State-Machine Configurator

Analysis and Design Document

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Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 18.03.2020 | 1.0 | <details> | Sas Cosmin Andrei |
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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

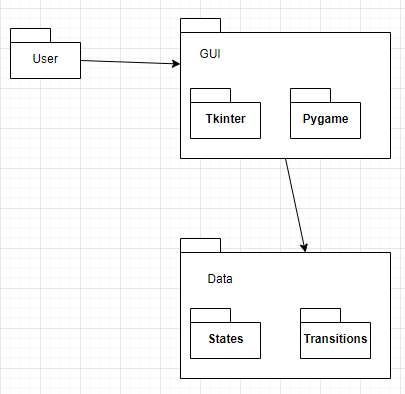
* The user will interact with the tkinter part and the pygame part
* As the data is modified by the tkinter and pygame parts, the new structure will be calculated in the background

# Architectural Design

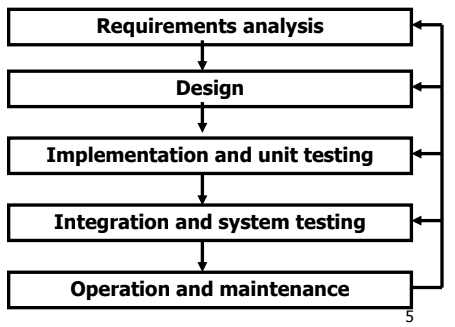
## Conceptual Architecture

* I will use a component-based architectural style
* The pattern will be Model-View-Controller

## Package Design



## 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

* For the internal state-machine tree I can test every function separately

# Future improvements

* I think the greatest improvement would be making it work on the GPU.

# Bibliography