Software Reengineering Project

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Abstract

This document is meant as additional information on the reengineering/refactoring of the `JFreeChart` project, which was the assignment of the Software Reengineering course of 2019, at the University of Antwerp.

1 Introduction

`JFreeChart` is a Java library that can be used to add/show professional-looking graphs and charts in your Java applications. This inheritly implies that is it useful in a lot of different contexts and scenarios that require this kind of feature.

The ability for such a library for being flexible and expandable with a vast amount of new features would therefore be an incredible advantage for this.

1.1 Problem at Hand

At this point in time, `JFreeChart` has a wide range of possible graphs, charts and plots it can generate for any kind of data you'd like. Unfortunately the core of this software; i.e. the drawing of a set of points can be considered *legacy code* and is quite solidly hardcoded within the project.

If a user or a client would, for instance, like to create graphs in which every datapoint has a different, predetermined and userdetermined, symbol associated with it[1], this would be impossible with the current state of the code. A general fix for this kind of problems within the software-world is to refactor the code so it becomes more flexible and easier to understand.

[1] As was the assignment.