1.2 Purpose and Scope

The purpose of this document is to verify functional, performance, and reliability requirements of the My Taxi service developed so far.

Since the project is vast and complex, it is useful to make this document in order to have a solid point of reference about ways and techniques of testing, and a schedule about the order of components to be tested.

1.3 List of Definitions and Abbreviations

VEDI RASD E DD

2.1 Entry Criteria

Before starting the testing process, every lowest-level component (like single Java classes) has to be checked alone. This means that every class code has been revised using code inspection, and every function has been tested alone.

It is also necessary to write and collect the documentation related to single classes, and previous RASD and DD are requested in order to know every detail and plan the testing in the best way.

2.3 Integration Testing Strategy

The integration strategy is based on a bottom-up approach. This choice depends on the fact that every smallest unit has already been tested, and so it is easier in this situation to put low-level components together and test every subsystem created. This method is therefore efficient, and saves time and resources since it is not necessary to create stubs and to simulate components behaviours.

Finally, high-level components are separated from lower tiers by using defined interfaces and are easy to design and implement, so it is useful to produce them in the last phase.

4 Tools and Equipment Required

* Apache JMeter: It is used to simulate a heavy load on a server or object to test its strength or to analyse overall performance under different load types;
* Junit: unit-testing framework for the Java programming language;
* Mockito: software used to mock missing components;
* Manual testing.

5 Program Stubs and Test Data Required

The chosen testing strategy minimize the stubs needed to test the components. However, in order to fully test the application, it is necessary to create some stubs to overcome the external components not yet available, like the localisation system, and the message and e-mail service.

It is also necessary to generate sample data in order to test both database operation, like insertion and deletion, and the business tier that needs data to manipulate.