History and Rules of Chess Report

Author:   
Alex Mason

Moodle Name:   
ZEAC061

Student Number:  
100873598

Email Address:   
[ZEAC061@live.rhul.ac.uk](mailto:ZEAC061@live.rhul.ac.uk)

# Brief History

Chess goes back roughly 1500 years, with the game first dating back to Northern India in the 6th century. It then spread to Persia, and subsequently Southern Europe. At roughly 1475-1500AD was the birth of the modern game that we still know today, with the difference being new moves for the queen and bishop compared to earlier versions of the game.

The first chess tournament took place in the US in 1849, and the first world championships of the game was acknowledged in 1886.

In the 20th and 21st century, there have been lots of advances in the theory of chess, leading to the development of Artificial Intelligence within chess engines (a program with the ability to play the game against a human player), as well as the development of chess databases. The interest in the development of chess engines and AI within these engines has led me to develop my own engine for my final year project.

# Facts About the Game and Its History

1. The most amount of moves you can make in the longest game of chess is 5,949 moves.
2. The word “Checkmate” comes from the Arabic word “shah mat”, meaning “The king is dead” in English
3. The pawn’s ability to move two steps instead of one in its first go was first introduced in Spain in 1280.
4. The longest time the World Chess Champion title was held for was 26 years and 337 days by a German man named Dr Emanuel Lasker.
5. The chess board we know today first appeared in Europe in 1090.
6. The second book which was ever printed in the English Language was about how to play Chess.
7. Alan Turing developed the first computer program which was able to play chess in 1951. No computers were powerful enough to process the program, so Turing could only test it by doing calculations himself and playing in accordance to the results of each move. Each move took about several minutes.
8. The first time a computer beat an international expert in the game was in November 1988, in Long Beach, California. The computer was named Deep Thought.
9. The number of possible moves when playing the first four moves (for both sides) in the game is 318,979,564,000.
10. Approximately 600,000,000 people know how to play chess across the world

# Basic Rules of Each Chess Piece

Pawns:

* Can move forward one square if the square is unoccupied.
* A pawn can move forwards two squares if that pawn has not moved before and both squares in front are unoccupied.
* If the squares diagonally in front of the pawn contain an opponent piece, the pawn can move one square diagonally to capture that piece.

Rooks:

* Can move any number of squares vertically or horizontally, as long as the squares are vacant.

Bishops:

* Can move any number of squares diagonally, as long as the squares are vacant.

Knights:

* Can move in an L shape in any direction. It can move two squares forwards, backwards, left or right, then one square to the left or right. Alternatively, it can move one square forwards, backwards, left or right, then two squares to the left or right.
* Knights can jump over pieces in its intended path, so the squares in its path do not have to be vacant.

Queen:

* Can move in any number of squares in all directions (horizontally, vertically, or diagonally), as long as the squares are vacant.

King:

* Can move one square at a time in all directions (horizontally, vertically, or diagonally), as long as the square is vacant.

# Chess Manoeuvres

Castling: Castling is the only move where more than one piece can move in a single turn. When castling, the king will move two squares in the direction of the rook the king wants to castle with, the rook then moves over the king into the square the king passed.

There are two conditions which must be met before castling:

* Both the king and rook must not have moved from their original positions
* There cannot be any pieces between the king and rook when castling

En Passant: This is a move which occurs straight after a pawn (which is going to be captured) moves two squares from its starting position. To make an En Passant capture, it must be made in the next turn as you cannot do so afterwards/later on.

These are the conditions for En Passant:

* The capturing pawn must be on the 5th row/rank
* The pawn being captured must be on the same row and has just moved two squares in one move
* The capture must be made in the move after the opponent pawn moves two squares, otherwise the player cannot capture the opponent’s pawn en passant.

Pawn Promotion: This is when a pawn reaches the end of the board on the opponent’s side. The pawn can be promoted to a queen, rook, bishop or knight, and is entirely down to the player’s choice. The piece the pawn is being promoted to does not need to be a previously captured piece.

# Bibliography

***History of Chess - Wikipedia***

<https://simple.wikipedia.org/wiki/History_of_chess>

This article on the history of chess was very useful in researching the origins of the game, as well as where the game has spread to throughout the world and the advancements of the game throughout its history.

***Facts About Chess***

<https://ohfact.com/chess-facts/>

<https://thechessworld.com/articles/general-information/40-facts-about-chess-most-people-dont-know/>

These two websites provided an interesting insight into facts about chess and its history which most people are unaware of. The two websites have enabled me to gain a higher level of understanding of the game during my research of the game.  
  
  
**Chess Setup and Rules**

<http://www.chesscoachonline.com/chess-articles/chess-rules>

By researching the rules on this website, I have gained a much better understanding of all the rules and conditions for each piece and move, which will be useful for programming these into my chess game. Furthermore, it taught me about the ‘En Passant’ move, which is a move I wasn’t aware of until now and means I can implement this into my game now I have researched and am aware of this type of manoeuvre.