Project Plan

# Definition

The goal of this phase is to define the project extent. This includes

* Define the title of the student research project
* Define the objective of the project
* Define the prototypical implementation of the project
* Create a project plan
* *Create a paper summarizing the objectives and the possible outcome of the project. The created one page paper has to be accepted by Prof. Heinrich Braun and Daniel Lindner*

# Environment

Create “walking skeleton” that implements the validation one rule of the Object Calisthenics.

Setup all necessary tools for prototypical development:

* Working version control with repository
* Create eclipse project skeleton
* Start an eclipse instance with an installed plugin

With this version it is possible to:

* Open an arbitrary Java project with Eclipse
* Run the build in Validation Plugin Object Calisthenics
* See an information in the terminal or a minimalistic UI indication for violations of the rule

*Show Working Skeleton to Daniel Lindner*.

# Research

Research about the Object Calisthenics. Find information about their history and purpose. Find background information. Get all necessary references from libraries and from the internet.

Read these papers and create mind maps and cues and keywords.

# Structure

Prepare latex template.

Create a first table of contents of the research paper. Write short descriptions for each chapter. What’s the purpose of the chapter which questions does it pose or answer.

*Show table of contents to Daniel Lindner*

# Describe

Describe every rule step by step.

* Explain the rules
* Give an good and a bad example for every rule
* Purpose of the rules
* Describe researched patterns and ideas behind the rule
* Summarize the rule’s purpose

Give a priority of the rules:

* Which rule is the most important one?
* Prioritize the rules based on their outcome with the given description and example

# Analysis

Analyze every rule. Find out:

* Similarities of the rules?
* Analyze for every rule:
  + Difficulty of implementation
* Categorize the rules in groups if possible
* Describe the validation steps to check for every rule
* Prioritize the rules based on how hard it is to implement them

The outcome of these steps is a feasibility analysis for every rule.

# Prototype 1

The next step is to implement three of the rules in a protypical implementation. In this implementation there’s only an information if the rule was violated or not. This information can be simple terminal output

# Prototype 2

This second prototype does not add more rules to validate but adds a simple User Interface with simple indication like markers in the editor and a list of validated rules.

# Conclusion

Write a conclusion for the report. Add benefits and outlook chapter.

# Prototype 3 – optional

This third prototype adds more rules to validate

# Project Finish

Submit paper to Daniel Lindner. Get feedback from Daniel Lindner.