

National Parks Builder Summary

Group 2

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The National Parks Builder is a game application that allows users to maintain, build, and manage their own national park. Users would be able to choose the area they would want to set up their national park. From there, they will be able to build upon the park with units such as trees, lakes, geysers, hills, animals, etc. These units would allow the park to gain popularity and rewards, and it would be the players job to maintain their parks. In addition to building the park, the player would also have to make executive decisions throughout the game. These decisions would include dealing with problems with the park, keeping employee morale high, generating revenue, etc. The tasks that will be presented to the user throughout the game will attempt to simulate challenges that national parks face in real life. The user will have to ensure that the popularity of the park and revenue are up to par. Otherwise, this could potentially result in a shutdown of the park. The game will also include the ability to compete with friends and allow users to view and compare with other parks. Furthermore, the game's profits from microtransactions would be donated to parks to help fund their cause in preservation. Users will have the ability to spend hours on this game with new challenges and events that would be presented each time the player logs in. These challenges and events would attempt to simulate real life events as well, and these challenges will incentivize players with rewards and further progression which will unlock more features and a more personalized park. The purpose of this game is to increase awareness to players about national parks, their benefits and challenges. We hope that this game would increase the popularity around national parks.

In regards to requirements for our project, the game itself will give users the ability to complete challenges, gain currency, and build certain objectives. These core requirements are the fundamentals of the game itself, and will indeed be able to keep players focused and determined throughout the game. Some functional requirements the game itself should provide is to constantly keep the players progressing by providing rewards for gametime, and continuously displaying new challenges to complete. Some performance requirements the game should display are keeping the latency at a correct level, and the ability for users to interact with the screen without any lag. These features are important to keep users content, as they have no barriers from enjoying the game. Furthermore, gearing towards dependability and capacity, the backend should be able to support a concurrent amount of connections from many different areas, and should have a secure database that will be able to account for numerous amounts of information. Another important requirement is that maintenance will constantly be happening throughout the months making sure there are no current bugs, and also focusing on releasing periodic updates to ensure players are able to receive fresh content throughout the year. The application itself should also be functional on any smartphone or tablet, as those will be the platforms that users should be able to play the game. Additionally, in terms of security it is very important that a possible third party would be responsible for keeping players information secure, and ensuring all payments will be encrypted. If the system is ever breached, users should immediately be notified. Finally, in terms of usability the game itself should have a modern feel, and be easily playable without much practice. The game itself should have vivid images to keep the audience captivated, while holding easy gameplay to ensure that all users have the ability to play without any complaints.

The general design of the National Park Builder takes into consideration that the majority of the screen/user interface will be the terrain. The terrain is where the user will manage all of their buildings. The average user needs to be able to enter the game and have a clear understanding of what is where. All buildings/structures will be clearly highlighted and labeled to be able to distinguish them from other types. Doing this will also guarantee that buttons and other features will not blend into the terrain/environment of each user. Because National Park will have a lot going on with unique buildings, habitats, and forestry, key features will use bold colors. A major piece for National Park Builder is the Building interface. This is a factory method design pattern that will be the base of the every single other Building in the part. This includes habitats, the Town Hall, Hospitals, and many many more. Something important to note is that the Building interface will have an Action() method that will be unique to every building meaning that each building can perform its very own distinctive action to perform. As for the design platform, Unity works very well for mobile games in IOS and Android. Unity is also amazing because it will allow the designers to create beautiful 3 dimensional buildings for the game.

Figure Below: This is the Building interface discussed above

