**ChessPad V 0.3**

Load, browse, modify, delete PGN files, possibly inside zip files. You can get detailed information about PGN at <https://en.wikipedia.org/wiki/Portable_Game_Notation> and about FEN at [https://en.wikipedia.org/wiki/Forsyth%E2%80%93Edwards\_Notation](https://en.wikipedia.org/wiki/Forsyth–Edwards_Notation) . This is the picture of Game view:



ChessPad creates a sample file ChessPad/sample.pgn so the user can get an idea of ChessPad features. Note that all modifications to this file will be lost after ChessPad is restarted.

To make a move click on the piece on the board (the square will be selected like h5 on the picture) and click on the square where you want to move to. ChessPad does not allow illegal moves.

Using Menu button you can load another game, save your changes, append game to the existing PGN file or create a new PGN file containing the opened game.

When appending to a PGN file the path format is:

…/dir1/dir2/save.pgn

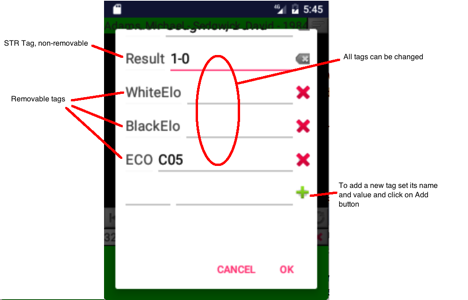
or

…/dir1/zipped\_pgn.zip/save1.pgn

Limitation. Zip file can contain several PGN files but not directories which are ignored.

By clicking on the title line you get to the screen where you can modify PGN tags.

All tag values can be modified and the tags not included in STR can be deleted. You can also add new tags using the last line:



Using menu item Setup you can switch to Setup screen. The position will be copied from Game screen.



To place a piece on the board tap on it on the pool set, then tap on board where you want to place it as many times as you want. To remove a piece from the board fling it.

Setup can de finished and ChessPad returns to Game screen only if the position does not have errors, e.g no King, more than one King, etc.

To abandon Setup and return to Game screen user Menu ‘Cancel Setup’. The position will be lost in this case.

**Merging variations**. ChessPad V0.3 merges variations once they create the same position. Example:

**1.e4 e5 2.Nf3 {main} (2.Bc4 {v1} Nc6 {v1} 3.Nf3 {v1} Nf6 {v1} $4 4.c3{v1} $7) 2. ... Nc6 {main} 3.Bc4{main} Nf6{main} $5 4.c3{main}**

Note that positions after 3.Nf3 {v1} and 3.Bc4{main} are the same. As a result ChessPad changes the pgn above to:

1. e4 e5 2. Nf3 {main} (2. Bc4 {v1} Nc6 {v1} 3. Nf3 {v1} ) 2. ... Nc6 {main} 3. Bc4 {main} Nf6 $5 {main; v1} 4. c3 $7 {main; v1}

Some important implications:

1. If 4. c3 is deleted, it disappears from both main line and variation.

2. If 3. Bc4 {main} move is deleted, its following moves are not deleted, but moved to the variation, resulting:

1. e4 e5 2. Nf3 {main} (2. Bc4 {v1} Nc6 {v1} 3. Nf3 {v1} Nf6 $5 {main; v1} 4. c3 $7 {main; v1} ) 2. ... Nc6 {main}

**DGT board integration**

Staring with V 0.3 ChessPad can be connected to DGT board from Digital Game Technology (DGT Projects), available at <http://www.digitalgametechnology.com/index.php/products/electronic-boards/usb>

In fact, an older DGT board with serial port connection can also be used. You can either upgrade it to USB as the company recommends, or just buy Tripp Lite USB Serial Adapter USA-19HS (other adapters may work too, but this one has been tested on Mac and Linux Ubuntu). The benefits of the latter method are obvious:

* You do not have to drill holes in your board to install USB circuit.
* Not all serial boards are upgradeable.
* Probably Android battery will last longer with 19HS since the board has its own power adapter.
* It's x4 cheaper.

In both cases you'll need a special OTG cable, the regular USB cable is no good.

There are some restrictions on using DGT board with ChessPad.

* If the recording starts in the initial position, it does not matter on which board side the pieces are located. Otherwise note that DGT board has its own orientation, so a1 and h8 squares are distinctively different.
* Only legal moves are recorded.
* Do not drag a piece over the board. The board registers each passing square as the target of your move and all subsequent squares will be ignored.
* When castling you have to place your king first, then rook.
* If you messed up, restore the last good position or the position after your move.
* Unless the recording starts in the initial position, ChessPad cannot tell whether White or Black turn it is or castling or en-passant is allowed. So the decision is made after the first move, and if kings and rooks are in their initial spots, castling will be allowed based on their places.
* When promoting you have to place you pawn on the last square first, then replace it with the promoting piece.

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