

UNIVERSITÀ DEGLI STUDI DI UDINE

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CORSO DI LAUREA IN TECNOLOGIE WEB E MULTIMEDIALI

BACHELOR THESIS

Design and implementation of a Language Server for the Jolie programming language

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Al mio cane,
per avermi ascoltato mentre ripassavo le lezioni.

Acknowledgements

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Abstract

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I

Introduction

Introduction

1.1 Sezione

1.1.1 Sottosezione

Jolie and the Language Server Protocol

- 2.1 Jolie: Java Orchestration Language Interpreter Engine**
- 2.2 Language Server Protocol**

II

Project

Analysis of the problem

In this chapter I will identify the requirements, gathered an analysis of the Language Server Protocol and over a series of meetings with the supervisor.

3.1 Functional Requirements

Functional requirements are statements of services the system should provide, particularly how it should react to particular inputs. The Language Server Protocol has six features that can be implemented:

- Code completion
- Hover information
- Jump to definition
- Workspace symbols
- Find references
- Diagnostics

From those features we extracted the following functional requirements, in ascending order of importance.

Table 3.1: Functional Requirements

Functional r. No.	Description
FR 1	

3.1.1 Complying with the Language Server Protocol specifications

3.1.2 Language Server Protocol features

3.2 Non-functional requirments

3.2.1 Distributed

3.2.2 Modular/scalable

4

Design of the system

4.1 Architecture

4.1.1 Modules, interfaces, communication

4.2 What needs to be implemented

Implementation

5.1 Choosing a language: Jolie (why)

5.2 Implementation details

6

Validation

6.1 Met requirements (screenshots)

6.2 Unmet requirements

**Conclusions: review, what needs to be
done**

III

Appendici

A

Altro capitolo

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