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# Beard Game

5<sup>th</sup> May 2016

## Individual Contribution

It was great working in team YEN. My Contribution for the team includes all the programming and Design of the Terrain with the gameplay and visual effects along with story writing linking the game design with that of the topics that we have studied.

I designed the terrain of Beard game using the assets of unreal engine which came out with high quality graphics. To add more realistic details to the beard game, scissors as weapon and barber shop where the player can make transformations was added in the game. The environment includes trees and buildings along with few birds. Real Time Physics concept which are Particle System, Collision, Rigid Bodies and Soft Bodies were added to the game in the form of Weapons and Explosions, Impact Damage, Agent, Barriers.

Since the theme of the game was to make it Horror, it is important that the sound effects should synchronize with the player movements. I did add sound which relates to the player movements and made it synchronized. All the sounds were edited using Audacity. It can be observed that there are individual sounds for each movement of the player and the agents.

Then I did add AI in the game which is programmed with the advanced principle of Inverse Reinforcement Learning (<https://github.com/NavneethRaj/AI-Development>) which has Zombie Behavior and each agent has different characteristics which were classified based on the Hearing, Sensing and Attacking Levels.

The Player Controller was added by me with the blueprint of unreal engine which included the transformations, attacking of agents and regeneration of health. Also the transition of the player with gain of experience points to take place at the barber shop was added by me.

The prologue of the game was made by me using Sony Vegas software:

<https://www.youtube.com/watch?v=01m4EQBrkPg>

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## Group Interaction

The whole team had similar ideas of developing a different game from the existing ones and came up with many ideas and finally we decided to develop a beard game. Initially we were a team of 3, due to some reasons we were reduced to 2. But, we did not give up on our idea and we planned accordingly on how we can complete the work within the given time frame. We followed the SCRUM technique and used to finish off the sprint work within the time we had allotted. If we faced any problems, we used to discuss and come with a solution. We used to speak daily on the work that is completed and work that has to be completed. We together made the gameplay and story line of the game. We used to share the work that we have done in the cloud so that we work in parallel by using the results for the next stage. The project was so well planned at the initial stages that we were able to overcome the difficulties during the process of development.