Design Details

SIXTYHWW SENG3011 Report

**1. Describe how you intend to develop the API module and provide the ability to run it in Web service mode**

**2. Discuss your current thinking about how parameters can be passed to your module and how results are collected. Show an example of a possible interaction. (e.g.- sample HTTP calls with URL and parameters)**

**3. Present and justify implementation language, development and deployment environment (e.g. Linux, Windows) and specific libraries that you plan to use.**

**API:** Our API will be written in node JS

**Scraper:** Our web scraper will be built in node JS using the cheerio library. We chose this as the library is easy to use, relatively light weight, and it makes it extremely simple to create JSON objects from the scraped reports from a JavaScript program. This means that it will work seamlessly with the API and database.

**Database:** Our database will be constructed using SQLite3

**Frontend:** The frontend for our web app will be constructed using typical web programming languages such as HTML5, CSS and JavaScript.

**Deployment:** Our API will be deployed on the Heroku web hosting service. This allows us to easily host our API on the internet, and run our scraper on a schedule for free. For local development, the API and the scraper will both be running on Linux operating systems.