Politecnico di Milano

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Integration Test Plan Document

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PowerEnjoy

Instructor : Prof. Di Nitto

Authors:
Amico Simone
Chianella Claudia Beatrice
Giovanakis Yannick

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1. INTRODUCTION

1.1 Purpose and Scope

The purpose of the **Integration Test Plan** is to describe the necessary tests to verify that all of the components of the *PowerEnjoy* platform are properly assembled. Integration testing ensures that the unit-tested modules interact correctly.
The description of the testing process includes:

- A high level specific of the tests
- A testing strategy
- An overview of the testing tools

The document is aimed at stakeholders ,developers in charge of the testing implementation and engineers.
It is important to notice that the focus of the document lies essentially towards **integration** whereas **unit-tests** are ignored and considered as already conducted.

1.2 Definition and Abbreviations

Throughout the document the following *abbreviations* are used and not further explained:

- **RASD**: Requirements And Specifications Document
- **DD**: Design Document
- **ITPD**: Integration Test Plan Document
- **API**: Application Programming Interface
- **RESTful**:REpresentational State Transfer

Each **integration test** has a unique identifier that follows the syntax:

$$I[0-9]^{+}$$

Each **test case** has a unique identifier that follows the syntax:

$$I[0-9]^{+}T[0-9]^{+}$$

1.3 Reference Documents

For a full understanding of the content of the ITPD ,it is strongly advised to read the **RASD** and especially the **DD** as they contain more in-depth explanations for the majority of the subjects.
A complete overview about documents and the general system description can be found int the **Assignments AA 2016-2017.pdf** file.

2. INTEGRATION STRATEGY

2.1 Entry Criteria

The **Integration tests** are meant to be developed and conducted only after **single units** have been successfully and thoroughly tested ,with particular regard towards those parts involving intermodule communication.

2.2 Elements to be Integrated

From what we can infer from the previous documents , the to-be tested platform used the **client-server paradigm** as its main architecture with the addition of intra module communication , especially in the **back-end system** where the *business logic*lies, and direct communication happening back and forth on separate channels between the **back-end** and the **client-side applications.**

3. Individual Steps and Test Description

4. Tool and Test Equipment Required

5. Program Stubs and Data Test Required

6. Appendices

6.1 References

The following tools where used in the creation of this document:

- *TexMaker 4.5* as Editor

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- Chianella Beatrice h
- Giovanakis Yannick h