**SYNOPSIS**

**Title:** **ONLINE CHESS GAME**

**ABSTRACT**

Chess is a two-player strategy board game played on a checkered board with 64 squares arranged in an 8×8 grid. The game is played by millions of people worldwide. Play involves no hidden information. Each player begins with 16 pieces: one king, one queen, two rooks, two knights, two bishops, and eight pawns. Each piece type moves differently, with the most powerful being the queen and the least powerful the pawn. The objective is to checkmate the opponent's king by placing it under an inescapable threat of capture.

Since the second half of the 20th century, chess engines have been programmed to play with increasing success, to the point where the strongest programs play at a higher level than the best human players. Since the 1990s, computer analysis has contributed significantly to chess theory, particularly in the endgame. The IBM computer Deep Blue was the first machine to overcome a reigning World Chess Champion in a match when it defeated Garry Kasparov in 1997. The rise of strong chess engines runnable on hand-held devices has led to increasing concern about cheating during tournaments.

**Aim:**

To design and develop chess game web application which could be accessed in browser and provide features to play online by login and sending request to other online available players.

**Existing System:**

* Earlier we used to play chess using physical chess board and pieces.
* To play physical board is setup between two players and both players move the pieces at their turn.
* For playing with physical board both players should be available at same place.
* Many android and desktop apps are also available.
* In this apps we can setup chess board and play.
* For this apps also both players should be available at same place to play the game.

**Proposed System:**

* This app is basically is a chess game hence the user will be player who will login with unique login id to play the game.
* Anyone can login at anytime from anywhere using app link to the app to use app and play.
* After login user will be able to view received invitation for playing from other users all over the world he can accept or reject the request.
* User will be able to view sent request as well with its status and he can cancel the request anytime.
* User will be able to delete the accepted and sent or received request from app.
* User can open the game and start playing with other users after accepting the request.
* User will be able send/receive request to/from multiple users and able to play with many users at a same time.

**Advantages:**

* Online and accessible from anywhere across the globe.
* 24x7 available to everyone.
* We can play with anyone irrespective of location by sending invitation.
* Chat feature is provided using which we can chat side by side while playing.

**Software Requirements:**

* Visual Studio Code , NodeJs , npm
* Chrome , Firefox , IE or any other browser

**Operating system**

* Windows XP,7,8 or obove
* Linux

**Hardware Requirements:**

* Pentium 200MHz Processor
* 2 GB RAM
* 500 GB Hard disk