

Politecnico di Milano
A.A. 2015-2016
Software Engineering 2: “myTaxiService”
Integration Test Plan Document

Roberto Clapis (841859), Erica Stella (854443)

January 11, 2016



Contents

1	Introduction	3
1.1	Revision History	3
1.2	Purpose and Scope	3
1.3	List of Definitions and Abbreviations	3
1.4	List of Reference Documents	3
2	Integration Strategy	3
2.1	Entry Criteria	3
2.2	Elements to be Integrated	3
2.3	Integration Testing Strategy	4
2.4	Sequence of Component/Function Integration	4
2.4.1	Software Integration Sequence	4
2.4.2	Subsystem Integration Sequence	5
3	Individual Steps and Test Description	6
3.1	T7	6
3.2	T8	6
3.3	T9	6
3.4	T10	7
3.5	T11	7
4	Tools and Test Equipment Required	7
5	Program Stubs and Test Data Required	7

1 Introduction

1.1 Revision History

1.2 Purpose and Scope

This document describes the Integration Test Plan for the myTaxiService application. It provides a plan referring to how the various components of the software architecture described in the Design Document will be integrated for testing.

1.3 List of Definitions and Abbreviations

- *UI*: User Interface.

1.4 List of Reference Documents

- The document with myTaxiService's description
- myTaxiService's RASD
- myTaxiService's Design Document

2 Integration Strategy

2.1 Entry Criteria

Before the integration testing, each single module must have been tested to verify its correct functioning according to its specifications.

2.2 Elements to be Integrated

According to the Design Document, the components to be integrated are:

- Database:
 - Accounts
 - Active Reservations and Requests
- Web Server:
 - DBConnector
 - APIBackend
 - WebpageCreator
 - NotificationModule
 - HttpHandler
- UI:

- ClientUI
- DriverUI
- AdminUI

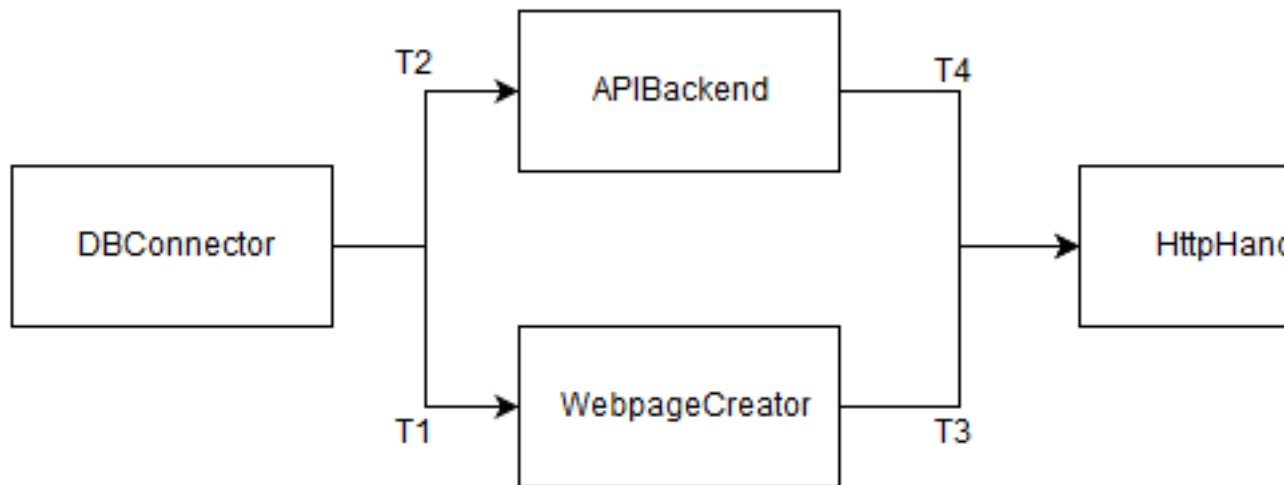
2.3 Integration Testing Strategy

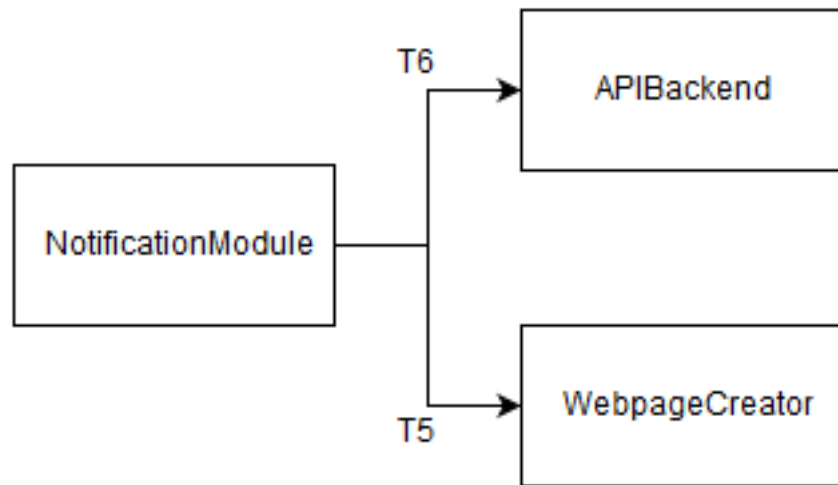
The decided testing approach is bottom-up.

2.4 Sequence of Component/Function Integration

2.4.1 Software Integration Sequence

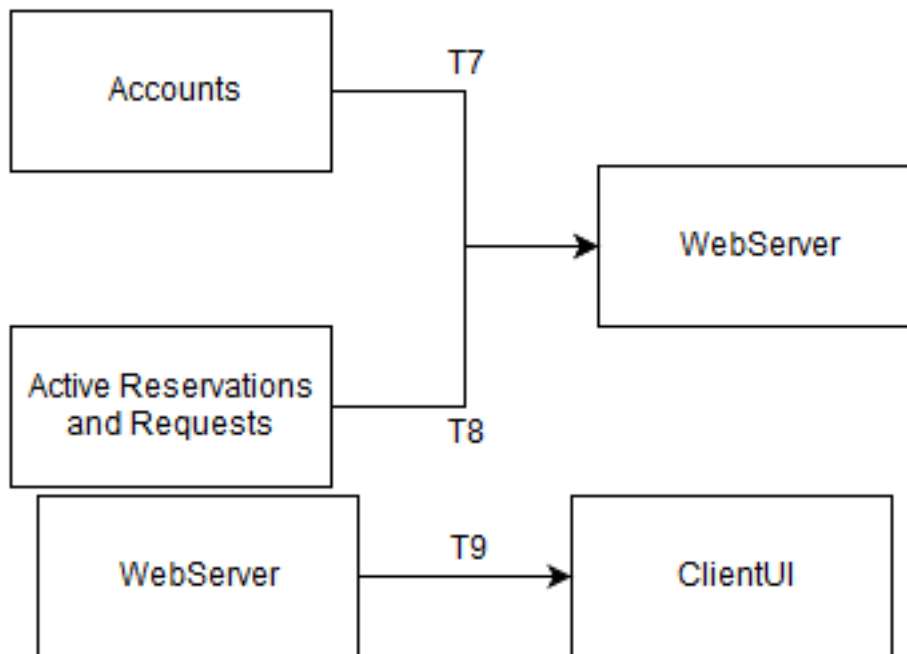
2.4.1.1 Web Server The following images describe how the Web Server's components will be integrated for testing. The arrows represent the order of integration.

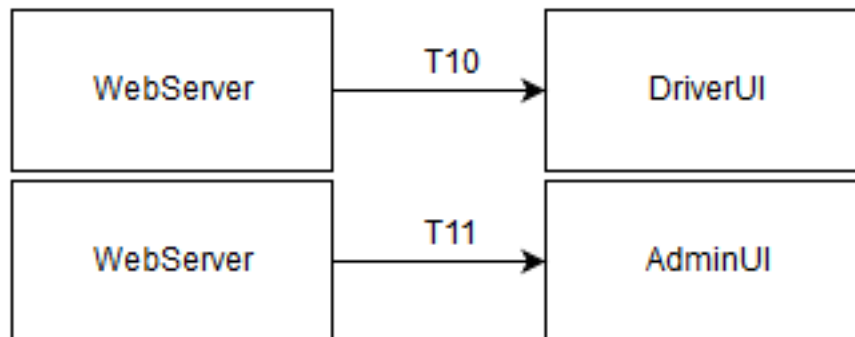




2.4.2 Subsystem Integration Sequence

The following graphs describe how the three components of myTaxiService application, which are the database, the Web Server and the various UIs, will be integrated.





3 Individual Steps and Test Description

3.1 T7

Test Case Identifier	T7
Test Items	Accounts → WebServer
Input Specification	
Output Specification	Check if the correct Accounts' methods are called
Environmental Needs	T1 to T6 succeeded

3.2 T8

Test Case Identifier	T8
Test Items	Active Reservations and Requests → Web Server
Input Specification	
Output Specification	Check if the correct Active Reservations and Requests' methods are called
Environmental Needs	T1 to T6 succeeded

3.3 T9

Test Case Identifier	T9
Test Items	Web Server → ClientUI
Input Specification	Typical ClientUI input
Output Specification	
Environmental Needs	T7 and T8 succeeded

3.4 T10

Test Case Identifier	T10
Test Items	Web Server → DriverUI
Input Specification	Typical DriverUI input
Output Specification	
Environmental Needs	T7 and T8 succeeded

3.5 T11

Test Case Identifier	T11
Test Items	Web Server → AdminUI
Input Specification	Typical AdminUI input
Output Specification	
Environmental Needs	T7 and T8 succeeded

4 Tools and Test Equipment Required

5 Program Stubs and Test Data Required