Assignment Review Form

COMPSYS723-Assignment 2

This form must be completed to evaluate the overall performance of the assignment. Fill **one form for each group**.

Fill in the following information:

**Team/Group Number: 17**

**Name of the Student 1: William Chao**

**Name of the Student 2: Leighton Jonker**

Please fill in the following table to indicate the number of hours spent by each student.

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Student 1** | **Student 2** | **Student 3** |
| Planning | **5** | **3** | **-** |
| Understanding the assignment | **1** | **1** | **-** |
| Understanding Esterel | **3** | **2** | **-** |
| Programming | **5** | **1** | **-** |
| Debugging | **2** | **1** | **-** |
| Documentation and Reporting | **2** | **10** | **-** |
| Other | **-** | **-** | **-** |
| **Total number of hours** | **18** | **18** | **-** |

**Any further comments on the assignment:**

How the cruise controller assignment can be improved?

* The cruise controller should ALWAYS set the cruise speed to the current speed of the vehicle when going from the OFF to the ON state rather than only initially. If this was the case, it needs to be stated clearer.
* Better test cases for a thorough verification and having automated test scripts

What do you think of the Esterel language?

William: I think that it’s outdated and should be reworked or updated so that it is more similar to modern languages. For example, traps are just break statements, loop is just a while(1) loop, etc. There is little to no support for this language, even the official website of Esterel-Technologies does not have any mention of it. I found it very annoying, having to explicitly state every possible combination of inputs when checking if signals are present. It should have something similar to an “else if” where priority is stated sequentially. The UI of the program itself is very hard to use because it does not scale to the screen’s resolution. Having to change the size of the fonts to “big” or “huge” every time the application runs is extremely annoying and it takes a while to do so. On the bright side, it does as expected, and being able to execute modules in parallel rather than sequentially awesome.

Leighton: Could use more information to do with Esterel syntax, as well as examples for situations the cruise controller could encounter, and how the system should react. The vector.in / vector.out not working was also slightly frustrating for the testing process, and didn’t seem to specify many possible outcomes of the system. Esterel was slightly annoying to handle, with the multiple windows and needing to change the size of the font every time, but other than that everything was good..

What do you think of the formal verification?

William: We didn’t use formal verification as it did not make any sense to use it in this program. It’s not useful to know if an output signal is just POSSIBLY EMITTED / ALWAYS EMITTED / NOT EMITTED. Better to test it manually by manipulating the inputs.

Leighton: As William said, it was better to manually test the system. We wished to use the provided vector files but they were not working. Even if they did work they did not provide much insight as to how our system worked as it was very shallow and vague.