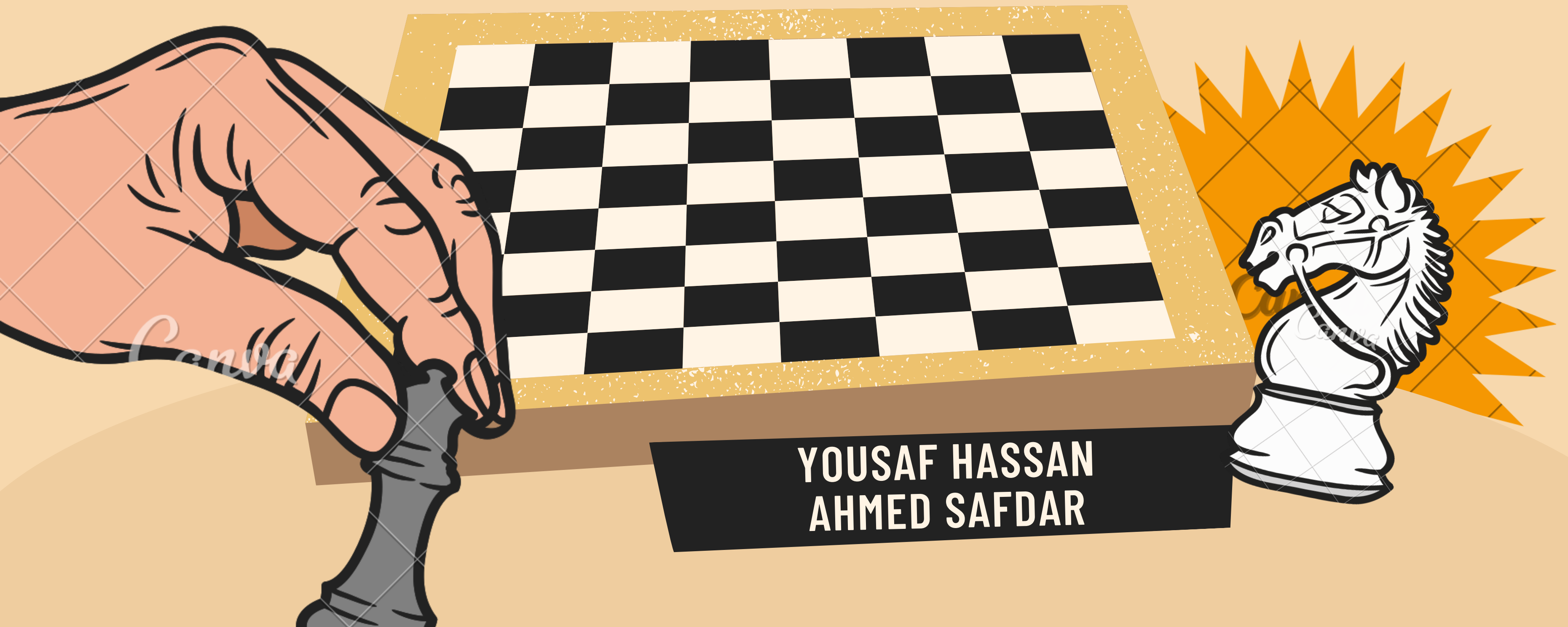
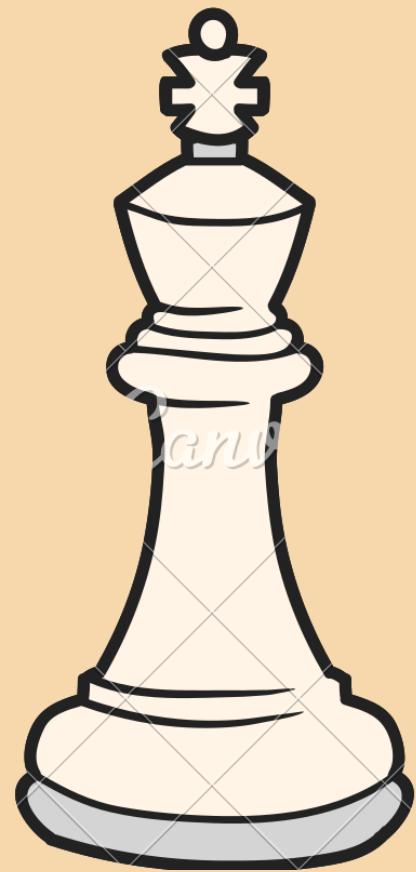


# 2-PLAYER CHESS

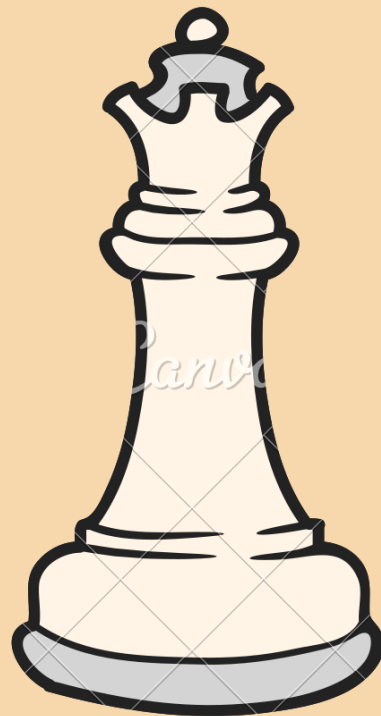


YOUSAF HASSAN  
AHMED SAFDAR

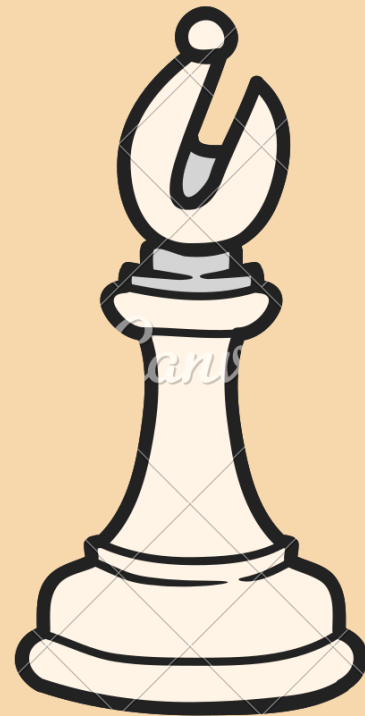
# OVERVIEW



**PROJECT  
CHOICE**



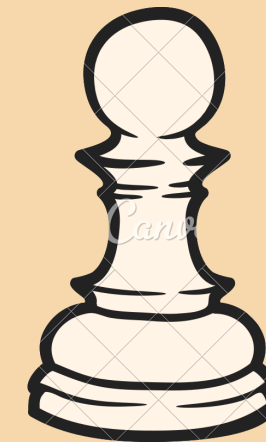
**LANGUAGE  
& IDE**



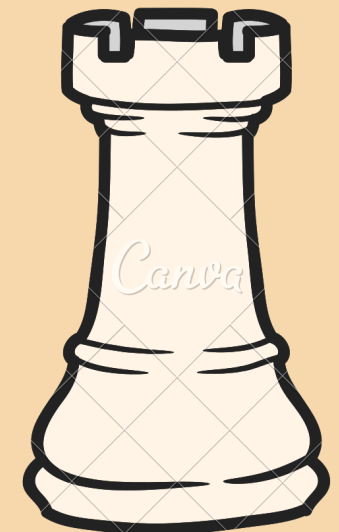
**FEATURES**



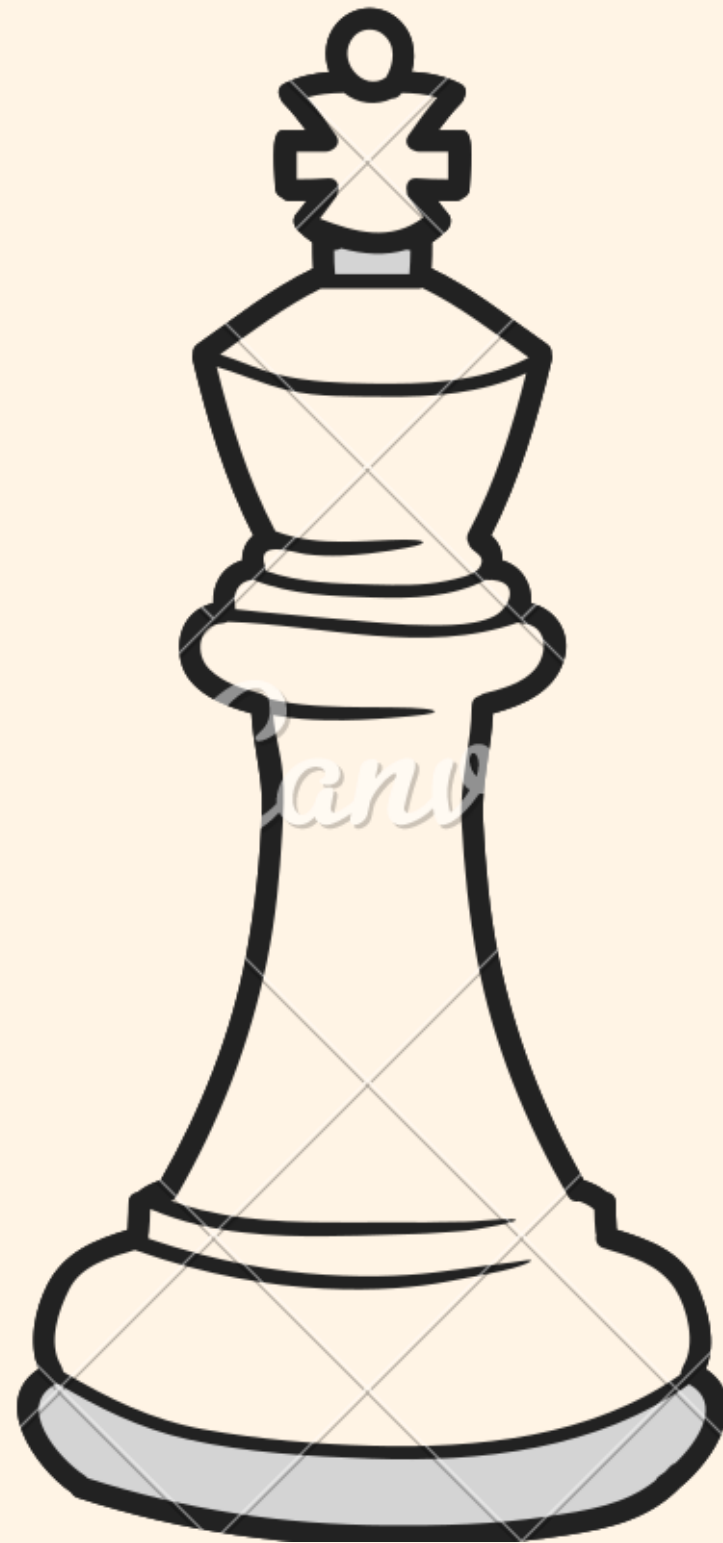
**GAME LOGIC**



**PROJECT  
TREE**



**PROBLEMS  
FACED**



# PROJECT CHOICE

- **Implementing a Chess game in C++ provides an opportunity to understand and apply key programming concepts in a practical context.**
- **Developing a Chess game allows for a practical application of OOP principles like encapsulation, inheritance, and polymorphism.**
- **Chess is a universally recognized and popular game, making the project inherently interesting and engaging for both developers and potential users.**

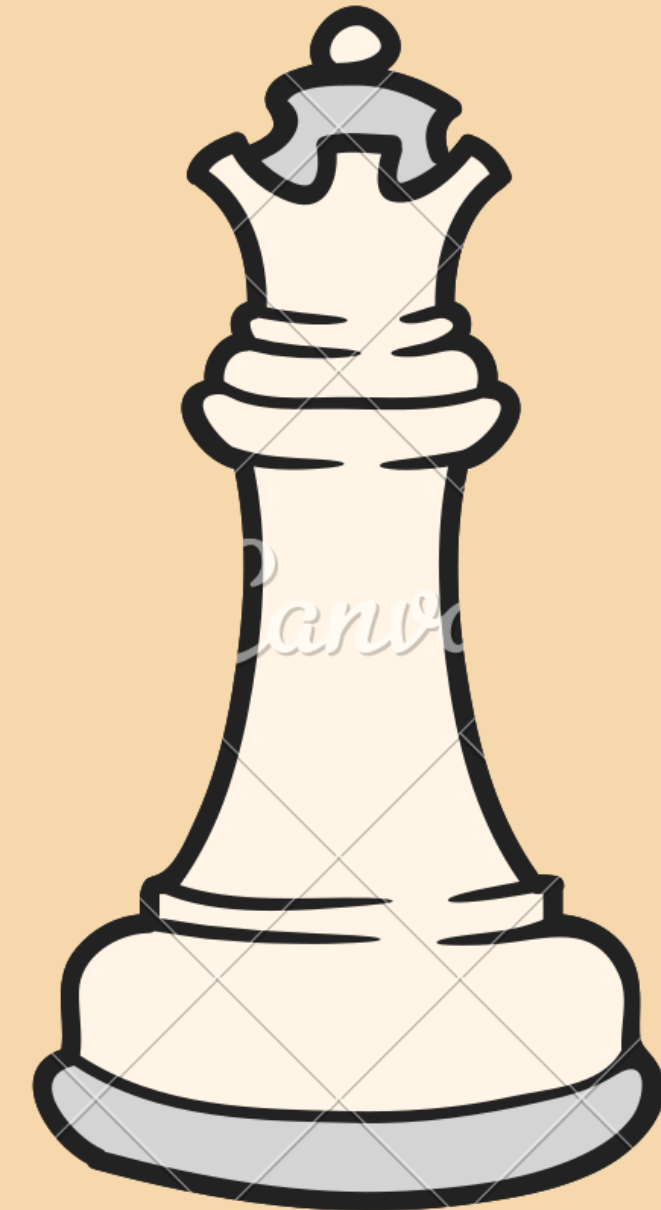
# LANGUAGE & IDE

## 1. Programming Language: C++

- **Selected for its efficiency, performance, and versatility.**
- **The language's object-oriented features facilitate a modular and structured design for the Chess game.**

## 2. QT Creator

- **The chosen IDE aligns with the team's familiarity and preferences, optimizing productivity throughout the project.**



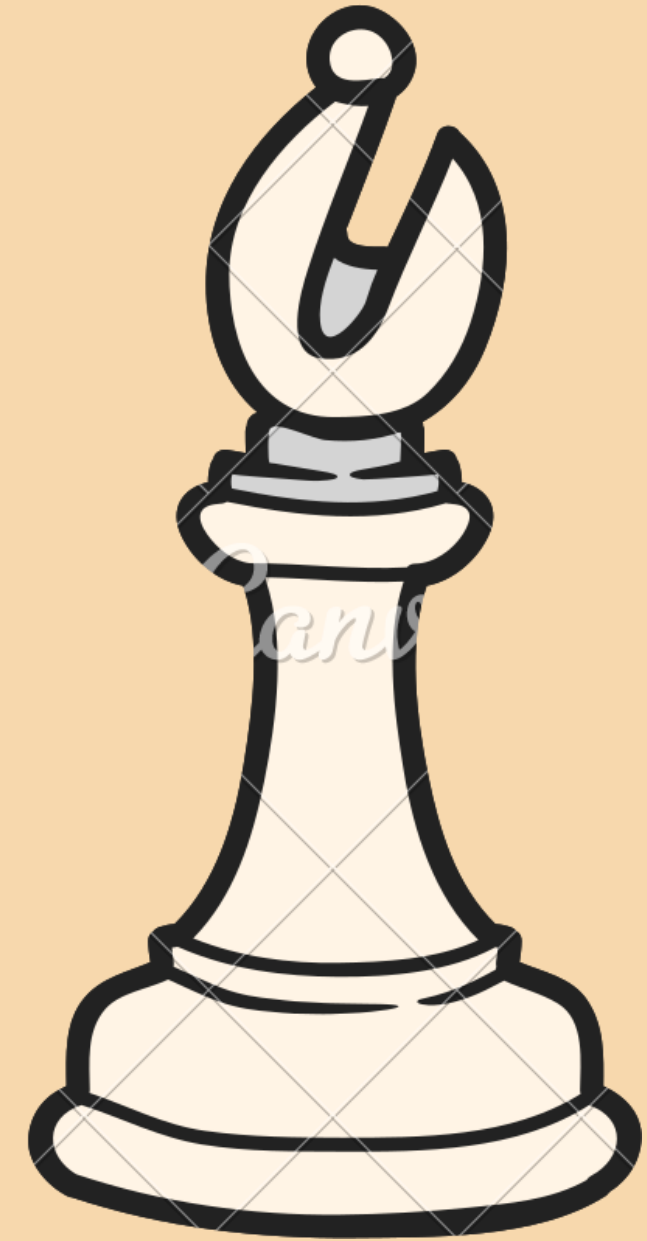
# FEATURES

## Chess Board

**Made using a 2-D Array**  
**A function that resets the chess board to its initial state**

## Chess Piece

**Individual Piece Classes**  
**Using Inheritance**  
**Using Setter & Getter to Get the Current Box**  
**Checking the legal moves for a piece**

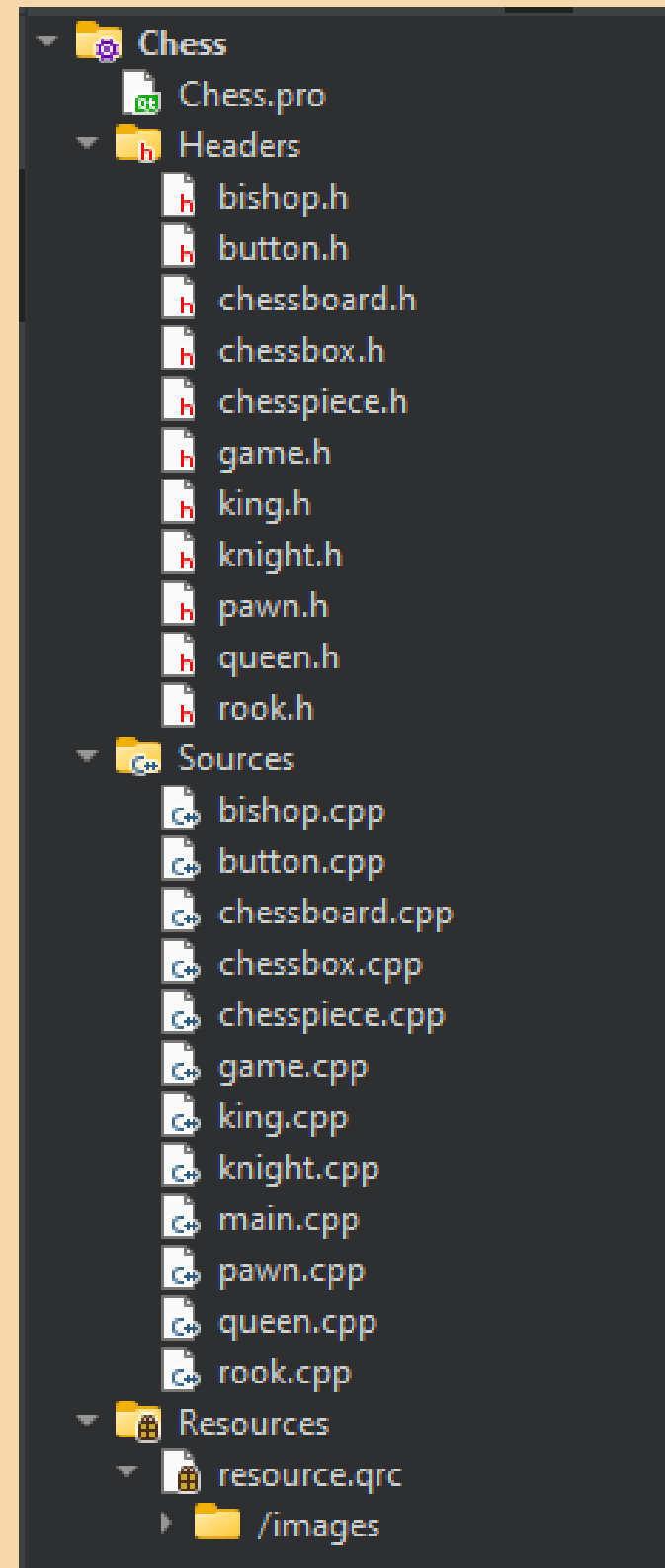
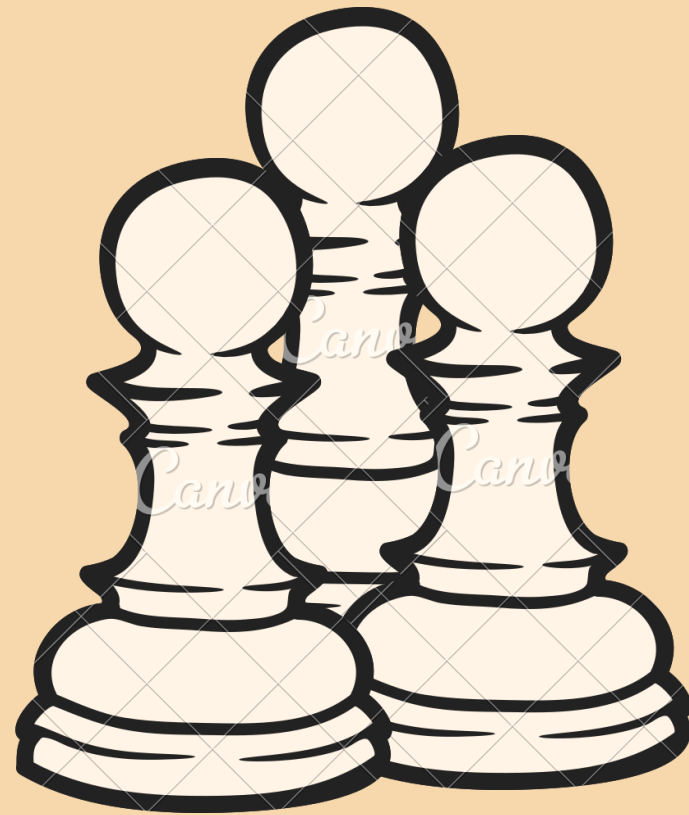


# GAME LOGIC

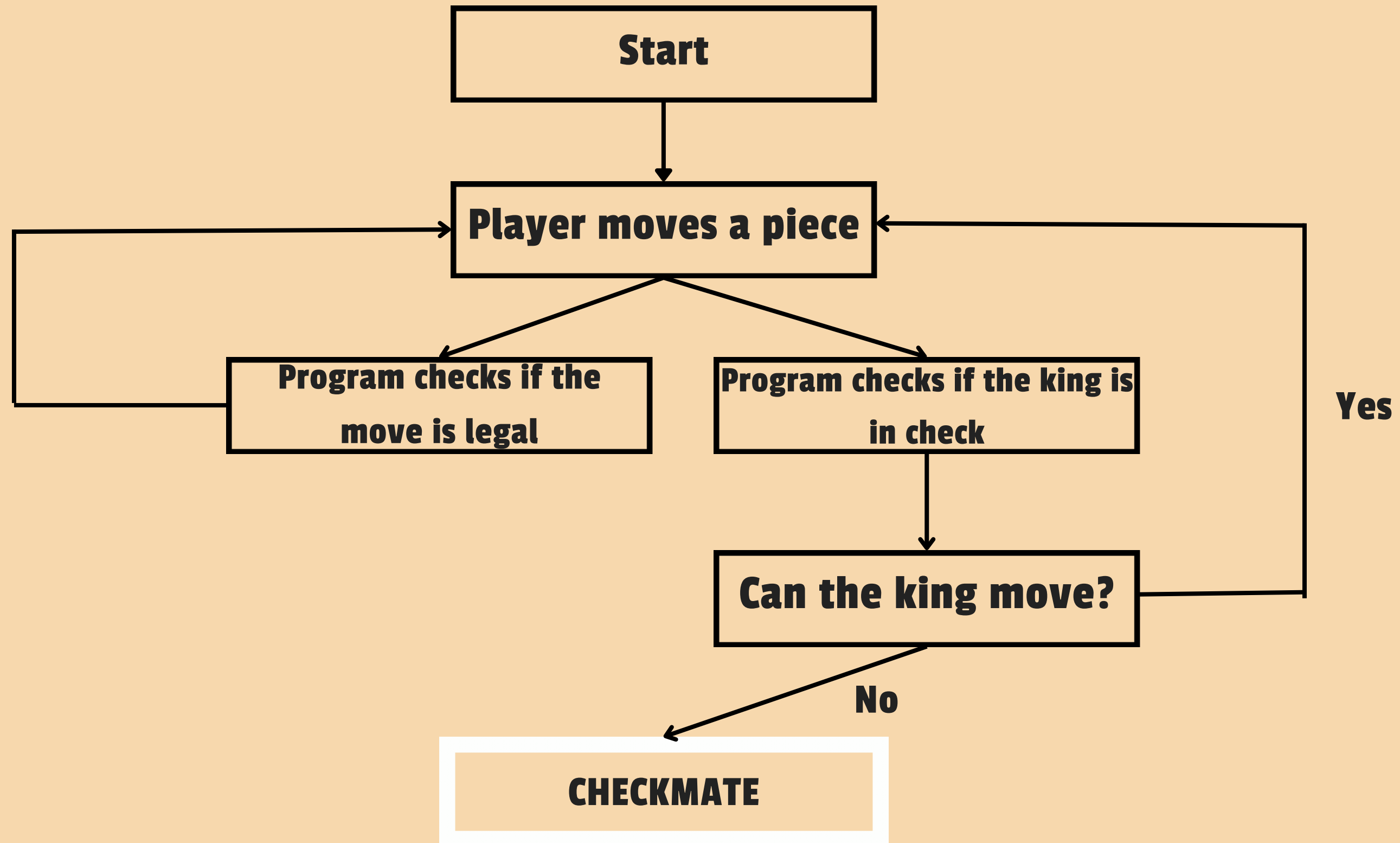
- **getTurn, setTurn, and changeTurn methods control the flow of turns between WHITE and BLACK.**
- **placeInDeadPlace function manages the placement of pieces in the dead piece holders.**
- **gameOver resets the game state, clears alive pieces, and invokes the chessboard reset.**



# PROJECT FOLDER TREE



# FLOWCHART





# PROBLEMS FACED



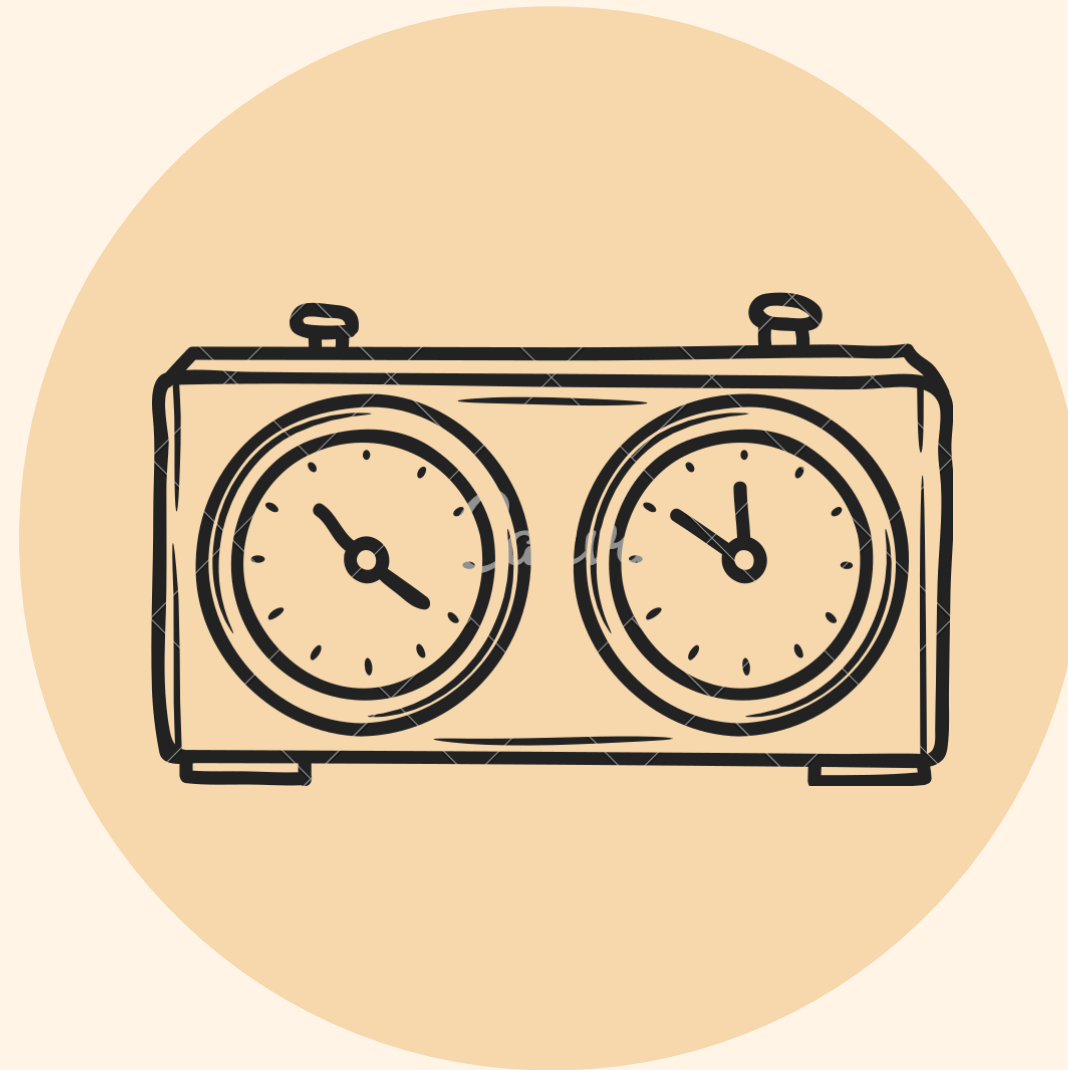
- **Graphics Integration with QT**
- **Handling Game State Transitions**
- **Dead Piece Display**
- **Integration of Chess Rules**
- **Real-time Check Detection**
- **Coordination of Chess Piece Movements**

# Flaws

**NO PROMOTION**



**NO TIMER**



THANK YOU FOR LISTENING

**LET'S PLAY CHESS!**

