Centre: [redacted]

Candidate: [redacted]

H446 – “2D Map Runner”

Additional Commentary to Examiner

- The pen drive contains the full original source code for the game as well as a folder with video testing evidence which is referred to in the documentation.
- **Analysis:** Stakeholders / users well identified and justified on p3 along with why they are suited / why they would like the game developed. Each computational thinking strand is looked at on p4&5 and comments made which clearly justify why this program will be solvable by computational methods. This is implicitly covers why such a solution is amenable to a computational approach. Research starts on p6 with a look an existing game. Key features from this game they will include and also would avoid are listed. This is followed by an interview with analysis on p8 and a follow up interview. This is well rounded off with a section on p11 features for this proposed solution. These features are well justified. Although there is some reference to limitations, these are not as evident and should really have been pulled out in a different section. I also question if research just one existing solution is considered “in depth”. A full and detailed list of requirements / success criteria appear in a table from p13 onwards. Each has been justified and linked back to part of their analysis. This is followed by a well thought out and justified hardware and software requirements table on p16 **9/10**
- **Design:** The design starts on p19 with a top down modular design. Each box/module is then taken in turn and plenty more design information is provided. For example, Screen Designs p20,21,22,24; Key Variables & Structures p25-29; Validation p39; Test Data for Development p43,45. Usability features are well documented p29,30. A complete set of detailed algorithms are presented as flow diagrams on p33-40, along with a diagram of how they link together on p41. There is also very good evidence in the ongoing development story of design choices being amended and full justified p61,72 **13/15**
- **Iterative development of a coded solution:** Iterative development starts on p49 and takes the form of a development story as a diary. There is clear evidence of an iterative approach with successive prototypes being review at regular points with the user p65,76,82. Good code snippets are shown throughout the development story as the solution is being coded p58,63,70.74,77,84. The entire code is also provided as an appendix at the end of the project. The code has been well annotated in places and poorly in others. However it has been developed in an OO Modular way and all variables and classes have sensible names to aid in future maintenance. **13/15**
- **Testing to inform development:** There is excellent evidence of both implicit and explicit testing throughout the development process. Implicit testing can be seen whenever they hit a big in developed which are all well recorded, along with their subsequent investigations and actions taken p57,104. Explicit testing is excellent, test data identified in design is used and results recorded and justified and actions taken p55, 82,102 **9/10**
- **Testing to inform evaluation:** Post development end user / system testing starts on p133. Detailed testing has been carried out p113-119, with matching video evidence on the USB pen. This testing includes usability. **5/5**
- **Evaluation of solution:** There is a final evaluation from p121-133. It starts with all of the usability features in detail along with if the original requirement (success criteria) has been met and if not how it might be achieved in the future. This is very extensive and fully justified. Maintenance and limitations are tackled again from p134-136 and it nicely summaries how the game could be improved and how updates to could be pushed out for their game. **12/5**

61/70