Create by Lin 2/9/15

Modify by Huang 2/9/15

**Project Name: Hunt UDown**

**Team Members:**

☺ Ankur Upadhyay

☺ Fangyu Lin

☻ Haikun Huang (Chair)

☺ Srinivas Iyer

☺ Vijeth

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**Project Agreement**

**Introduction:**

Our goal is to build a first-view 3D shooting video games by using the tool Unity\_3D and the Oculus Rift Virtual Reality Headset. The development tool is Unity\_3D which is a free programming source online. The Oculus Rift Virtual Reality Headset is used to move view of the game and target opponents to shoot. We can use keyboard to take a shoot, or if it is possible to use a gaming gun to make a shoot which would be awesome. There are some different hero characters in the game and they have different abilities. After finish each chapters, you will receive some rewards (unlock), bullets, guns and so on. With the chapters going on, it will become harder and harder, and you can improve your hero’s armor. The project would be similar to dead of house, <https://www.youtube.com/watch?v=4zTujonaRfM>.

**Components:**

1. Map: Chapters Map design (could be different kind of background and view)
2. Buildings: Different kind of houses and streets would be possible.
3. Hero: Hero characters design.
4. Ability (super power);
5. First View direction;
6. Skin and windows components;
7. Health and Energy setup and level up.
8. Enemy: opponent characters design.
9. Body and skin setup;
10. Health setup;
11. Moving speed setup;
12. Attack power setup (for different levels);
13. Visibility setup (for different levels);
14. Weapons:
15. For different heroes have different guns;
16. Bullets limited setup;
17. Weapon types switch setup;
18. Weapon damage power setup;
19. Main menu design:
20. Take aim or selecting at the center of view;
21. The panel windows background;
22. Able to use Headset to make a selection of chapters and heroes;
23. Using Keyboard or shoot (or USB gaming gun maybe);

**Levels:**

1. Chapter Maps and buildings
2. 3 chapters or more;
3. 4 buildings or more;
4. Different Heroes Characters and ability
5. Ability power are different;
6. Initial weapons are different;
7. Heroes health initialization;
8. Heroes’ energy bar is zero at each start point;
9. Enemy characters and powers;
10. 3 different normal enemy characters;
11. 3 Boss for different chapters;
12. Different health limited when level up;
13. Weapons and bullets limited setup;
14. At least 3 different weapons;
15. Bullets limited setup for weapons;
16. Power of the weapons;

Simulation:

1. Able to select:
2. Select chapters and heroes to start games;
3. Able to connect to Oculus Rift Virtual Reality Headset and use it;
4. Able to use keyboard to switch weapons and reload bullets;
5. Able to quit games easily;
6. Health and Damage:
7. Heroes have different health and can take damage;
8. Heroes are not allowed to be healed before finishing one chapter;
9. Heroes’ ability are able to use when the energy bar is full;
10. Enemy and Boss have different health and powers and can take damage;
11. Enemy’s visibility could be different in the later chapters test;
12. Enemy Boss may be able to heal itself in the test;
13. Weapons and Bullets:
14. Weapons have different powers and bullets limited;
15. Bullets have different size for different weapons;
16. Some weapons may not need bullets which can take damages;
17. Able to reload bullets by using keyboard or auto reload;
18. Able to switch different weapons in the games;
19. Able to shoot by using keyboard or USB gaming gun;

**Project Plan:**

1. Main panel and Background setup;
2. Heroes and ability design;
3. Weapons and bullets design;
4. Enemy and Boss design;
5. Keyboard and mouse testing;
6. Oculus Rift Virtual Reality Headset testing;
7. Project Presentation;

**Responsibility: (TBC)**

Haikun Huang:

Main Framework (e.g the transitions between stages, global tools, etc. ), resources (e.g 3D model and music,etc.), mind node (kind of work flow design).