

# CHESS: THE ROYAL BATTLE

**Minor Project on**  
**GAME DEVELOPMENT**  
**using Unreal Engine 4**

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- What is a Game?
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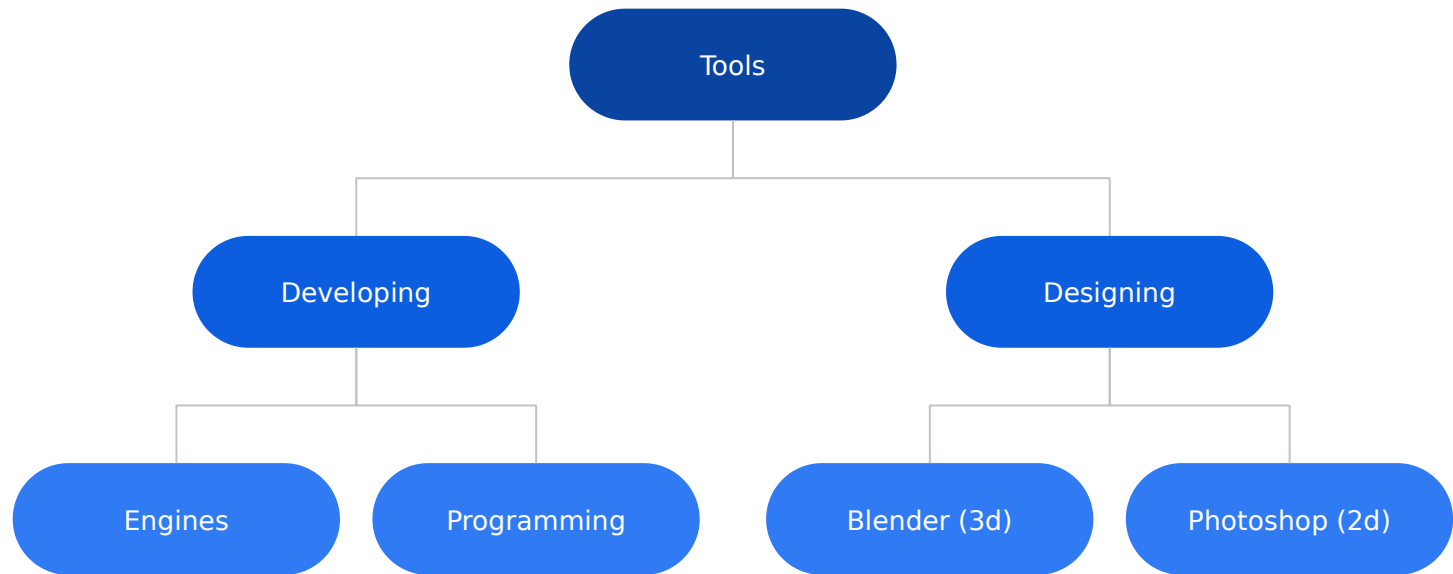
# What Is A Game ?

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?

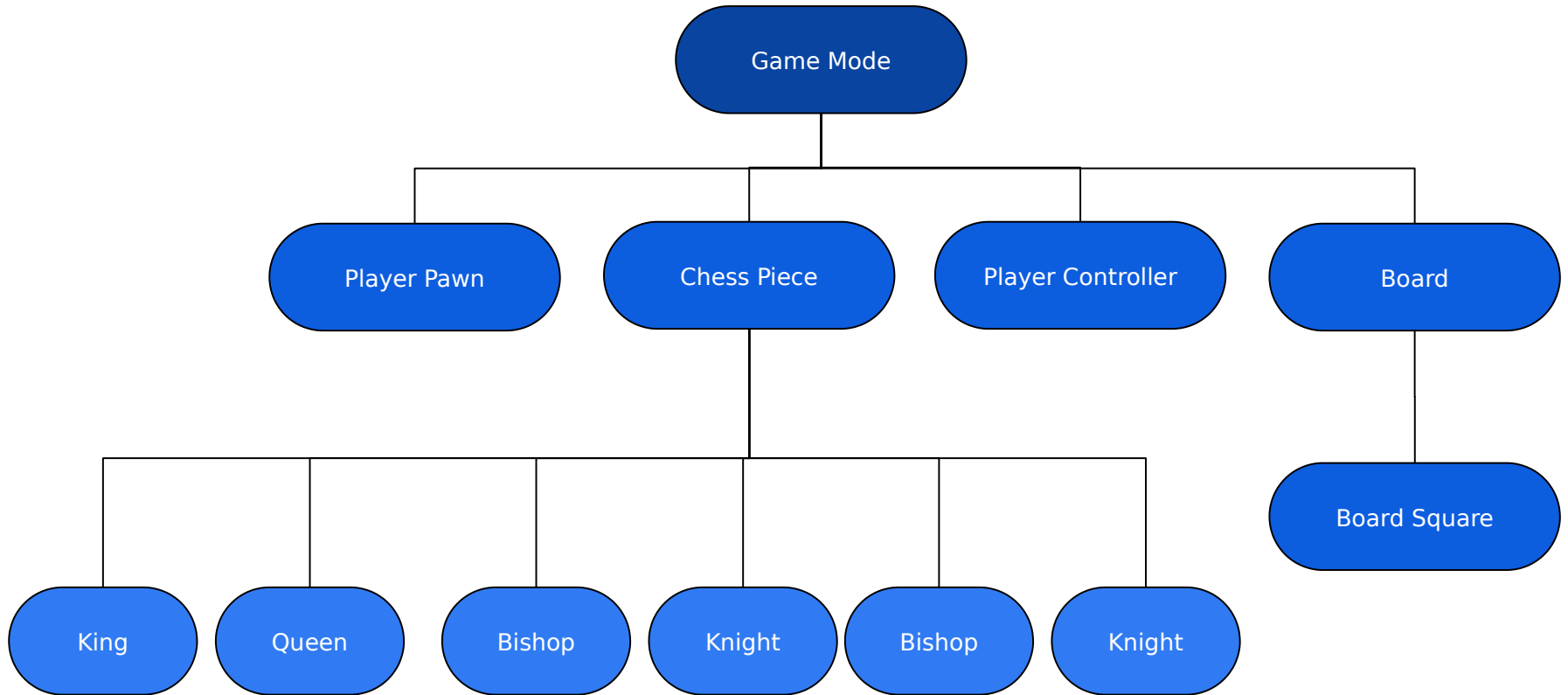
- It will provide the users very new and interactive graphical user interface.
- It will help the users to enhance their strategic and logical thinking.
- Users will get a very new environment like (different chess board, different characters etc).
- This project will change the mindset of users regarding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



# Requirements for Project

- High performance computers
- Game Engine
- Knowledge of programming languages
- Knowledge of designing and modelling tools
- Time

# Objectives of Project

- To understand the working of Chess game
- To understand how Game Engines (in this case Unreal) work
- To create an environment for the chess game
- To add the conditional statements to allow Chess piece movement
- To add graphical models and complete chess board

# Advantages of Project

- It prepares us to enter into the increasingly competitive profession of computer sciences with confidence.
- It provides you with hands-on learning and a team-oriented environment that simulates the work setting found in large companies.
- It will help us learn the design and critical thinking skills needed to find employment in industry.
- There are numerous career opportunities in the game development. There is increased demand for such professionals in industries such as entertainment, education, government and consumer products.



# Current Progress

Place Actors

Search Classes

Recently Placed

Basic

Lights

Cinematic

Visual Effects

Geometry

Volumes

All Classes



Empty



Empty



Empty



Point



Play



Cube



Sphere



Cylinder



Cone



Plane



Save Current



Source Control



Modes



Content



Marketplace



Settings



Blueprints



Cinematics



Build



Pause



Stop



Content Browser

Add/Import

Save All



Content > Game >



Filters

Search Game



Highlights



Pieces



Widgets



BP\_Chest Board



BP\_Game Mode



BP\_Player Controller



Chess Character



ChessFunction Library



EN\_Direction



EN\_Team



MainMenu

11 items

View Options







A large outdoor chessboard is set up in a medieval courtyard. The chessboard is made of dark and light grey stone tiles. White and black chess pieces are arranged on the board. In the background, there is a large stone building with a central arched doorway and two side arches containing statues of monsters. Stairs lead up to the building. The scene is brightly lit, suggesting daytime.

# Winner Black

Restart

Menu

Quit



# Thank You

Please feel free to clear any doubts or ask any questions

