Positive Energy Worker

Subtitle

Zied Guesmi

Supervisors: Prof. A.B. Supervisor
Prof. C.D. Supervisor

Advisors: Dr. A. Advisor
Dr. B. Advisor

Department of Computer Science Engineering
Faculty of Mathematical, Physical and Natural Sciences of Tunis
University of Tunis ELMANAR, Tunisia

This dissertation is submitted for the degree of
Computer Engineer

King's College XXXX September 2018

I can not dedicate something that does not belong to me, so dear parents …

Acknowledgements

And I would like to acknowledge ...

Abstract

This is where you write your abstract ...

Table of contents

List of figures

List of tables

Chapter 1

General Introduction

- Blockchain, IoT, Cloud Computing, fancy words that shaped the actual era of IT
- With all the innovation they have brought, are we using them the right way ?

Chapter 2

Project Context

2.1 Context

- pfe
- Engineering degree

2.2 Host company

- iExec: founded when where, size, doing what ...

2.3 Problematic

- Enegy Consumption
- Centralized Services
- Idle IoT devices
- Idle Computing resources

2.4 Suggested Solution

- Positive Energy Worker - Usefull use cases - Multi-functionality IoT devices

2.5 Adopted Methodology

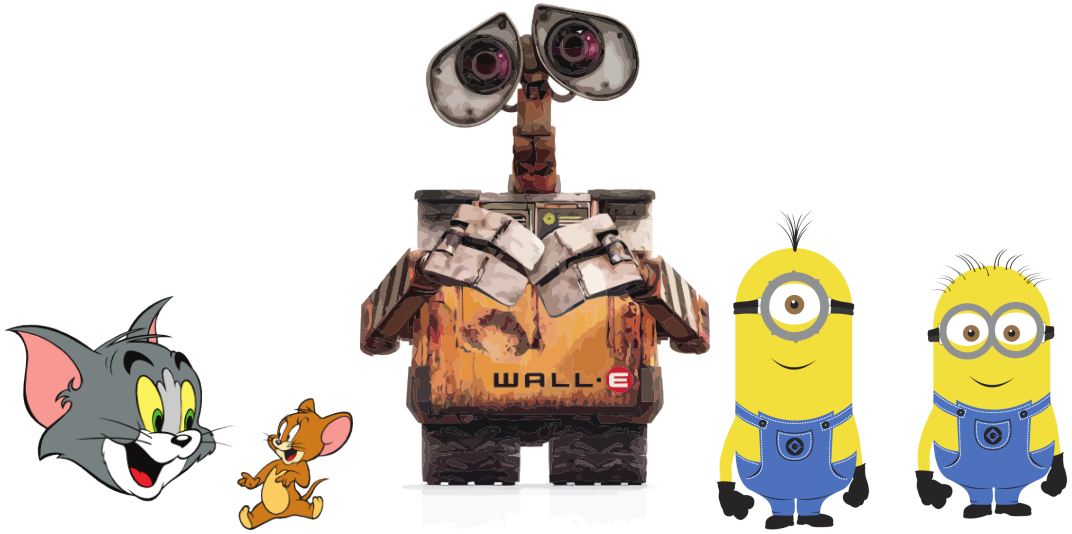
- To Do

2.6 Hidden section

Lorem ipsum dolor sit amet, *consectetur adipiscing elit*. In mag a dignissim nisl iaculis nec. Praes et tempus mi cursus.

Etiam elementum eleifend sed [1]. Maecenas dapibu augue ut urna Integer non dictum nunc.

[1] My footnote goes blah blah blah! ...



(a) Tom and Jerry (b) Wall-E (c) Minions

Fig. 2.1 Best Animations

Subplots

I can cite Wall-E (see Fig. 2.1b) and Minions in despicable me (Fig. 2.1c) or I can cite the whole figure as Fig. 2.1

Chapter 3

State of The Art

3.1 Introduction

- what's out there

3.2 Critique de l'existant

- Centalized
- Energy Consumption
- Idle resources

3.3 Conclusion

Chapter 4

State of The Art

4.1 Introduction

- intro

4.2 Architecture

4.2.1 Global System Architecture

4.2.2 Scheduler

4.2.3 Worker

4.2.4 Software Development Kit (SDK)

4.3 Detailed Design

4.4 Conclusion

Chapter 5

State of The Art

5.1 Introduction

- intro

5.2 Requirements

5.2.1 Functional Requirements

5.2.2 Non-Functional Requirements

5.3 Analysis

5.3.1 General Use Case Diagram

5.3.2 System Sequence Diagram

5.4 Conclusion

Chapter 6

Implementation

6.1 Introduction

- intro

6.2 Environment

6.2.1 Hardware

6.2.2 Electronic Card: Raspberry Pi

6.2.3 Solar Panel

6.2.4 Battery

6.2.5 Witty Pi

6.2.6 Software

6.2.7 Development Technologies

6.2.8 Documentation

6.3 Illustration

6.4 Conclusion

Chapter 7

General Conclusion And Perspectives

References