

# Project GF2: Software First Interim Report Software Design Team 1

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## **1 Introduction**

This project requires the development of a logic simulation program, implemented in C++. When completed, the application will read a definition file containing a list of devices and the connections between them. It will then graphically display the values of specified monitor points in the circuit as the simulation is run. Some legacy code has been provided, but lacks a scanner, parser and GUI which will be developed in this project.

### **1.1 Teamwork Planning**

The GUI development requires learning and reference to the wxWidgets and OpenGL packages, so makes sense for one team member to focus efforts here. The scanner and parser will require robust coding and testing, so it was decided to combine the two as a peer programming project to allow implementation and testing to be carried out by different team members.

The work is to be distributed as follows: Andrew will code the GUI, and James and George will write and test the scanner and parser.

## **2 Syntax Specification**

## **3 Semantics Specification**

## **4 Error Handling**

## **5 Example Circuits and Definition Files**

### **5.1 XOR Circuit Composed of NAND Gates**

### **5.2 3-bit Gray Code Counter**