State-Machine Configurator

Analysis and Design Document

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Revision History

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# Project Specification

# The project represents a platform (a development tool) that will generate C code based on a State Machine. The state machine will be created by the user using the built-in drag&drop interface.

# Elaboration – Iteration 1.1

# Domain Model

*[Define the domain model and create the conceptual class diagrams]*

# Architectural Design

## Conceptual Architecture

*[Define the system’s conceptual architecture; use an architectural style and pattern - highlight its use and motivate your choice.]*

## Package Design

*[Create a package diagram]*

## Component and Deployment Diagrams

*[Create the component and deployment diagrams.]*

# Elaboration – Iteration 1.2

# Design Model

## Dynamic Behavior

*[Create the interaction diagrams (1 sequence, 1 communication diagrams) for 2 relevant scenarios]*

## Class Design

*[Create the UML class diagram; apply GoF patterns and motivate your choice]*

# Data Model

*[Create the data model for the system.]*

# Unit Testing

*[Present the used testing methods and the associated test case scenarios.]*

# Elaboration – Iteration 2

# Architectural Design Refinement

*[Refine the architectural design: conceptual architecture, package design (consider package design principles), component and deployment diagrams. Motivate the changes that have been made.]*

# Design Model Refinement

## *[Refine the UML class diagram by applying class design principles and GRASP; motivate your choices. Deliver the updated class diagrams.]*

# Construction and Transition

# System Testing

*[Describe how you applied integration testing and present the associated test case scenarios.]*

# Future improvements

*[Present future improvements for the system]*

# Bibliography