A web-based IDE for Java

PROJECT PLAN

Semester project for Software Engineering Laboratory Open-Source EiffelStudio

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1. PROJECT DESCRIPTION

Overview

In a world where cloud computing becomes more and more established it is a logical consequence that software development itself has a future in the cloud. Development environment, libraries, compiler and even the source code can be outsourced from the local machine to a server. Fast and reliable data transfer makes it possible. Cloudstudio realizes the idea of a web-based IDE where you can immediately start participating by just using a web browser. There is no need to install any software. Since Eiffel is probably not the most commonly used programming language, Cloudstudio shall provide support for other languages as well. One of them is Java, which I will try to do.

Scope of the work

Adapt Cloudstudio to support Java projects. This includes:
- Syntax highlighter for Java
- Displaying Java code when starting a new project
- Project file structure for Java
- Compiling and running a Java project

Intended results

Not having much of an idea of how difficult these points are to realize I cannot entirely predict the results. Goal is to implement these points as far as I am able to. This project will be part of the whole adapting to other languages process.

2. BACKGROUND MATERIAL

Reading list

Not decided yet. Most of the reading will be the online documentation of Java and the Google toolkit.

3. PROJECT MANAGEMENT

Objectives and priorities

Highest priority shall have the basic functionalities to create and develop simple Java programs using Cloudstudio. This can of course be extended with additional services such as importing libraries which however will have a lower priority.

Criteria for success

Success is bringing Cloudstudio forward by adding things which can actually be used and which are enriching the project.

Method of work

First I will have a look at the code which I am going to adapt and try to understand how the system works and how Cloudstudio is coded. If questions appear I will contact the assistant via email and after some working steps we meet to discuss the quality of the product and what to do next.

Quality management

Documentation

Documentation will be mainly done with comments in the code. There will also be a final report.

Validation steps

Manual testing and code reviewing by the supervisor.

4. PLAN WITH MILESTONES

Project steps and Deadlines

- Get a feeling for the project and the source code   14.11.2011
- Understand how the parts work which I am going to adapt   21.11.2011
- Change these parts of code step by step to a Java environment   12.12.2011
- Testing, Documentation and final report   23.12.2011