Table 1: Revision History

| Date           | Developer(s)       | Change                    |
|----------------|--------------------|---------------------------|
| Sept. 22, 2016 | Christopher, Varun | Initial problem statement |

## SE 3XA3: Problem Statement Spann

Team 8 Christopher Stokes — stokescd Varun Hooda — hoodav

## Why is this an important problem?

Development is often a challenging process that has many points of failure. This is why developers often make use of tools and software applications that make the entire process easier to manage and maintain, as well as reduce the overall effort and time that has to be put in by developers. Web-based coding/development solutions, such as the one we are basing our project on, often lack many features and functionality that make modern software development more efficient. Thus the benefits of such online platforms are often outweighed by their lack of features and functionality. Solving this issue will provide developers with the benefits of an online, web-based, development platform while retaining the benefits of traditional desktop IDEs. Thus, increasing the efficiency of the entire software development processes.

## What problem are you trying to solve?

The project Spann is attempting to solve the issue with delays in development caused by compiler and interpreter setup and maintenance, IDE maintenance, files system maintenance and dependency control. This problem is especially noticeable on smaller projects where the delay in development is a much higher percentage of the overall time. The project therefore focuses on providing a quick and easy system for the user, with features specific to making development fast. This means lowering the time impact of the multitude of issues that slow down development. or impede actual development tasks. This includes language and compiler install time, renaming and refactoring, simple syntax mistakes and incorrect names.

## What is the context of the problem you are solving?

The primary stakeholders of Spann are developers who need to prototype or test sections of code, and developers working on the project when they do not want to have to manage the language dependencies themselves. By having the platform run independently of a users system, were able to make Spann accessible to more people by removing the complexity, effort and time of setting up a development environment. This makes it ideal for developers working on different platforms and devices that may not support the language or have complications with setting up the environment. It also is ideal for developers working on subsections of a larger project, giving them the ability to quickly implement algorithms with fewer faults away from the complications of the larger project.