Chapter 3

Literature & Technology Survey

3.1 Introduction

Throughout this chapter, we explore existing technologies, reviewing what areas of the problem they solve and which requirements they are lacking. We also seek to confirm the need for such a technology to fully solve the issues we’ve identified.

3.2 Overview

One of the expected outcomes of this dissertation is an online, collaborative platform to facilitate cross and multi project code reuse, effective code searching, and code sharing and peer review.

To begin, we must identify key points surrounding the current state of cross project code reuse:

* Has code reuse evolved over time?
* What tools are there currently that attempt to partially or completely fulfil the goal of cross project, multi user code reuse?
* How have these tools evolved, and what were their original intentions?
* Is there literature to support the idea that code reuse remains sub-optimal?
* Is there ongoing research in to new methods of code reuse or code sharing, specifically cross project?
* How do current developers feel about their existing environment in relation to code reuse, and what do they feel works well or poorly?

The majority of this chapter will explore each of these points in detail, with a focus on small scale code reuse, which will be what is primarily referred to by the term ‘code reuse’.