"Back To Blue" Technical Risk Assessment

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Game Production 1

"Back To Blue" is a sea-based educational game intended to raise awareness of oceanic pollution among younger students, in development for Unity by Team Orange. From a technical standpoint, there is very little risk in Back To Blue's fairly simple mechanics. The game's main mechanic, using line to drag objects, is a simple enough task that requires some basic physics for coding, however, Unity already provides many of the needed tools for such an idea. Simple physics are all that is needed, to allow the movement of creatures, objects, and the player around the level. All systems should be able to handle Unity's physics engine, and thus the game seems unrestricted in terms of platform limitation. Since the game is intended to be played on school computers, this can prove incredibly helpful considering the broad range of possible public school computers.

The most risky aspect of the project is likely going to be the artificial intelligence, which is required for the various sea creatures that are planned to make appearances in the game. The AI has to be predictable enough for the target audience and complex enough to make for interesting interactions in-game, all while representing the real-life actions of the creatures. Thus, the currently planned AI will be simple, mostly limited to interaction with the player and

sometimes various objects in the environment, such as trash and pollution, in order to keep in-scope with the project. However, with multiple levels, new AI will likely be needed, and thus it is expected for AI to be created or re-used. The more levels planned, the riskier it becomes.

While AI can be a bit of a risk for larger amounts of levels and will no-doubt require playtesting, the project is simple enough and certainly in scope with the current tasks and planned features. The game is also open enough to allow for additional features to be added in the case that something were to change, making the game rather technically flexible.