Project Proposal Form

|  |  |  |
| --- | --- | --- |
| Name: Percy Dracott | | Class: CO3 |
| Project title (Working title): Exploration into Neutral Networks and Machine Learning | | |
| Outline a description and the aims of your project: | Making a 2D exploration game, with procedurally generated world, destructible environment, NPCs and enemies, game saving, and online multiplayer.  Using unity to recreate terraria, an exploration and crafting game. Aiming to utilise level 4 grade techniques in the making of the game, such as use of complex data structures in the saving of the game. | |
| Potential client/ third party/ end-user(s) and who they are e.g., a local business owner, a person interested in board games: | The project would appeal to game companies for resale, in addition to the wider public for playing | |
| What kind of access do you have to your potential end-user? | The proj | |
| What potential programming skills ([from Table 1](https://www.aqa.org.uk/subjects/computer-science-and-it/as-and-a-level/computer-science-7516-7517/subject-content-a-level/non-exam-assessment-the-computing-practical-project#Example_technical_skills) or skills that are not listed) will it enable you to demonstrate? | The project would use dynamic generation of objects in the making of the procedurally generated world; in addition to server-side scripting in the multiplayer, as well as a complex data model in the saving of worlds. | |
| What data will your system potentially store and access? |  | |
| Have you prototyped part of the project? If so, describe it and the next steps: |  | |
| Useful links related to the proposed project: |  | |

# Alternative Project Idea (optional but recommended)

|  |  |  |
| --- | --- | --- |
| Name: Percy Dracott | | Class: CO3 |
| Project title (Working title): Exploration into Neutral Networks and Machine Learning | | |
| Outline a description and the aims of your project: | In the project, a neural network will be used and taught to walk a physics simulated entity. Physics objects will be used to make a character with jointed legs. A neural network of varying amounts of artificial neurons will attempt to walk the character along a distance. Each generation will aim to improve the results by copying the most successful entities.  I will proceed to observe and evaluate the effect of increasing the number of artificial neurons on the rate of learning and result over several generations.  I also plan to create different types of neural networks and potentially explore how they differ, and which are more suited to the walking experiment. | |
| Potential client/ third party/ end-user(s) and who they are e.g. a local business owner, a person interested in board games: |  | |
| What kind of access do you have to your potential end-user? |  | |
| What potential programming skills ([from Table 1](https://www.aqa.org.uk/subjects/computer-science-and-it/as-and-a-level/computer-science-7516-7517/subject-content-a-level/non-exam-assessment-the-computing-practical-project#Example_technical_skills) or skills that are not listed) will it enable you to demonstrate? | Uses of data structure, iterative processes and application of code in an external software. | |
| What data will your system potentially store and access? |  | |
| Have you prototyped part of the project? If so, describe it and the next steps: |  | |
| Useful links related to the proposed project: |  | |