Brainstorming

1. What are the objectives of AI, HUD, and graphics
   1. Developing a flawless gameplay and gaming dynamics. Adjusting suitable difficulty for different player skills. Being able to make dynamic gameplay, contrasting to linear gameplay which will result in different gaming experiences.
   2. Keep the user aware of various important variables in the game such as health, timer. Makes it easier for people to learn (more user friendly game). Also, it enhances the gaming experience.
   3. Create the setting of the game, to create the world which our story settings takes place. Defines the various challenges and puzzles in the game. It also helps to enhance the horror atmosphere and to relate the story to the player in a better way. Having well-presented graphics is a better way to attract player’s attention. Ad Hoc, what player sees in the game
2. Challenges
   1. Graphics:
      1. 2D sprites are not done really often in real life, so there is not much documentation available publicly.
      2. Integrating the graphics together with the platform. UDK needs objects to be designed as a set of coordinates and vertices. These vertices would define collision, size, reshaping. Objects in UDK is vector oriented instead of pixel oriented. It has to be a combination of different programs (Photoshop, Maya, Face FX). Hence, it is hard to design 2D objects in a 3D engine.
      3. To come up with different designs and drawings - beautifully looking graphics that reflects our vision of the game and suits the main feeling of the game (horror)
   2. AI/Gameplay:
      1. UDK (Unrealscript) is lacking API documentation and source IDE. Therefore, it was a challenge to fully understand it.
      2. Designing AI with quick execution, which takes less than half a second each iteration.
      3. Slowing down AI behavior (Tone down). AI should not be too good at aiming, detecting where player at (Although player is always visible to the AI, the AI should not be able to detect it unless it comes too close)
   3. HUD:
      1. Learning Flash development for designing dynamically changing HUDs (Health bar decreasing when player is hit).
      2. Connecting unrealscript with actionScript (flash), because we can only control the action and graphical change from flash methods which needs to be executed from unrealscript event.
3. Design
   1. Graphics
      1. Map. More than one map, 4 maps for at least game testing. Beta testing would be closed beta to our close friends, to judge the acceptance of the game.
         1. Map would be mostly dark and have dark feelings.
         2. 3-4 different “vertical lanes” which player can choose/move.
      2. Characters. The reason that we have 4 different maps is not only about story. We want to test out the mechanics of the possession for the AI.
         1. 2 main design for pawns. Actual player (ghosts), and basic pawn (enemy).
         2. Instead of having unified pawn class for every enemy type, we will create different type of enemy classes.
   2. Gameplay
      1. AI: Abilities
         1. Possession ability, which allows player pawn as a ghost to take ethereal form and take control of one enemy pawn for a limited amount of time.
         2. Flying/Glide/Floating. Player as a ghost, can defeat the force of gravity and allows him to fly freely on a level.
         3. Lighting. Player will use his life form to light up the environment. The longer the player floats, the more life energy will be converted to light to light the environment.
      2. Storyline:
         1. Even though the player is a ghost, he still retains some human ability and memory, which allows him to interact in the human world.
         2. Going through the level, the player finds out more about his past and what he needs to do (involves stealing and running away from an organization).
      3. Puzzles:
         1. You ultimate goal is to be unnoticed while going through the map. Each map has its own set of puzzles to the player, where player can choose stealth mode or fighting through his way.
         2. Traps/Alarm that the player should evade in order to progress through the game.
         3. Puzzle requires the player to interact with the environment.
      4. Music/Sound effects:
         1. Ambient music will be integrated with game to have induced horror feeling while playing the game.
         2. Sound effects will be played for most aspect of the game.
4. Implementation
   1. Graphics
   2. Gantt Chart
   3. Burn Down Chart
   4. Description of our progress so far
5. Testing
   1. Remote Control testing.
      1. Enabled in UDK Editor which allows us to change any predefined variables of any Actors in the game. Remote control testing is useful to us, because UDK platform requires developers to rebuild the whole script every time a file is changed.
   2. Debugging mode in nFringe Development environment. We are trying to make our game functionality as independent from the gameplay as possible, so any changes made to the gameplay would have minimal effect to existing functions.
   3. Alpha and Beta testing, which we are planning to release one full map in beta for people to test and give us inputs.

Introduction: