corn': 0.6079
- 'tomato sauce': 0.4357
- 'nuts': 0.5579

Use case 1 - The story of our life



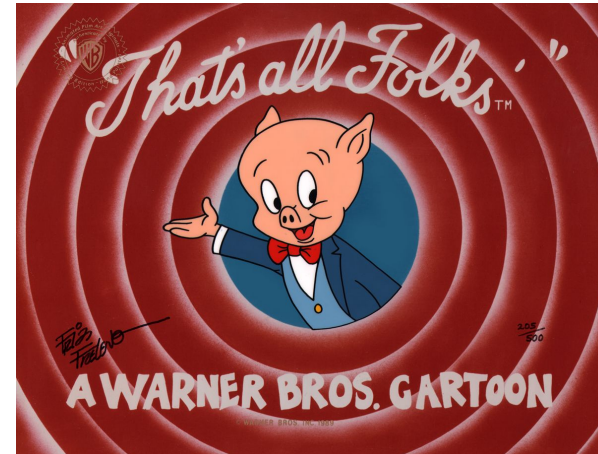
Use case 2 - Recognition and advice



Use case 3 - Installation



1. Plug in
2. Push WPS button
3. Add it to your devices list
4. That's all folks!



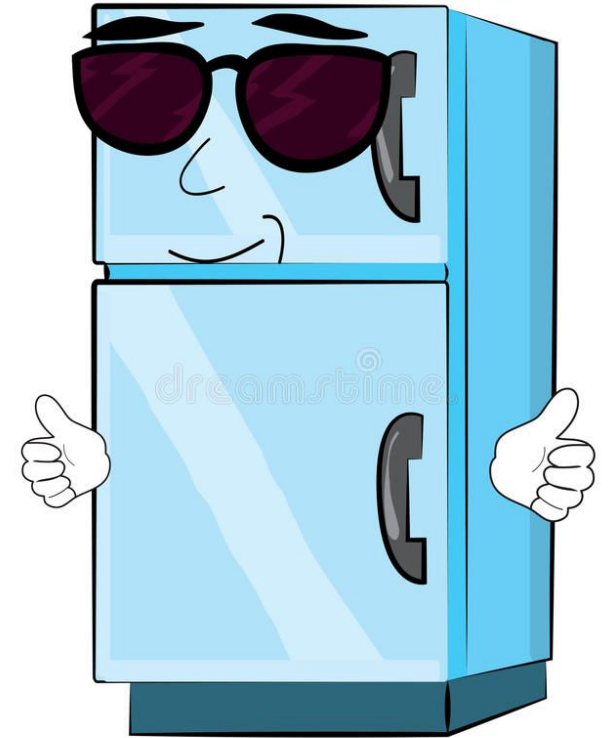
Future goal: make it smarter

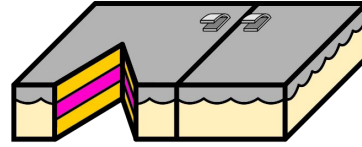
Hardware view:

- more cameras in one shelf
- use a magnetic sensor instead of the light one

Software view:

- integration with google, amazon shopping
- management of a shared list of products
- shopping advisor
- give more information on the products





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Thank you

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