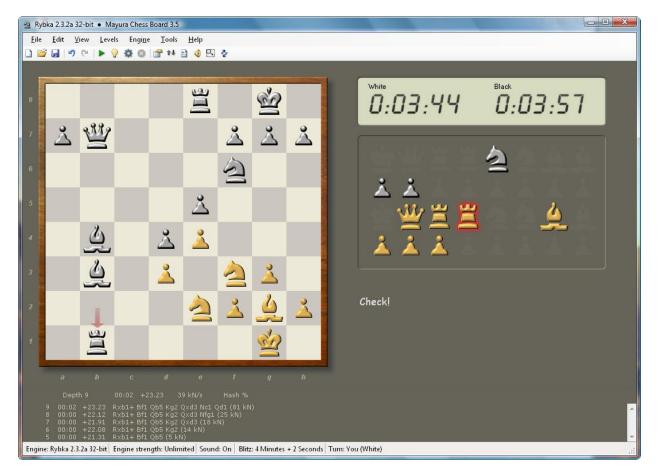
Mayura Chess Board

A sample of features

August 15, 2007

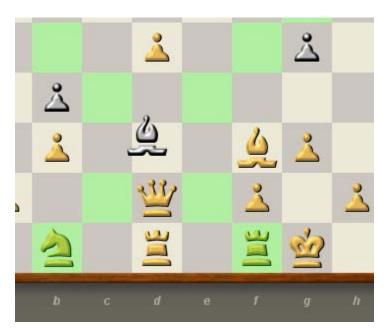
Modern graphics

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.

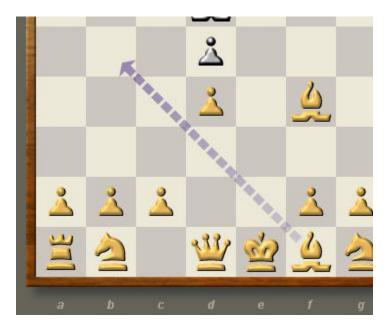


Highlights attacked and undefended pieces

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.

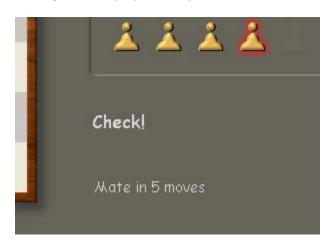


The status bar displays how many moves are remaining in the current time control.

Time control 2. Moves to go: 19

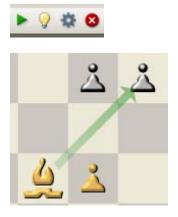
Message area

Messages are displayed in a special area.



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.



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.

Qa4	Depth 1	1/28	00:01 -0.06	348 kN/s	Hash 4%
10/28 9/28 8/21 7/21 6/19 5/15	00:01 00:00 00:00 00:00 00:00 00:00	-0.15 -0.31 -0.43 -0.55 -0.30	Qa4 Bb7 c5 bxc Qa4 Bb7 c5 bxc Qa4 Nb4 c5 bxc Qa4 Bb7 c5 bxc Qa4 Bb7 c5 bxc Qa4 Bb7 cxd5 e	5 Qb5 Rab8 Qx <u>5 Qb5 Ba6 Qxc</u> 5 dxc5 Qc6 Nd4 5 Rxc5 g6 (12 l xd5 Ng5 (9 kN)	<n)< th=""></n)<>
4/12 4/12	00:00 00:00		Qa4 Nb4 c5 bxc c5 bxc5 Rxc5 B		



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.

Analyze Moves			×
Select moves to	analyze:		
Bf1	Nf4		
🔲 Bh1	Nfxd4		
🔲 Bh3	🔲 Ng5		
🗆 g4	🔲 Nh4		
🗆 h3	🔲 Nxe5		
🗆 h4			
🗆 Kf1			
🗌 Kh1			
□ Nc1			
□ Nc3			
🗌 Nd2			
🗆 Ne1			
Nexd4			
		<u>Analyze</u>	

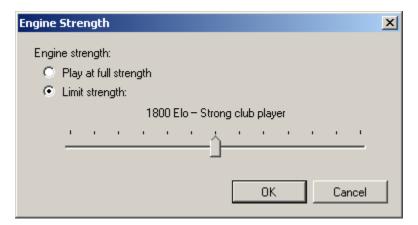
Edit Position

The current position can be edited using the Edit Position dialog.

Edit F	osition	iii								×
8	90g		å		loc	å	<u>م</u>	Å	Side to move: White Black Castling rights:	
6	4	Å	2	NRy	Å	4			🛯 🎹 🗖 White 0-0	
5	Å		_	Å		~			White 0-0-0 Image: Section of the sec	
4			2	3						
3					3		2			
2	1	3		2		3	4	2		
1			ILE.	<u>Щ</u>	ILE					
	а	b	С	d	е	f	g	h	•	
	Clear	Board		9	tart Pos	ition			OK Cancel	1

Limit strength

Limiting engine strength (using the UCI_Elo option) is supported.



Levels

Common ways of setting time control are supported.



Long Game	×				
First time control:	Presets				
Moves: 40 🛨	C 60/5'				
Time: 2 🔹 h 0 🚎 min	C 60/15'				
Time bonus per move: 0 📑 sec	C 60/60'				
Second time control:	C 60/120', Rest 30'				
Moves: Rest 20 🕂	C 40/120', Rest 60'				
	40/120', 20/60', Rest 60'				
Time bonus per move: 0 🐳 sec					
Third time control:					
Moves: 🔽 Rest 🛛 🗁					
Time: 1 🔹 h 0 🚎 min					
Time bonus per move: 0 📑 sec					
	OK Cancel				

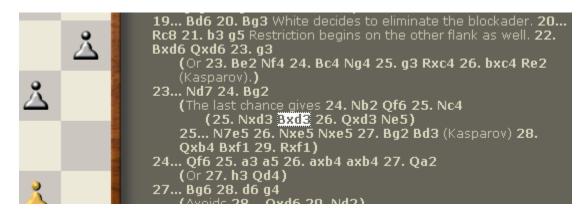
PGN Game Browser

Mayura Chess Board has a PGN game database browser with search capability. You can search tag fields as well as annotations.

àame C:\Do	wnloads\MATCH.	PGN		Browse				
Search								
kaspa			Clear					
ames								
#	». Date	White	Black	Result 🔺				
# 479	1985.??.??	Karpov, Anatoly	Kasparov, Gary	1-0				
480	1985.??.??	Kasparov, Gary	Karpov, Anatoly	0-1				
481	1985.??.??	Kasparov, Gary	Karpov, Anatoly	1-0				
482	1985.??.??	Karpov, Anatoly	Kasparov, Gary	0-1				
483	1985.??.??	Kasparov, Gary	Karpov, Anatoly	1-0				
484	1985.??.??	Karpov, Anatoly	Kasparov, Gary	1-0				
485	1985.??.??	Karpov, Anatoly	Kasparov, Gary	0-1				
486	1986.??.??	Kasparov, Gary	Karpov, Anatoly	1.0				
Site: Date: Roun Resul SCO: White Black Annot PlyCo	:: Wch32-KK2 Moscow 1985.??.?? d: 16 lt: 0-1 844 Elo: 2720 Elo: 2720 tator: JvR ount: 80 Date: 1985.??. ⁻	??						
1. e4 c5 2. Nf3 e6 3. d4 cxd4 4. Nxd4 Nc6 5. Nb5 d6 6. c4 Nf6 7. N1c3 a6 8. Na3 d5 9. cxd5 exd5 10. exd5 Nb4 11. Be2 Karpov brings a novelty, but his opponent has already prepared a surprising answer. 11 Bc5 12. O-O (He will play 12. Be3 Bxe3 13. Qa4+ the next year (Karpov - Van der Wiel, Replay This Game Close								

PGN Viewer

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



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.

Type In Moves	×				
Move notation: Qxd7					
Examples: e2e4, Nc3, dxe5. Notation is case sensitive.					
Move Close					

UCI Options

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

Option Clear Hash Contempt CPU Usage Display Current Move Display PV Tips Emergency Time Buffer	▲ Value 0 100 true false Medium	×
Contempt CPU Usage Display Current Move Display PV Tips	100 true false	
CPU Usage Display Current Move Display PV Tips	100 true false	
Display Current Move Display PV Tips	true false	
Display PV Tips	false	
Emergency Time Buffer	Medium	
Emergency rime barrer	1. Collocation	
NalimovUsage	Rarely	
Outlook	Neutral	
Preserve Analysis	false	
Rate Of Play	Normal	
Server Buffer	false	
Time Usage	Varied	
<u></u>		<u> </u>
NalimovUsage	Rarely	<u> </u>
Default: Rarely		
Reset All	<u></u> K	<u>C</u> ancel

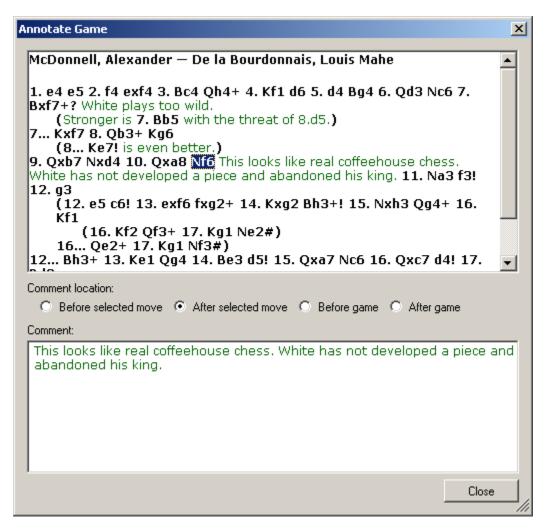
Create your own opening book

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\gmgames.pgn Browse							
Filter games:							
Number of opening half moves to use from each game:							
Note: Memory requirements increase significantly as this number is increased.							
Start Cancel							

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.