Project Description Report 1 Summary
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Project Overview and Goals

The overview in the report describes the concept and objective of our Ocean Inc. game. It lays out the idea of an industrial management game that ultimately aims to give players the experience of environmental damage on human-made infrastructure that is unintentionally self-inflicted. This gameplay experience will spread a deep understanding of the environmental consequences of industrialization.

Relevant Facts

In the report for Ocean Inc., relevant facts are described in section 8. By introducing relevant facts, it helps show what users can expect from the game and how it affects the gameplay. We explained how the game would be realistic, educational, and fun. It will be realistic due to the amount of data that will be collected to help make effects of factories on the environment. Educational because the game is based on the environment and the effect of climate change on the environment. It will be fun because it's a game that will have many objectives and content available to the user.

Scope of the Project

Ocean Inc. is an innovative simulation game that educates players about the environmental impacts of industrialization on ocean ecosystems. By merging engaging gameplay with real-world environmental data, the game aims to raise awareness of pollution and climate change in the ocean, addressing gaps left by titles like SimCity, Cities: Skylines, and Anno 2070. While those games simplify pollution mechanics, Ocean Ink incorporates real-life climate data and ecological models to show the effects of industrial actions. This responsive simulation encourages players to understand sustainability and the consequences of their decisions, creating a more nuanced and scientifically accurate gameplay experience.

Scope of the Work

The primary goal of the game is to strike a balance between industrial growth and environmental stewardship, allowing players to monitor pollution levels while making strategic decisions to expand their businesses. Players can take corrective actions to mitigate environmental damage if pollution rises too high, while also exploring opportunities for growth when needed. Key features include a secure login for account access, notifications about critical updates and environmental conditions, an Upgrades tab for improving various aspects of the business, and options for equipment enhancements and implementing green technologies. Players can partner with other virtual businesses, hire staff to manage operations and oversee waste management practices. The game also allows users to monitor marine wildlife health, track pollution levels in real time, and invest in environmental remediation efforts to repair damage caused by industrial

activities. By navigating these challenges, players must find the right balance between building an industrial empire and minimizing harm to the planet.

Constraints

Ocean Inc. will be a product that can be accessed from a digital video game distributor named Steam. The game will be available to play on Windows and Apple machines and does not require high power.
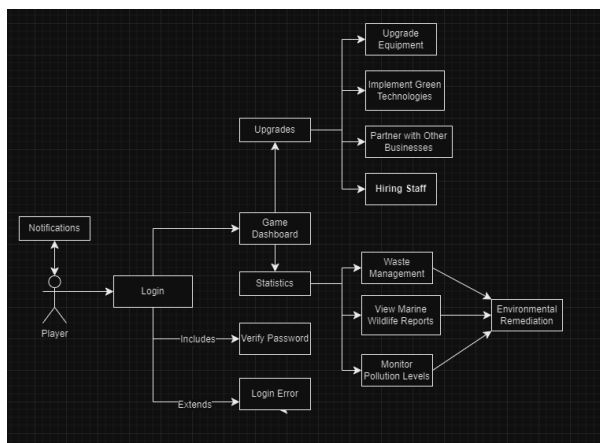
Key Terms

Under section 7 of the report are a handful of key term definitions relevant to Ocean Inc.'s game mechanics. Factories, Playable Area, Build Menu, Pollution Meter, Upgrades, and Pollution Rate are defined so far since they are key components to the game's design. Thus, as we ponder more features of Ocean Inc. there will be more key terms to define. In addition to a definition, the report explains that the Pollution Rate depends on the factory type and shows a simple expression of how the pollution rate affects the pollution meter.

Assumptions

In the report, assumptions are described in section 8. All of the assumptions that are listed are relevant and important to the Ocean Inc. game. This will help the users understand what they can assume when the game is released and some background information on what to expect. Some that are included in the report are micro-transactions, partnerships, Software tools, etc. Everything listed will be used to help explain more about the game and what type of features it will have. Furthermore, it can help users assume what type of game it will be and how it will work within the development of the game,

Diagrams

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Use Case Diagram   **Work Context Diagram**

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