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Game Design Document

MOON JUMP: Dance the Universe

Abstract of Story

The player is looking for the perfect music beat to unlock a new level of the game and challenge a new opponent who will make it difficult to advance to the next level or world. The goal is to reach the final plateau as the "King of the Dance Floor".

Appearance

The setting of the game takes place in different "worlds". Each world is different (examples: space, aqua marine/Captain Nemo, Bonsai garden, Egyptian pyramids, metropolis (Los Angeles). The game's camera point of view is top-side which gives a semi-3D look. Depending on the interface, the user will either see a 2D or 3D/Virtual Reality experience. Other considerations included Augmented Reality, where the user sees game objects appear in their local space instead of a "virtual" space created by the game

User Interface

The User Interface includes many tools to help in understanding what is going on during the game. The user has a "mini-map" that allows him to see the general layout of the whole map. The player can only see levels which have been "unlocked" by achieving a winning score. Along with this, the player also has the ability to see the attribute points of any selected unit that he or she controls. This allows for the player to know when a dancer is skilled, tired or injured. The other features of the user interface allow for the player to see the progress of the game, this is done through:

- Allowing the user to see how many worlds he or she has in control
- Allowing the user to see how many points he or she has
- Allowing the user to see how many worlds are left to conquer for the next level
- Others (?)

Player roles and actions

Game play is similar to the 80's game "Street Fighter". Scoring would be based on the right combination of moves to score high in the battle. The "moves" library allows for the game player to select a specific dance move to execute. Players can choose between several avatars/characters at the beginning of the game. Each character has strengths and weaknesses, specialties. Dancers can "block" their opponent to allow for more dance time and hidden bonus points.

Strategy

The goal of the game reach the final plateau as the "King of the Dance Floor". The basic measures to achieve this goal are as follows;

- Select Dancer and Compete with other Dancers:
  The player will be able to choose their avatar/dancer at the beginning. Upgrades are available at an extra cost, and they improve the appearance (clothes), stamina, strength, dexterity, etc.
- Conquer as many worlds as possible:
  Each world increases in difficulty. Ultimately, the winner of the game will have conquered all worlds.
- Create new dance moves/unlock new moves
  Each dancer can create a series of new dance moves or unlock new moves.

Level Summary / Story Progression

In this game there are many levels. Every time the player starts a game, a random map will be generated, and this will ensure variety. Story progression can vary greatly and it gets shaped according to the player's actions and strategies, however, no matter how the story progresses, a common game scenario may have the following stages;

- Starting stage:
  The player starts off with the dancer and a few moves and some strength, stamina and dexterity but no experience. During this stage, the player will barely have enough resources to compete.
- Exploration stage
  Player learns how to execute dance moves and increases experience, strength, stamina and dexterity.
- Buildup stage
  As the factors (experience, strength, stamina, dexterity, food, water) starts to accumulate, players start to build and upgrade their dance crews. That will allow for the possibility of challenging other dance crews and participating in multi-player "battles" where there is opportunity for bonus points.
- Ending stage
  The winning player will have control of the worlds and the universe.

Minimum Hardware Requirements

- PC with 1 gigahertz or higher processor clock speed. AMD Athlon or Intel Pentium recommended
- 2 GB of RAM
- 100 GB of available hard drive space

- DirectX 9.0c compatible video adapter

Minimum Software Requirements

- Windows 7
- DirectX 9.0c runtime
- Oculus compatible
- HTML5 Compatible

Algorithm Style

The graphics in the game will be produced using Blender and Unity5 sprite animation. In addition to that, the game will have the following algorithms / functions;

- AI. The computer should know how to build a dancer, perform moves.
- Collision detection and map scrolling
- Management of inventory of water, food. Players can purchases food and water by using their points.