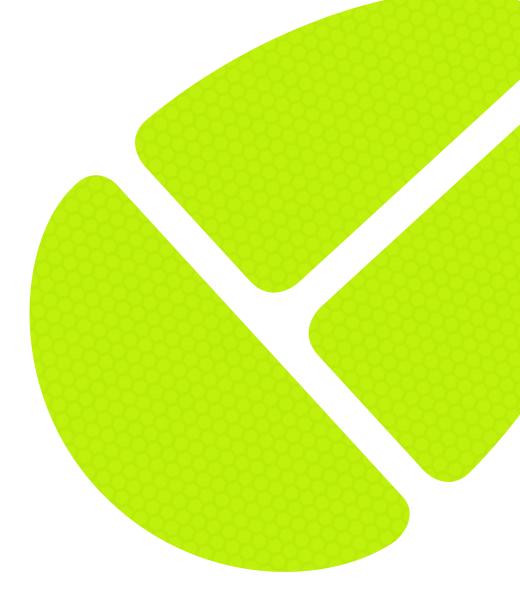
2015





LGP FEUPCritical Manufacturing



Tiago Fernandes Engenharia Informática Team Leader Duarte Duarte Engenharia Informática Fernando Martins Engenharia Informática Hugo Sousa Engenharia Informática José Moreira Engenharia Informática Simão Felgueiras Engenharia Informática Ana Costeira Engenharia Multimédia Raquel Pontes Design de Comunicação Rita Brás Design de Comunicação



01 Introduction

- 01.2 Objectives p.4
- 01.2 Objectives p.4
- 01.2 Objectives p.4

02 General Definition

- 01.2 Objectives p.4

os Specific Requirements

- 01.2 Objectives p.4
- 01.2 Objectives p.4
- 01.2 Objectives p.4

01 Introduction

Objectives

The goal of this project is to analyze and study the technical executability and economic viability of the use of HTML5 supported by responsive frameworks for the development of graphical interfaces applied to manufacturing systems. These are characterized by:

- Geolocation requirements (multicultural);
- · Security requirements;
- Presentation of information in a drill-down model;
- Ease of use and learning curve;
- · Low loading and response times;
- · Low hardware resource requirements;
- · Graphical interface responsiveness;
- Segregation of duties with different privilege groups
- Application administrator;
- Supervisor and Manager;
- · Operator.

Also part of this goal is to implement a proof of concept that implements these requirements in the frameworks identified as the most suitable for the task at hand. Given that, reports specifying the results will be written and presented to the client.

Scope

Project realized for Critical Manufacturing, inside the Project Management La-boratory course, in FEUP (Porto University, Faculty of Engineering).

Global Vision

The cmNavigo is a last generation manufacturing execution system (MES), com-pletely built using Microsoft frameworks and technologies, including .Net, C#, Sil-verlight and SQL Server (the company Critical Manufacturing is a Microsoft Gold Partner for Application Development).

Being known as part of the most innovative solutions worldwide (Gartnet, Logic, LNS, ...), cmNavigo competes globally in the most demanding industrial markets, against a fierce competition that demands constant research and development and it need to be updated to the latest technologies and functionalities demanded by said market. Given the growth and diversity of platforms and devices (tablets, smartphones), Critical Manufacturing's goal is to provide an innovative, new and ergonomic way of interaction with certain areas of cmNavigo that feels intuitive to the user and is platform-independent.

Global Vision

MES: Manufacturing Execution System

SQL: Structured Query Language