Draft product specification - ALphaOnE

# Product Overview

The product to be developed is a system for automatic-testing. It is however not a unit or functional test system, but an integration test system that tests the target-software as a whole.

# General Specification

Following are the requirements that system should satisfies. They are at first only at very abstract level, and will be used in design phase to identify more detailed specification.

## Functional requirements

* Must provide possibility to define Test-suites and Test-cases dynamically and flexibly.
* Must provide possibility to connect to different target-system input/output interface without complicated implementation. Should actually only requires configuration.
* Must provide capability to provide various robust reports, with the possibility to define customized report.
* Must provide capability to notify external systems about test result.
* Should provide best possible information to identify error source in test

## Non-functional requirements

* The system must be easily extendable to new target system.
* The implementation should be as generic as possible for future expanding to Mediation system.

## Development code

Think wide. This is not only a test system.

# Technologies and tools

* Java 8+
* OOP & AOP
* JEE or Spring & JPA
* Application Server (Tomcat, JBoss or WebLogic)
* Eclipse as IDE
* GitHub as repository
* Maven or Gradle as Project management tool

# Development overview

## Methodology

Development will be done *incremental and iterative* with many smaller cycles. Each cycle will focus on developing certain functions of the product.

## Draft plan – first & second cycle

### First cycle - Infrastructure preparation

* IDE/Eclipse
* Repository – GitHub
* Project structure (Maven or Gradle)
* Documentation template with automatically versioning
* Development process

#### Second cycle - Core components

* Architectural Design – Core components
* Test planning/specification
* First core components and test implementation
* Test
* Cycle review