Smart Plant

Monitor and Irrigate your plants

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Pervasive Systems 2017/2018

Team

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Idea

Automate the process of plants irrigation based on the environment using sensors.

The plant will be perfectly fed accordingly to the surroundings variables and the user will be always kept up to date.

Timeline

1

Brain Storming

Find a good idea and validate it with feedbacks

2

Planning

Planning the architectures of the project

3

Realization

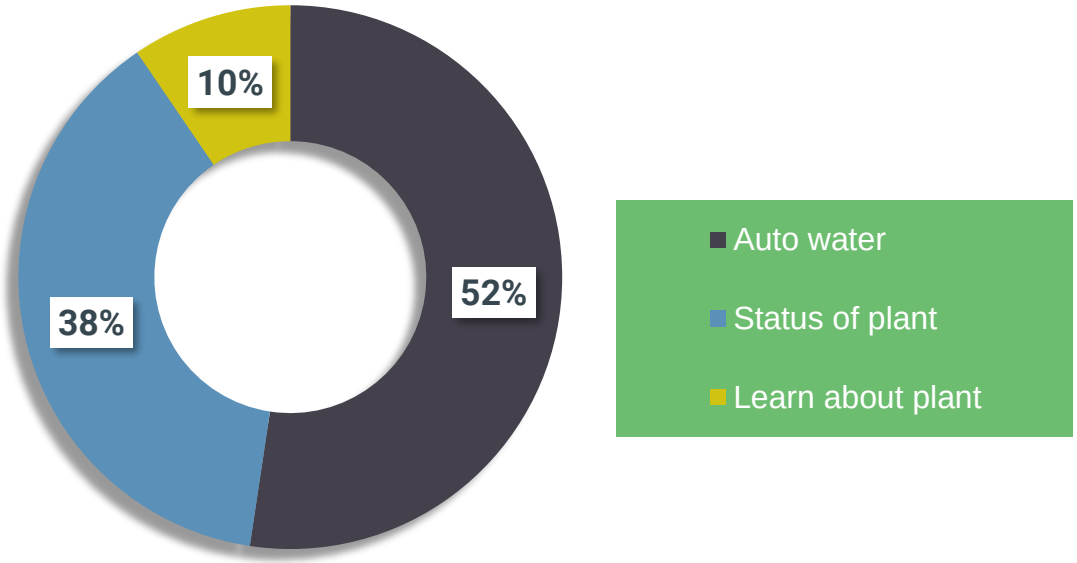
Code software and build the prototype

1

Brain Storming

Feedbacks...

Which feature you consider most important?



… and Suggestions

2

Planning

Structure

Server

Client

Tools

Mbed	Platform used to program STM32 Boards
NodeJS	Programming language used for the Raspberry pi
Telegraf	Node library used to develop Telegram Bot
Arduino	Hardware Platform to manage the step motor

Realization

Auto Water

Automatic feeding of plants

Smart Plant waters the plant or flower automatically based on the **type** of plant.

Alert Notifications

Alerts when there is a problem

Smart Plant Bot sends you a Telegram **message** when some parameter is not good.

Status of the Plant

Monitor your Plant/Flower

In **every moment** you can check the current and the previous statuses of the plant/flower.

Demo

Conclusions

Despite the difficulties we had, we succesfully developed SmartPlant.

- Simplicity in use
- Very effective for plant life
- Earn great skills with green thumb

In conclusion we had a lot of fun developing this smart irrigator!

Thank you

GitHub Link

https://github.com/pervasivesystems/smart-plant

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