Project: Plagiat  
Specifications

Olivier Duménil  
Antoine Jacquin-Ravot

Table of Contents

[I/ Scope of the Project 3](#_Toc390949776)

[II/ Description of the project 3](#_Toc390949777)

[a/ The core applications 3](#_Toc390949778)

[b/ The detection modules 3](#_Toc390949779)

[c/ Interfacing the core and the modules 3](#_Toc390949780)

# I/ Scope of the Project

This project aim to produce a software able to help teachers detect plagiarism in programming assignments. It should provide the following features: detection methods modularity, ease of access, results readability.

The creation of new detections algorithms is out of scope.

# II/ Description of the project

This project will be divided into two parts: the core application and the detection modules, as described as follow.

## a/ The core applications

The core application will be presented in the form of a graphical user interface written in C++0x11/Qt. It will be responsible for the processing of the files or project provided by the user. To do so, it will load and use detections modules selected by the user. Finally, it will present the resulting data in both a graphical, user friendly way, and by exporting it in various formats.

## b/ The detection modules

Their task is to analyse the given data using their own detection algorithm and produce usable results for the core. Each module should implement a different algorithm. They will provide the core application with a form to specify parameters for the algorithm.

## c/ Interfacing the core and the modules

The core will provide a simple API (Application Programming Interface) that will be responsible for the following tasks:

* Sending the data to analyse to the module
* Retrieve the parameter form of the module
* Send the module the parameters given by the user
* Tell the module to start, stop or pause the analysis
* Retrieve the results
* Retrieve the advancement of the analysis (optional)