Placement Sean Carlin. Weekly Progress Report

Week 2020-03-31 – 2020-04-03

This week Sean spend most of his time on refactoring. Sean was introduced to the principle of refactoring. It was explained to him that, although his module is working and looks complete, that there are several things that can be done to it.

It was explained to him that software is never really “finished”. Bugs will come to the foreground or improvements can be carried out. Last week Sean was left with the challenge of lifting pieces of code out of his module and collect them together in a library. It was explained that this would enable him to lift “complexity” out of the module. This exercise was intended to give him a better understanding of one of the core principals of coding, being encapsulation.

Sean had the insight on what functions could be lifted and moved these in a separate library. The way in which Sean did this was correct.

As Sean started to test his revised version he found that it was not working. Sean struggled with this for a while. As his mentor I got a copy of his finished module and performed the same tests. I located the bugs in his code and highlighted this. Sean was left with the challenge of finding the bugs. This led him to start using the debugger.

Sean was initially unable to spot the bugs. I emphasised to him that he has to look deeper into the concept of scope and variable declaration.

I revised the given copy of the code and tested it successfully. Sean was given the revised version and was asked to spot the differences.

By Friday he was left with one type of bug. This bug is more related to the actual Vectron API than in his understanding of the coding principles.

Sean made good progress. He must develop the skill of reading. Sean understands that by encapsulating code he will free up “brain power” to create more complex structures in code.

Next week we will be focussing on making the module complete data independent. What this means is that the module can be used in any kind of Vectron Data setup. Different sets of data have different numbers of operators, plus and medias.

Sean also will create a more random kind of general loop. Currently the loop runs based on a consistent timer. This has to become random.

Overall communications this week were done by Skype and Whatsapp