Mayura Chess Board

A sample of features
August 15, 2007

Modern graphics
Mayura Chess Board has an attractive interface and modern graphics. State-of-the-art techniques such as antialiasing and alpha-blending have been employed in its design. The result is an application that looks and feels much better than chess interfaces designed in the 90’s.
Highlights legal moves
To help new users, Mayura Chess Board can optionally highlight legal moves. Expert players can turn this feature off.

Highlights attacked and undefended pieces
To help new users Mayura Chess Board can optionally highlight attacked and undefended pieces.

Displays move being contemplated by engine
A dashed arrow is displayed while the engine is thinking. It gives the user something to look at while he is waiting for the computer's move. It also gives the user a preview of the computer's move so that he can start planning his counter move. This feature can be turned off.
**Arrow indicates computer move**  
A translucent arrow indicates the last move made by the engine.

**Displays captured pieces**  
Beginner and intermediate players don’t have the entire board in their head. They want to see captured pieces. Mayura Chess Board addresses this requirement. To answer the question “what did the computer just capture” the just-captured piece has an amber glow behind it.

**Clock**  
An LCD chess clock displays time remaining.

The status bar displays how many moves are remaining in the current time control.
**Message area**

Messages are displayed in a special area.

![Message area](image)

**User can ask for a hint**

Users can ask for a hint by pressing the light bulb icon. (This runs a 3 second or 7 move deep analysis of the current position.) The hint is displayed as a green arrow.

![User can ask for a hint](image)

**Analyze current position**

User can do an infinite analysis by pressing the gear icon, and stop the engine by pressing the red x button. The analysis panel displays engine statistics.

<table>
<thead>
<tr>
<th>Qe4</th>
<th>Depth</th>
<th>11/28</th>
<th></th>
<th>00:01</th>
<th>-0.06</th>
<th>348 kN/s</th>
<th>Hash 4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/28</td>
<td>01:00</td>
<td>-0.06</td>
<td>Qe4 Nbd cxd5 exd5 e4 Qd8 e5 Be7 Nh4 Bxd4 gxd4 (511 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/28</td>
<td>00:00</td>
<td>-0.15</td>
<td>Qe4 Bb7 c5 bxc5 Qb5 Rab8 Qxc5 g6 Qxd6 c6 Nh4 (191 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/21</td>
<td>00:00</td>
<td>-0.31</td>
<td>Qe4 Bb7 c5 bxc5 Qh5 Ba6 Qxc5 Qxc5 Rxc5 (74 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/21</td>
<td>00:00</td>
<td>-0.43</td>
<td>Qe4 Nbd c5 bxc5 dxc5 Qc6 Nd4 (30 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/39</td>
<td>00:00</td>
<td>-0.55</td>
<td>Qe4 Bb7 c5 bxc5 Rxc5 g6 (12 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5/15</td>
<td>00:00</td>
<td>-0.30</td>
<td>Qe4 Bb7 cxd5 exd5 Ng5 (9 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/12</td>
<td>00:00</td>
<td>-0.49</td>
<td>Qe4 Nbd c5 bxc5 Rxc5 (5 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/12</td>
<td>00:00</td>
<td>-0.80</td>
<td>c5 bxc5 Rxc5 Bd3 (3 kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The pv lines in the analysis panel turn into clickable links when the mouse hovers over them. Clicking the link opens a dialog where the current position is displayed and the user can step through the moves.

**Interactive analysis**

During analysis you can enter moves by moving pieces. A variation will be inserted and the engine will continue analyzing the new position.
Analyze selected moves
The user can search selected moves using the Analyze Moves dialog.

Edit Position
The current position can be edited using the Edit Position dialog.
**Limit strength**
Limiting engine strength (using the UCI_Elo option) is supported.

**Levels**
Common ways of setting time control are supported.
Mayura Chess Board has a PGN game database browser with search capability. You can search tag fields as well as annotations.

**Game Browser**

Game File: 
[C:\Downloads\MATCH.PGN](C:\Downloads\MATCH.PGN)  

Search: 
[kasparov](kasparov)  

Games: 

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>White</th>
<th>Black</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>479</td>
<td>1985.??</td>
<td>Kasparov, Anatoly</td>
<td>Kasparov, Gary</td>
<td>1-0</td>
</tr>
<tr>
<td>480</td>
<td>1985.??</td>
<td>Kasparov, Gary</td>
<td>Karpov, Anatoly</td>
<td>0-1</td>
</tr>
<tr>
<td>481</td>
<td>1985.??</td>
<td>Kasparov, Gary</td>
<td>Karpov, Anatoly</td>
<td>1-0</td>
</tr>
<tr>
<td>482</td>
<td>1985.??</td>
<td>Kasparov, Anatoly</td>
<td>Kasparov, Gary</td>
<td>0-1</td>
</tr>
<tr>
<td>483</td>
<td>1985.??</td>
<td>Kasparov, Gary</td>
<td>Karpov, Anatoly</td>
<td>1-0</td>
</tr>
<tr>
<td>484</td>
<td>1985.??</td>
<td>Kasparov, Anatoly</td>
<td>Kasparov, Gary</td>
<td>1-0</td>
</tr>
<tr>
<td>485</td>
<td>1986.??</td>
<td>Kasparov, Anatoly</td>
<td>Kasparov, Gary</td>
<td>0-1</td>
</tr>
<tr>
<td>486</td>
<td>1986.??</td>
<td>Kasparov, Gary</td>
<td>Karpov, Anatoly</td>
<td>1-0</td>
</tr>
</tbody>
</table>

**Karpov, Anatoly — Kasparov, Gary**

- **Event:** Wch.32-KK2
- **Site:** Moscow
- **Date:** 1985.??
- **Round:** 16
- **Result:** 0-1
- **ECO:** B44
- **WhiteElo:** 2720
- **BlackElo:** 2700
- **Annotator:** Jur
- **PlyCount:** 80
- **EventDate:** 1985.??


Close
PGN Viewer
The PGN viewer supports Recursive Annotation Variations. Notice how indentation level indicates the nesting level.

19... Bd6 20. Bg3 White decides to eliminate the blockader. 20... Rc8 21. b3 g5 Restriction begins on the other flank as well. 22. Bxd6 Qxd6 23. g3 (Or 23. Be2 Nf4 24. Bc4 Ng4 25. g3 Rxc4 26. bxc4 Re2 (Kasparov).)
25... N7e5 26. Nxe5 Nxe5 27. Bg2 Bbd3 (Kasparov) 28. Qxb4 Bxf1 29. Rxf1)
24... Qf6 25. a3 a5 26. axb4 axb4 27. Qa2 (Or 27. h3 Qd4)
27... Bg6 28. d6 g4 (Avoids 28... Qxd6 29. Nd3)

Multiple variations
Mayura Chess Board supports multiple variations.

Real Undo/Redo
Real undo/redo is available. This is different from stepping forward/backward in that it undoes changes to the PGN game tree.

Type-in moves
You can type in moves. This is useful for expert players, or if you are following a game in a chess book.
**UCI Options**

The Engine Options dialog can be used to modify UCI options. Options are saved and restored when the program is restarted.

![Engine Options Dialog](image)

<table>
<thead>
<tr>
<th>Option</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Hash</td>
<td>0</td>
</tr>
<tr>
<td>Contempt</td>
<td>True</td>
</tr>
<tr>
<td>CPU Usage</td>
<td>False</td>
</tr>
<tr>
<td>Display Current Move</td>
<td>True</td>
</tr>
<tr>
<td>Display FV Tips</td>
<td>False</td>
</tr>
<tr>
<td>Emergency Time Buffer</td>
<td>Medium</td>
</tr>
<tr>
<td>Talimov Usage</td>
<td>Rarely</td>
</tr>
<tr>
<td>Outlook</td>
<td>Neutral</td>
</tr>
<tr>
<td>Preserve Analysis</td>
<td>False</td>
</tr>
<tr>
<td>Rate Of Play</td>
<td>Normal</td>
</tr>
<tr>
<td>Server Buffer</td>
<td>False</td>
</tr>
<tr>
<td>Time Usage</td>
<td>Varied</td>
</tr>
<tr>
<td>Naimov Usage</td>
<td>Rarely</td>
</tr>
<tr>
<td>Default: Rarely</td>
<td></td>
</tr>
</tbody>
</table>

**Reset All** | **OK** | **Cancel**
Create your own opening book
You can use the supplied opening book, or create your own opening book.

Create Opening Book

To create an opening book you need a PGN file containing tens of thousands of Grand Master level games.

PGN file:
[c:\Downloads\gnames.pgn]  
Browse...

Filter games:

- Minimum Elo for players: 2400

Number of opening half moves to use from each game:
[12]

Note: Memory requirements increase significantly as this number is increased.
**Annotate game**

You can add comments to the game using the Annotate Game dialog.

**Technology used for implementation**

Mayura Chess Board was written using the .NET Framework.

**Why use .NET?**

Going forward, all new Windows GUI APIs will be exposed using the .NET Framework. In order to be a first class citizen in newer versions of Windows, and to take advantage of the latest Windows GUI technologies such as Windows Presentation Foundation (WPF), applications must be written to the .NET Framework.