**Rabbit Habbit**

" Don’t Get Eaten"

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**Executive Summary:**

*Describe the game in two or three paragraphs: basic setting, interesting aspects.*

Rabbit habbit is stealth game that brings you in a dark forest where you are a rabbit trying to find his way back to his burrow. Problem is, worlfs rome the forest and you should avoid them as much as possible because if they find you and attack you will die. If you make it back to your burrow you are safe and restart the level. Be carefull, these wolf are hunters and leanr from their preys actions and movements over time. Therefore, as you move along the levels they will find you faster and make it much harder to survive.

The rabbit as only joystick movement available and no attack possible to defend himself. Therefore, you should be clever in trying to find your way back. The wolfs contain genetec algorithm and neural network algorithms to learn the behavior of the rabbit over time. This learning algorithm allows the game to auto-level up.

**Overview**

*Updating of project proposal: core concept, major qualities of the game, relate with other games, and other aspects that give a mental image of the project.*

**Game Characters**

*Describe each character's background (fiction) and motivation.List things like physical description, vital statistics, occupation, tools/weapons, clothing, etc*

Rabbit

It looks like a hare with brown fur. Looks very inocent as a creature and would make an easy prey. He has no health and once hit by a wolf dies automatically. It is therefore a very aware, on his toes creature that does not feel safe in the forest and only thing he wants to do it find his way back to his burrow to be safe and sound. He does not contain any weapons or attacks that he could use against any enemy coming in is way which makes him a very clever fellow since he has to think outside the box to try and protect himslef.

Wolf

He is a very menacing creature that only wants to hunt prey and eat them. He especially loves rabbits has his major form of food. Since he is a hunter he lives on learning from his preys actions, movements choices and adapts to this in order to become more successfull in catching them. He is a very strong opponent since he can one shot kill his preys.

**User Interface Storyboards**

*Details (through simple sketches showing GUI elements) of the user interface such as title screen, menus, dialogs, in-game heads-up display (HUD) and information displays, etc.*

**Technology Plan**

*Enumerate all the technology needed to develop the game. List any tools used to develop the game (e.g., art assets), document the game (e.g., Google Project) and to run the game (external libraries, etc.)List any hardware requirements, etc., as well.*

Using unity 4.6 to develop the game. No external libraries are being used for this project simply the built in libraries that come with the default unity download. We are using Github for source control to commit our code as well as changes to Game Design document. Facebook is being used as a communication tool to determine meeting times, discuss brainstorming, send remainders, etc.

**Software Architecture**

*List major packages, modules, APIs and flow control.List the main components of the game program such as user interface, artificial intelligence, game logic, ...).*

**Controls**

*Show the mapping of control buttons to in-game functions.Detail the algorithms mapping analog inputs to actions.*

**Level Design**

*Create a map showing the layout and connectivity of the level. Indicate key items and goals.Diagram the flow of characters through the area.*

**Mechanics Analysis**

*Explain the gameplay reason for each game mechanic.Discuss any choices made for the sake of game balance.*

**Artificial Intelligence**

*Give details on each of the following:Individual Movement AI for NPCs, e.g., steering behaviours and kinematic movements used.Path-Finding for NPCsDecision-Making for NPCsStrategic AI for NPCs, either Team AI (working on their own) or Cooperative AI (working with player).Explain the use of animation for Non-Player Characters (NPCs)*

**Physics**

*Explain Collision Resolution used.*

**Results**

*What did you do to ensure the program is working properly? Provide quantitative results ⇒ for example, screenshots of your project during execution at key scenes. A reader should get a good "feel" for the program in execution. In place of a lot of screenshots, you could consider including in your submission a brief****video****of your game in action (especially if you plan to post one anyway on YouTube later as part of your gaming portfolio for job applications).*

**User Manual:**

*Briefly, how would a user compile (what unusual libraries or packages are needed, and where did you get them?), run your project? Describe how the user is to interact with your project? E.g., what buttons should be pressed to perform certain actions? You may have help screens outlining this information, but still include it in your documentation.*