**Ice Runner**

**Game Design Document Outline**

***Version 0.1 December 14, 2015***

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# Title Page

* 1. Game Name - Ice Runner
  2. Version Number - 1.0
  3. Team Members - LeRoy Eberly, Fan Zhang, Zhenjie Hao, and Zev Lopez
  4. Date - 12/15/2015

# Design History

Version 1.0 - The document was created and initial level design information was added, as well as some story elements, and game overview information.

# Section I - Game Overview

* 1. Game Concept - The game is a 3D platformer where the player must race to the finish as fast as he can.
  2. Feature Set
  3. Genre - 3D Platform game
  4. Target Audience - The game will feature anime stylish characters and background that does not need complex operations to move or win the game. The simple racing system is friendly for everyone and is playable by new players from ages 6 and up.
  5. Game Flow Summary – How does the player move through the game. Both through framing interface and the game itself.
  6. Look and Feel – The main look of the game is to convey a very cold world. The game takes place at night to add to the idea of the cold and the map features a light fog with some snowfall so that the player can get a sense of the type of weather that takes place.The water is made to look very frigid so that the player can know that falling in could mean death.It does have an overall look of a plat-former so that the player can know exactly where to go.
  7. Project Scope – The game will be a simple one level platformer with basic controls.
     1. Number of locations - 1 location.
     2. Number of levels - 1 level.

# Section II - Gameplay and Mechanics

* 1. Gameplay
     1. Game Progression
     2. Mission/challenge Structure
     3. Objectives – What are the objectives of the game?
     4. Play Flow – How does the game flow for the game player
  2. Mechanics – What are the rules to the game, both implicit and explicit. This is the model of the universe that the game works under. Think of it as a simulation of a world, how do all the pieces interact? This actually can be a very large section.
     1. Physics – How does the physical universe work?
     2. Movement
        1. General Movement
        2. Other Movement
     3. Objects
        1. Picking Up Objects
        2. Moving Objects
     4. Actions
        1. Talking
        2. Reading
  3. Screen Flow
     1. Screen Flow Chart – A graphical description of how each screen is related to every other
     2. Screen Descriptions – What is the purpose of each screen?
        1. Main Menu Screen
        2. Options Screen
        3. Etc.
  4. Game Options – What are the options and how do they affect game play and mechanics?
  5. Replaying and Saving

# Section III – Story, Setting and Character

* 1. Story and Narrative - Specific details like scripts and cut scenes may not be in this document but be in the Story Bible.
     1. Back story
     2. Plot Elements
     3. Game Progression
     4. License Considerations
  2. Game World
     1. General look and feel of world
     2. Area #1
        1. General Description
        2. Physical Characteristics
        3. Levels that use area
        4. Connections to other areas
     3. Area #2
        1. etc.
  3. Characters
     1. Character #1
        1. Back story
        2. Personality
        3. Look
           1. Physical characteristics
           2. Animations
        4. Special Abilities
        5. Relevance to game story
        6. Relationship to other characters
        7. Statistics
     2. Character #2
     3. etc.

# Section IV – Levels

* 1. Level #1
     1. Synopsis
     2. Introductory Material (Cut scene? Mission briefing?)
     3. Objectives
     4. Physical Description
     5. Map
     6. Critical Path
     7. Encounters
     8. Level Walkthrough
     9. Closing Material

# Section V - Interface

* 1. Visual System
     1. HUD - What controls
     2. Menus
     3. Rendering System
     4. Camera
     5. Lighting Models
  2. Control System – How does the game player control the game? What are the specific commands?
  3. Audio
  4. Music
  5. Sound Effects
  6. Help System

# Section VI - Artificial Intelligence

* 1. Opponent AI – The active opponent that plays against the game player and therefore requires strategic decision making (example, Civilization or Chess, how is it to be designed?
  2. Friendly Characters
  3. Support AI
     1. Player and Collision Detection
     2. Pathfinding

# Section VII – Technical – This may be abbreviated with most in the Technical Bible.

* 1. Target Hardware
  2. Development hardware and software
  3. Development procedures and standards
  4. Game Engine
  5. Network
  6. Scripting Language
  7. etc.

# Section VIII – Game Art - This may be abbreviated with most of the content in an Art Bible.

* 1. Concept Art
  2. Style Guides
  3. Characters
  4. Environments
  5. Equipment
  6. Cut scenes
  7. Miscellaneous

# Section IX - Secondary Software

* 1. Editor
  2. Installer
  3. Update software

# Section X - Management

* 1. Detailed Schedule
  2. Risk Analysis
  3. Localization Plan
  4. Test Plan

# Appendices

* 1. Asset List
     1. Art
        1. Model and Texture List
        2. Animation List
        3. Effects List
        4. Interface Art List
        5. Cut scene List
     2. Sound
        1. Environmental Sounds
        2. Weapon Sounds
        3. Interface Sounds
     3. Music
        1. Ambient
        2. “Action”
        3. Victory
        4. Defeat