

A PROJECT PROPOSAL

ON

GAME USING UNREAL ENGINE

IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS FOR THE COURSE OF CT 401 COMPUTER PROGRAMMING

BACHELOR OF COMPUTER ENGINEERING

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# ABSTRACT

Unreal Engine is a game making engine that uses C++ as its major language to program a game with real life physics and dynamics. It uses core concepts of object-oriented programming. Our project aims to use the physics supported by the unreal engine. To create a local multiplayer game that pins players against players or players against AI bots.

The game includes an arena that spawns in players. The main objective is to spot and then kill the enemy player. This is a simple third person shooter, that can be played and enjoyed by anyone. However, the technical aspect in quite intermediate. The use of gun/bullet physics; as well as; 3D graphics makes the game a lot more enjoyable and fun to play.

**Key Words:**

Physics, Unreal Engine. Third person shooter.

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# INTRODUCTION

## Background

Unreal engine is a game engine that helps create games with advanced physics and simulations. It includes an array of animations, physics and dynamics simulations; that can be directly implemented onto the project. Furthermore, it includes flexible animation and networking features.

The major feature that the unreal engine offers is the use of object-oriented programming to design each event of the game. The simple levels and other events can be easily edited, making the entire game environment very customizable. This higher flexibility in the code ensures that each aspect of the program can be edited specifically as needed.

Our project is simply a local multiplayer game that allows for up to four players to spawn onto a arena. Each player has the objective of killing the other players, using guns. Once the enemy player’s HP is 0, he is considered dead; and the The local multiplayer aspect makes the game fun for a number of people.

However, in case, the number of players is not filled a number of bot with implemented AI can be used to fill in for the remaining players. We use physics to simulate the movement of each part of the character model, giving it a more immersive feel while actually playing the game.

## Problem Statement

Using a gaming engine to develop a third person shooter, using real player and bullet physics; makes it possible to create something that is highly immersive and fun for people.

## Objectives

1. To implement reallife bullet and player model physics.
2. To make an immersible local multiplayer game.
3. To use object-oriented programming in C+

## Applications

It can be distributed to various computers; easily installed and played on LAN against other players.

## Project Features

* Physics Based Bullet and Character model
* Local Multiplayer
* Animations
* 3D graphics

## Feasibility Analysis

It is highly doable, using the unreal engine and the concets of object oriented programming in C++.

### Economic Feasibility

It is quite inexpensive to make and run.

### Technical Feasibility

It requires knowledge of the c+ programming language and is more technical.

### Operational Feasibility

It can run on any computer, with decent CPU and/or GPU.

# METHODOLOGY

## Topics as per ur project………

### Subtopics as required

…contents………

### ………

…contents………

## ………

### ………

### ………

Include system developments, system designs, block diagrams, other diagrams and materials that explain about working principles of ur project…

# EPILOGUE

## Expected Output

The basic expected output is as simple third person shooter, playable by anyone.Possibly, a chance to expand upon it and distribute it among other general public.

## Budget Analysis

………cost estimation of ur project development and running………….

## Work Schedule

……what u plan to do when… include gantt chart…………….

Figure 4.1: Gantt Chart <example>