

**R**equirements **A**nalysis and

**S**pecification **D**ocument (**RASD**)

Computer Science and Engineering (CSE)

Software Engineering 2 Project

Year 2015/16



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**Introduction**

**1.1 Purpose of the requirements model**

The main purpose of this RASD (*Requirements Analysis and Specification Document*) is to examine in depth the phases of analysis and specification of the project requirements.

The project name is *myTaxiDriver*, which is the Software Engineering 2 project of year 2015/16 at Politecnico di Milano.

The reference model used in this project is **IEEE/ANSI 830-1998**. This is one of the most widely known requirements document standard. It is important to underline that the specifications of this document may evolve in the future (this may occurs for several causes).

Anyway, we will try to maintain coherence with this document in the next steps as much as possible.

**Etcc…**

* 1. **RASD Approach: “The world and the machine”**

Identify the right requirements may be a difficult thing to do if the approach is not good enough. The main thing to understand is the link between what happens in the real world (*The World*) and the software technologies (*The Machine*). This link is Requirements Engineering.

**Requirements Engineering**

**Software**

**Technologies**

**Real World**

**Demands**

The approach followed in this document is known as “*The world and the machine*”. This one is the approach defined by Michael Jackson and Pamela Dave. There are two main entities in this approach:

* **The World**: part of the real World that interfaces with the software to be and which is influenced by him.
* **The Machine:** part of the software to be. That is the union of the developed software and the hardware where software will be executed.

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* 1. **myTaxiService: main goals**
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  4. **Definitions, acronyms and abbreviations**

**1.7 References**

This document was produced by faithfully following the directives contained in the **IEEE/ANSII 830-1998** (as we said in the chapter *1.1*).

It also revealed and very useful to consult some of the RASD presented over the previous academic years, trying to identify critical issues, patterns and isolate sections developed in an accurate, thorough and organic way.

Here are the documents used as reference:

* M*. Jackson, P. Zave, "Deriving Specifications from Requirements: An Example", Proceedings of ICSE 95, 1995*
* *M. Jackson, P. Zave, "Four Dark Corners of Requirements Engineering", TOSEM, 1997*
* *B. Nuseibeh, S. Easterbrook, "Requirements Engineering: A Roadmap", Proceedings ICSE 2000*
* *M. Jackson, Software Requirements and Specifications: A Lexicon of Practice, Principles and Prejudices, ACM Press Books, 1995*
* *830-1998 IEEE/ANSII Recommended Practice for Software Requirements Specifications,*

*http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=720574&tag=1&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs\_all.jsp%3Farnumber%3D720574%26tag%3D1*

* *Various projects of the past years (from the* ***Beep*** *platform)*
* *Slides of the course by Prof. Raffaela Mirandola*