## CHESS: THE ROYAL BATTLE

## Minor Project on GAME DEVELOPMENT

using Unreal Engine 4

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#### Content

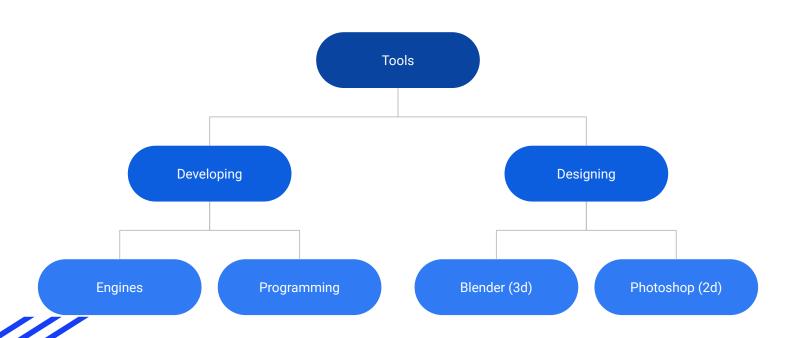
- What is a Game?
- How Games are Made?
- What is a Game Engine?
- What is the Pipeline of the Game?
- What are the objectives of this project?

#### What Is A Game?

A game is a structured form of play, usually undertaken for entertainment or fun, and sometimes used as an educational tool.

A video game is an electronic game that involves interaction with a user interface or input device – such as a joystick, controller, keyboard, or motion sensing device – to generate visual feedback for a player.

# How Games Are Made?



#### Video Game Development

- Video game development is the process of creating a video game.
- Game development, production, or design is a process that starts from an idea or concept.
- Often the idea is based on a modification of an existing game concept.

Many roles must be fulfilled in the game development process:

- Project Manger
- Designer
- Programmer
- Tester

## What Is A Game Engine?

A game engine, also known as a game framework, is a software-development environment designed for people to build video games.

Developers use game engines to construct games for video game consoles. The core functionality typically provided by a game engine may include a rendering engine for graphics, a physics engine, sound, scripting, animation, among others.

### Why Unreal Engine?

Unreal Engine is a complete suite of development tools for anyone working with real-time technology. From design visualizations and cinematic experiences to high-quality games across PC, console, mobile, VR, and AR, Unreal Engine gives you everything you need to start, ship, grow, and stand out from the crowd.

- Cross-platform support
- Written in C++
- Open Source
- Great graphics system

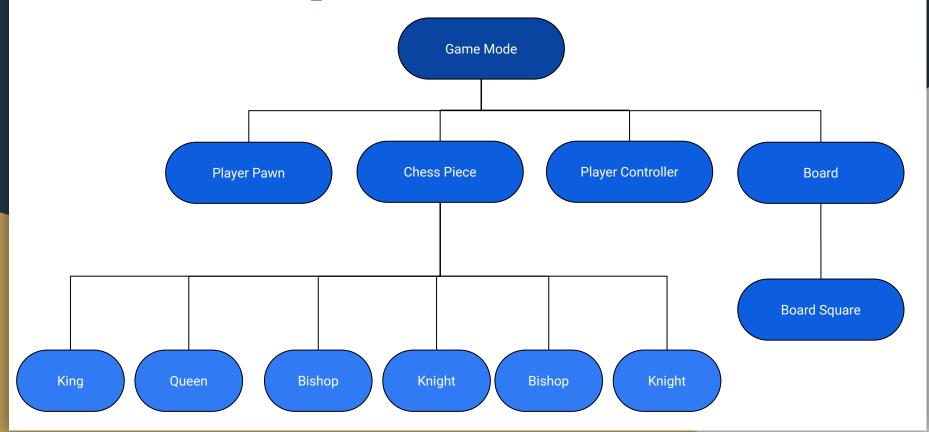
#### Why choose to make a Game?

- It will provide the users very new and interactive graphical user interface.
- It will help the users to enhance their strategic and logical thinking.
- Users will get a very new environment like (different chess board, different characters etc).
- This project will change the mindset of users regarding video games.
- While playing the game users will get entertained by seeing the different animations of the characters.

#### Chess

- Chess is one of the most popular and complete games ever played.
- Chess is an abstract strategy game and involves no hidden information. The
  object of the game is to checkmate the opponent's king, whereby the king is
  under immediate attack and there is no way for it to escape.
- One of the goals of early computer scientists was to create a chess-playing machine.
- Playing chess is also very beneficial for a player
  - It can help you focus.
  - It develops creativity.
  - It builds confidence.
  - It develops Problem-solving skills.

#### Pipeline Of The Game



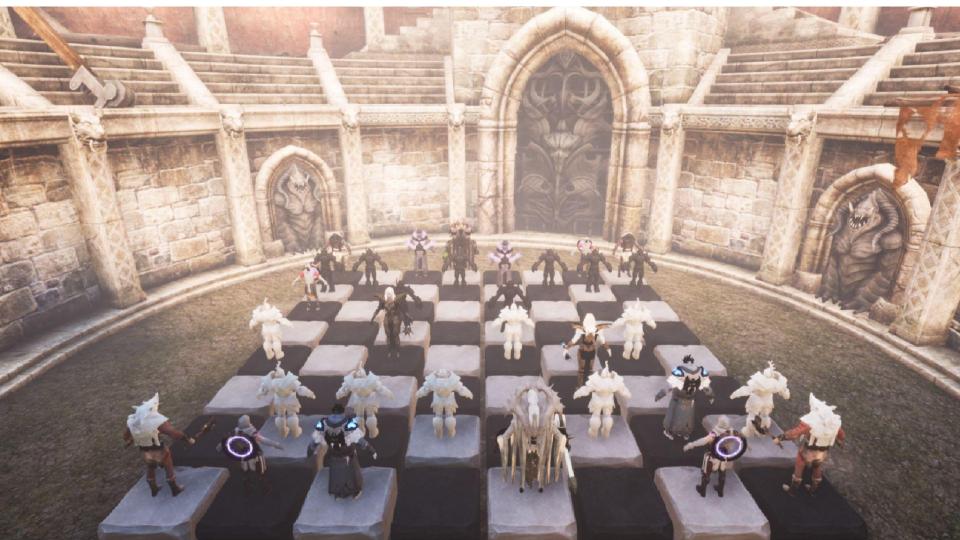
#### Background Music in Game

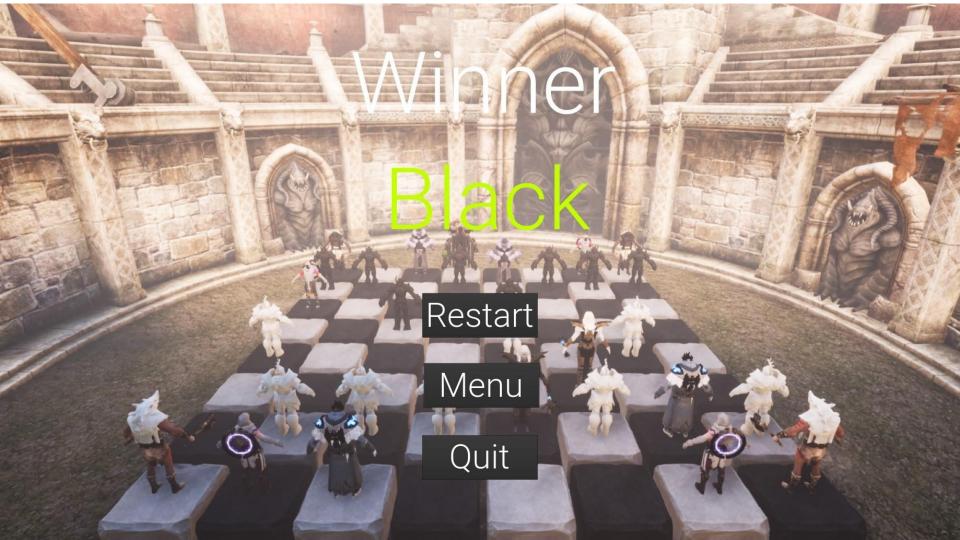
- The background music in the game was also an original production.
- It was mixed and generated through LMMS, an open source digital audio workshop
- LMMS produces music with your computer by creating melodies and beats, synthesizing and mixing sounds, and much more.

#### Objectives of Project

- To create a graphical user interface for the game.
- To add custom graphical models and complete chess board.
- To add the conditional statements to allow Chess piece movement.
- To add our own custom background music

## Output





# Thank You

Please feel free to clear any doubts or ask any questions