





P	A	T	C	H	W	O	R	K	
P	U	Z	Z	L	E	S			

Find the Missing Patches



USER' S GUIDE

Patchwork Puzzles is a fun pattern recognition game designed for parents of Pre-K through early Elementary School children (ages 5 through 8 years old). It helps your child build the academic skills critical for school success based on National Early Learning Standards. It improves knowledge of colors, shapes, numbers, letters of the alphabet and basic logic skills like ordering and sorting.

The game layout consists of a large "Crazy Quilt", filled with colorful icons that share a common theme. The Zoo Animals theme is shown below for demonstration purposes:



CRAZY QUILT



Below the Crazy Quilt is a small "Patchwork" section. The patchwork is a subsection taken from the Crazy Quilt (blue outline). But instead of a full section, it is only partially filled in - some of the patches are missing. The objective is for the child to locate the patchwork pattern in the Crazy Quilt, then fill in the missing patches on the patchwork by touching a patch on the quilt and touching its proper location on the patchwork.

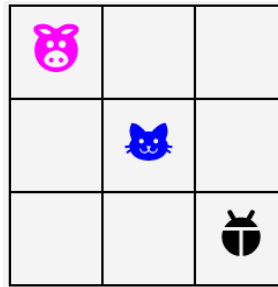
PATCHWORK

Difficulty Levels

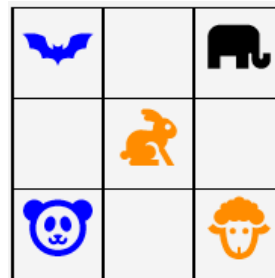
There are three basic levels and one extra level of difficulty built into the app.



Level 1 uses a large 6 x 6 Crazy Quilt, making it relatively easy to find the Patchwork pattern and solve the puzzle.

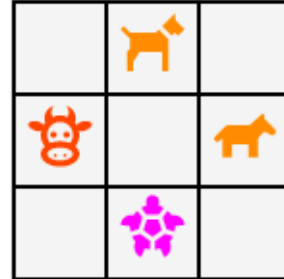


Level 2 uses an 8 x 8 Crazy Quilt. The dimensions of the Patchwork [3 x 3] is the same.





Level 3 uses an 10 x 10 Crazy Quilt. The Patchwork size remains the same.



Higher levels don't necessarily mean higher *difficulty* levels. Rather, the patterns will just take a little longer to find. Remember, the size of the [3 x 3] Patchwork is the same at all levels.

For younger children just learning the alphabet, numbers or basic colors, this app is a very effective tool to build confidence and enhance learning. Children this age will be very comfortable at Level 1.

Older children, or younger ones who become proficient, will enjoy the higher levels.

NOTE: The location from which the Patchwork is taken from the Crazy Quilt is randomly selected.

Themes

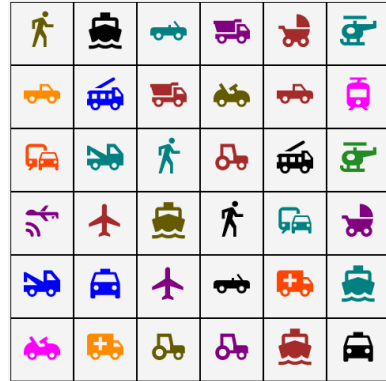
Themes are used to organize puzzles into like groups:



FOOD



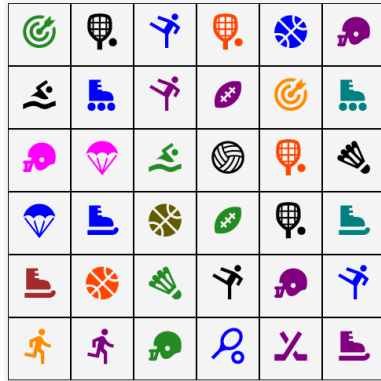
ZOO ANIMALS



TRANSPORTATION



TOOLS



SPORTS



UPPER CASE LETTERS



LOWER CASE LETTERS



NUMBERS

Puzzles

Each Theme has 8 puzzles to solve. A puzzle is created by removing patches from the Patchwork using different masks. For example, using the Crazy Quilt below, 8 different puzzles can be created by using 8 different masks:



Puzzle 1



Puzzle 2



Puzzle 3



Puzzle 4



Puzzle 5



Puzzle 6



Puzzle 7








































Puzzle 8







Game Play


Depicted below is an opening puzzle.

Player 1 

Locate the Missing Patches

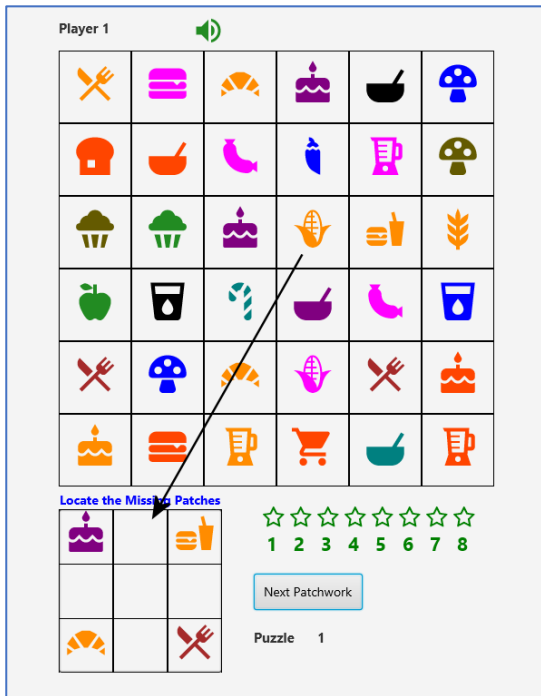

1 2 3 4 5 6 7 8

Next Patchwork

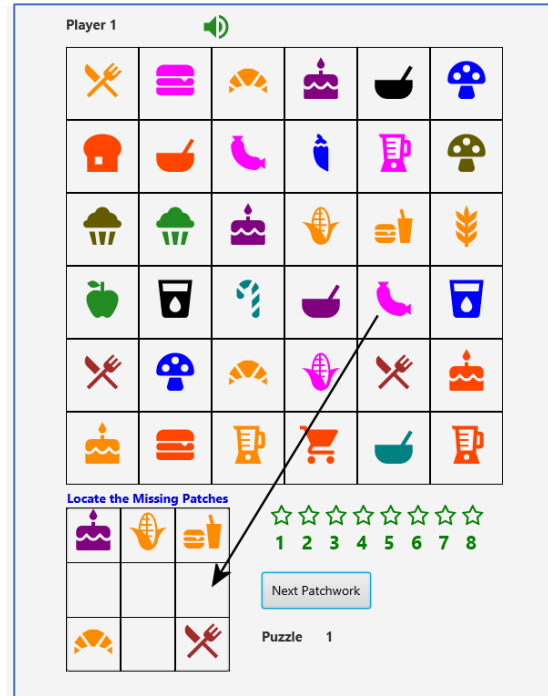
Puzzle 1

OPENING SCREEN

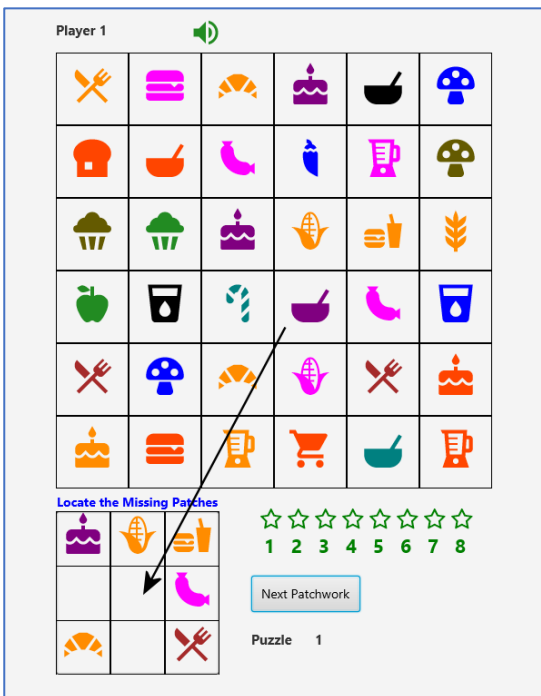
Subsequent moves to solve the puzzle are illustrated. Tap a patch on the Crazy Quilt then tap the corresponding empty square on the Patchwork:



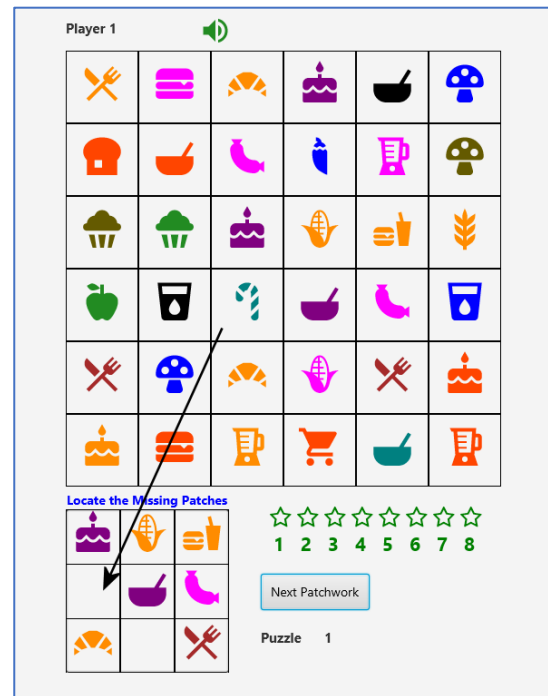
Puzzle 1 Move 1



Puzzle 1 Move 2

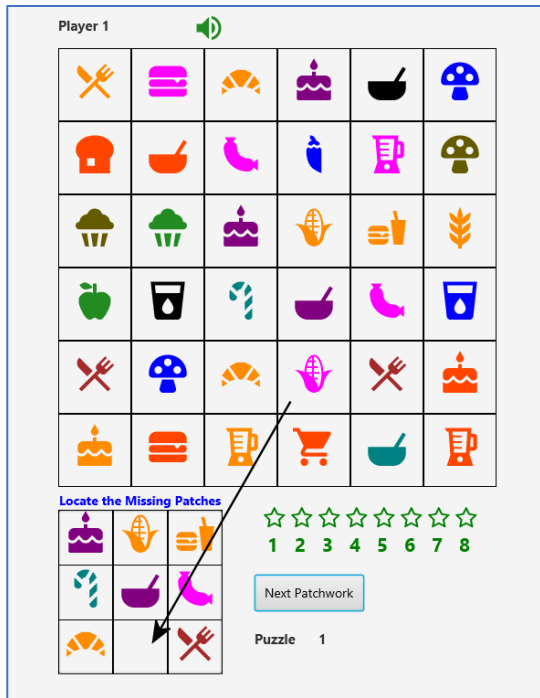


Puzzle 1 Move 3

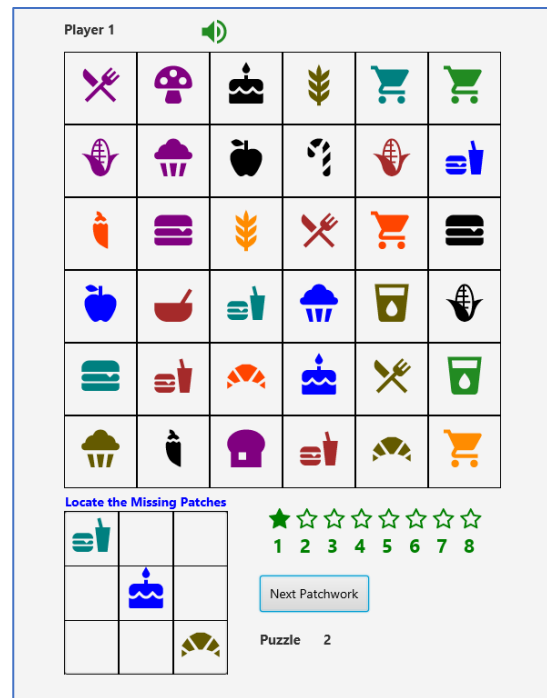


Puzzle 1 Move 4

Once the last move is made, the program *automatically* moves to the next puzzle and changes Crazy Quilts. Puzzle completion is indicated by the filled in green star above its puzzle number.



Puzzle 1 Move 5



Puzzle 2 Move 1

As you proceed to solve puzzles, the green stars are filled in to indicate your progress. When ALL 8 Theme puzzles have been solved, the following actions occur:



* A Theme Trophy is awarded (if a Trophy has not already been awarded for the Theme just completed)

* Program automatically moves to the next Theme

* The Puzzle number resets to 1 and the green stars are cleared

(Trophies are saved in a TROPHY CASE. Here is the Trophy Case after completion of the FOOD theme, Beginner Level)

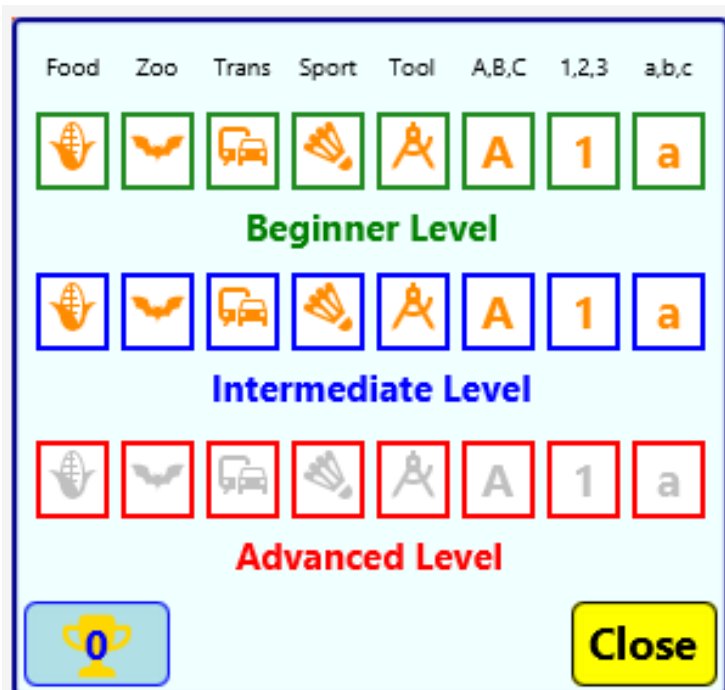
Level Completion

A Level is complete when all 8 of its Theme Trophies have been collected. For example, here are the Trophy Cases for Level 1 (Beginner) and Level 2 (Intermediate) completions.



Level 1 Complete.

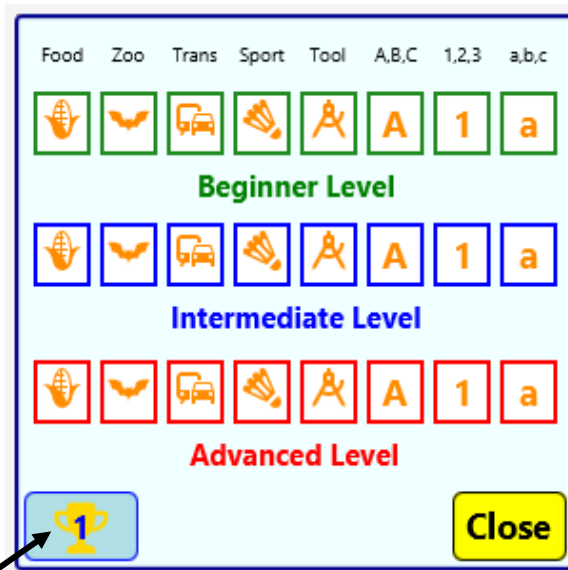
Level 2 (Intermediate) Level is unlocked (and remains unlocked) after all 8 trophies have been awarded at Level 1



Level 2 Complete.

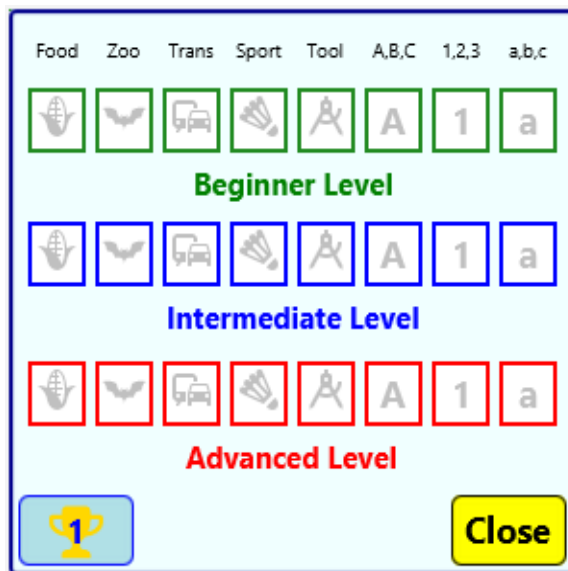
Level 3 (Advanced) Level is unlocked (and remains unlocked) after all 8 trophies have been awarded at Level 2

When Levels 1, 2 and 3 have been completed, the Trophy Case Count icon (gold cup) is incremented.



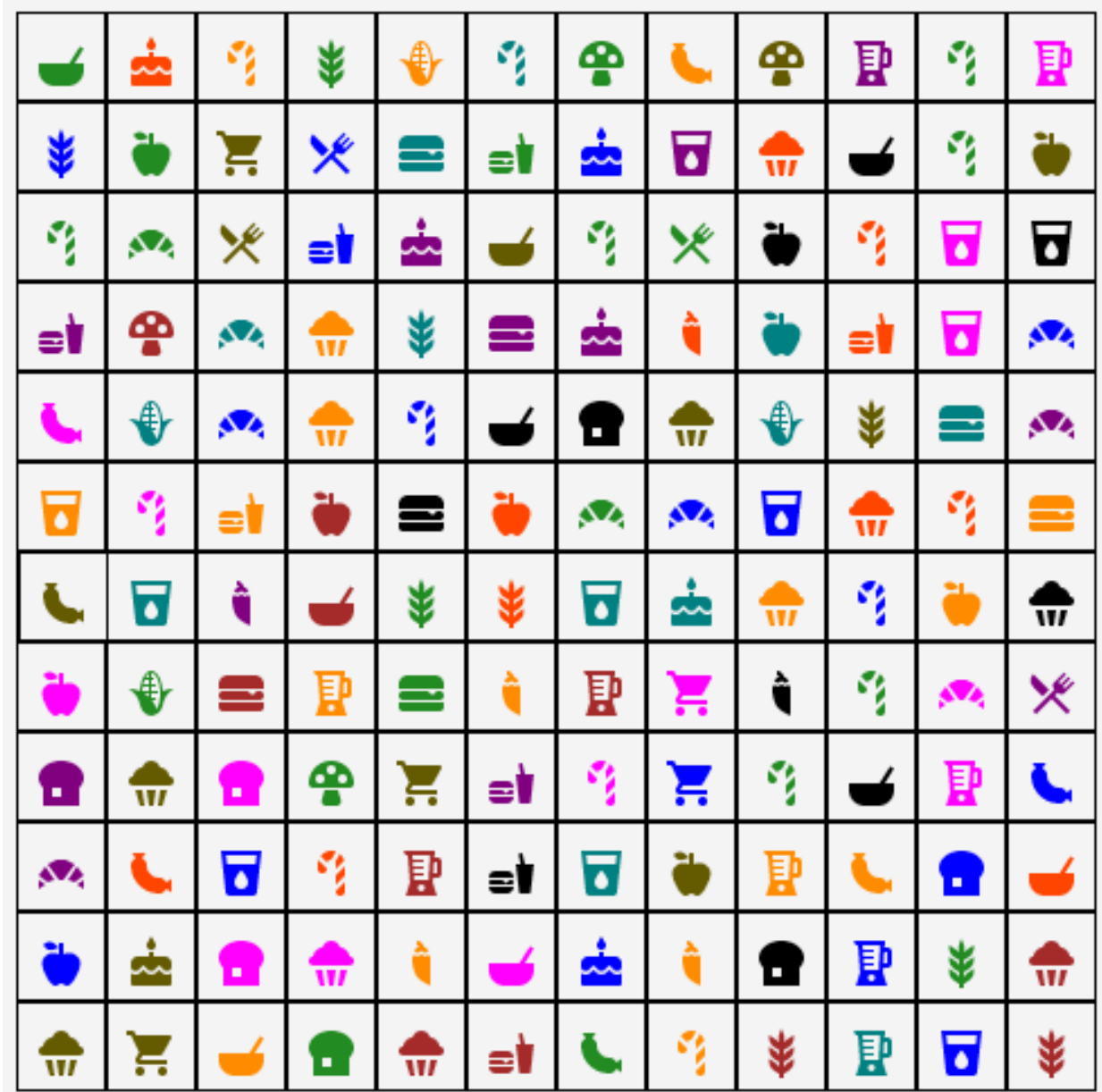
Trophy
Case
Count

After the Trophy Case is filled, the Trophies are cleared and a new round of puzzle solving begins.



ULTIMATE CHALLENGE

When two full Trophy Cases have been completed, a special Level called the Ultimate Challenge is unlocked and the Player Level is elevated to "MASTER". This is the highest level in the game. Depending on the Theme and Color option, this level can be formidable.






ULTIMATE CHALLENGE CRAZY QUILT (FOOD THEME)





































Menus and Controls

The Apple iPad playfield is shown below. The menus and controls are functionally identical to the Windows and Android versions of the app. Only their locations on the screen will differ. These differences are addressed in the Appendix.





4:14 PM Sat Feb 18 59%

THEME LEVEL  

Player 1  Timer: 00:07

Locate the Missing Patches

☆☆☆☆☆☆☆☆

1 2 3 4 5 6 7 8


Next Patchwork


Puzzle 1

THEME: rotary cycles thru the Theme Inventory

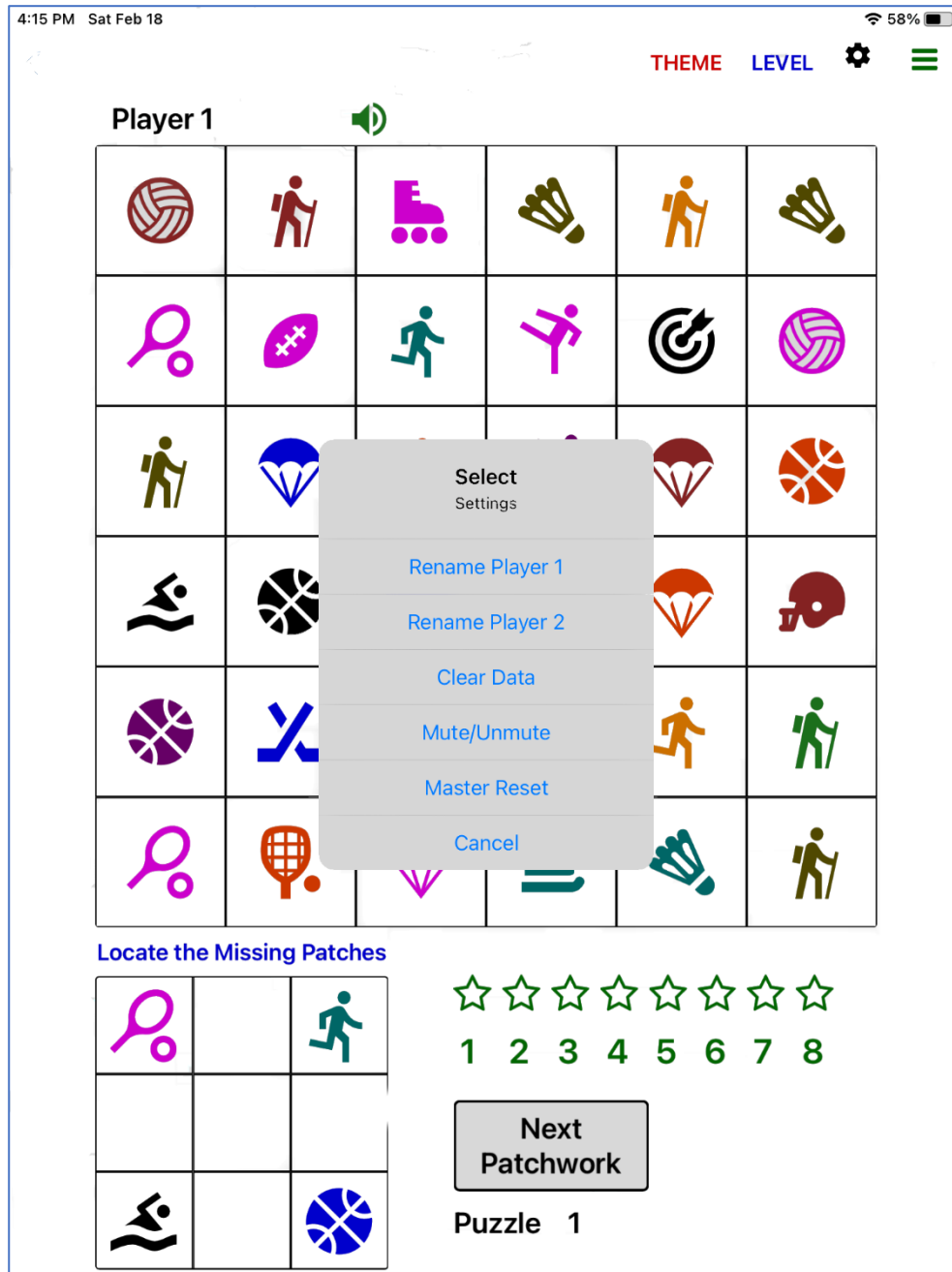
LEVEL: rotary cycles thru unlocked Levels

NEXT PATCHWORK BUTTON: rotary cycles thru puzzles 1-8. Allows manual selection of any puzzle

 Settings (next page)

 Options (next page)

Settings Menu



- Rename Player 1: Opens a text input field and keyboard to allow name to be entered. Default name ("Player 1") is displayed above playfield.
- Rename Player 2: (Same functionality as Rename Player 1)
- Mute/Unmute: Toggles the game's sound effects. Speaker icon is displayed above playfield to indicate current state.

- **Clear Data**

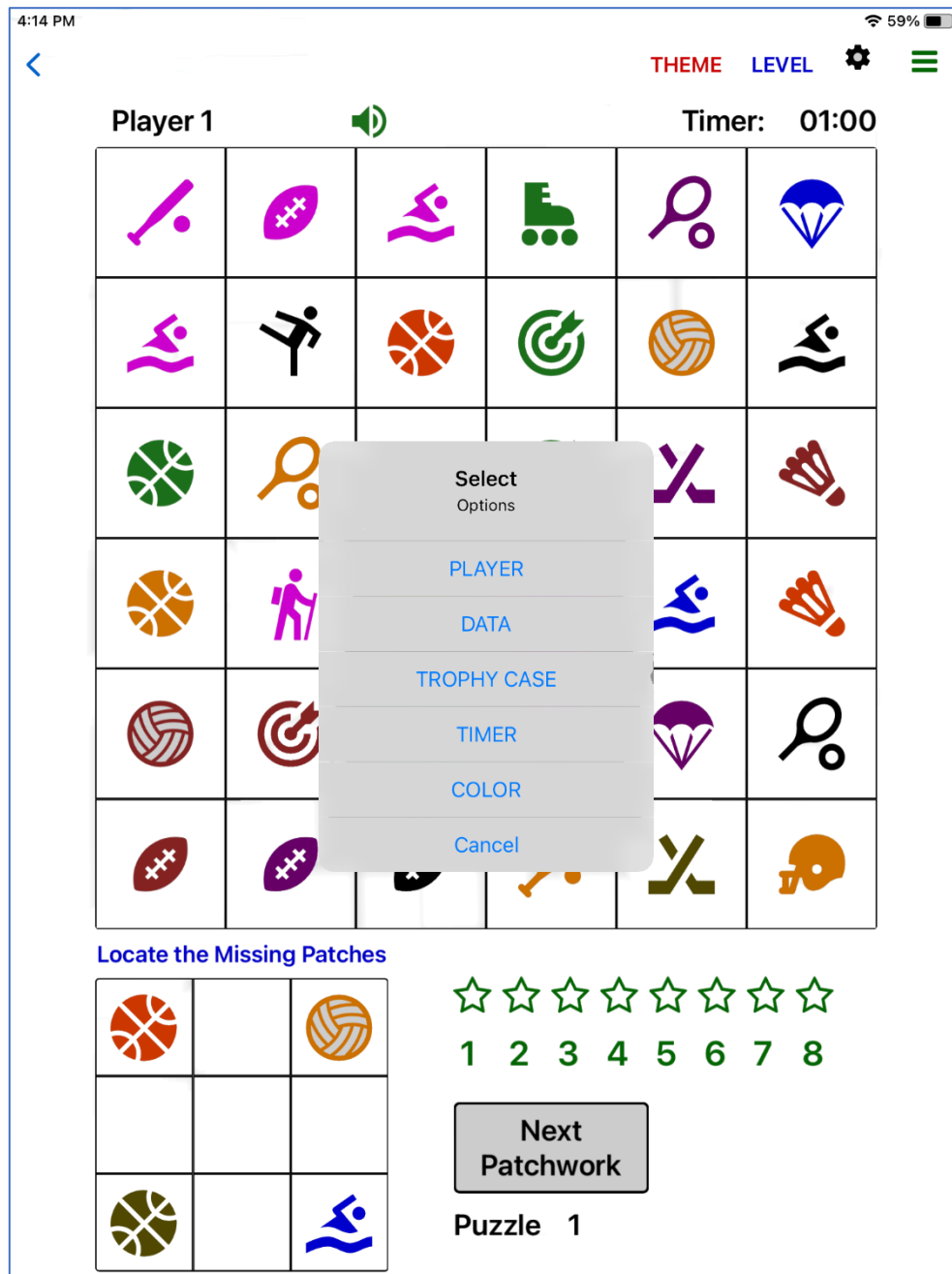
The screenshot shows a data panel with two player entries. Player 1 is highlighted with a blue border and has blue text. Player 2 is highlighted with a green border and has green text. A green 'Close' button is at the bottom.

Player	Level	Sessions	Total Time	Beginner	Intermediate	Advanced
Player 1	Beginner	0	00:04:37	0	0	0
Player 2	Beginner	0	00:00:00	0	0	0

The Data Panel is used by parents to track the amount of time their child spends with the app.

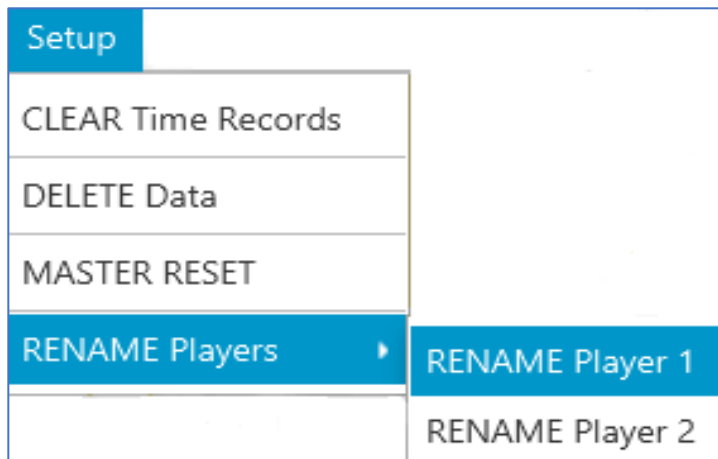
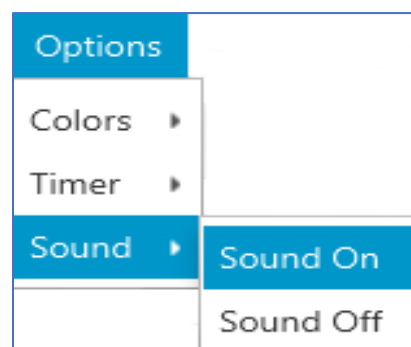
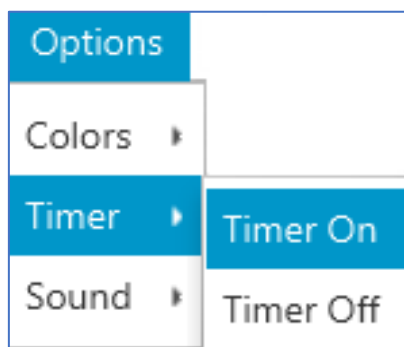
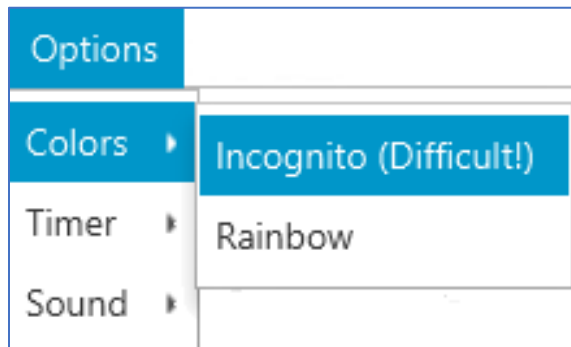
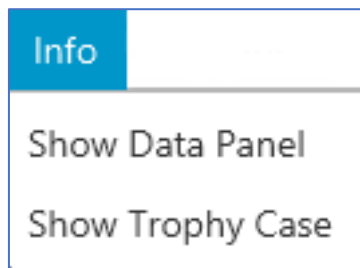
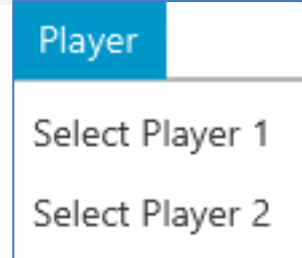
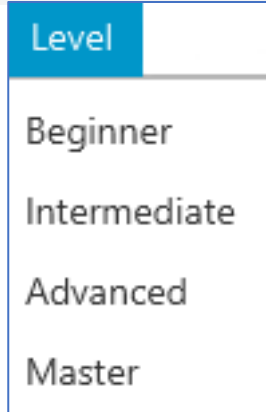
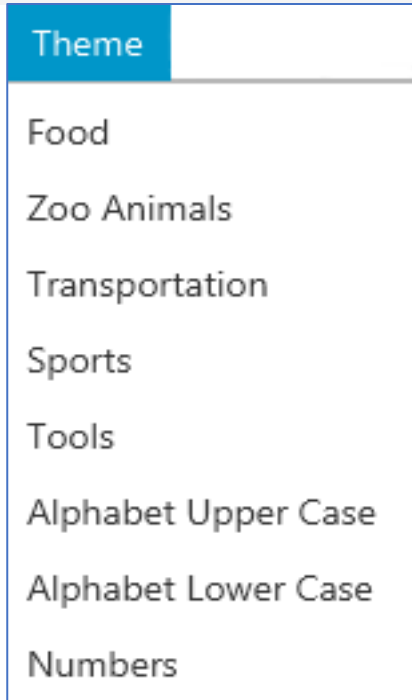
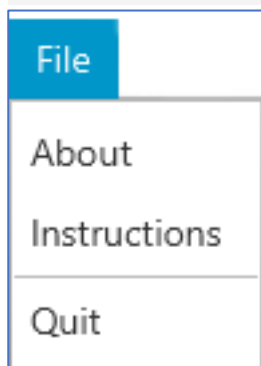
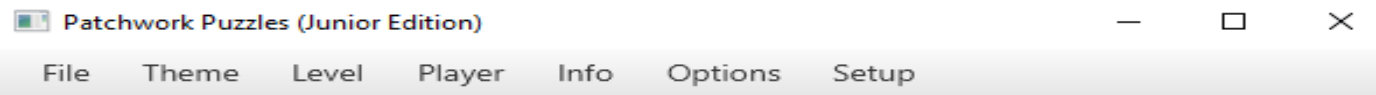
- o Player Data. Player 1's name and current Level are displayed blue text; Player 2's data is green.
 - o Sessions. A session starts when the first puzzle move is made after opening the app. It is a cumulative measure; each time the app is opened, any move made and the app then closed, this counter is incremented.
 - o Total Time. Cumulative elapsed time since game start with the particular player selected. Switching to the other player resumes that clock.
 - o Rounds. A Round is simply a completed Theme at a given Level. Since a Trophy is only awarded after a Theme's first completion, Rounds are tracked instead, for it is sometimes useful for the child to repeat themes at a consistent lower level until some mastery is achieved.
 - o CLEARING the data resets all data to zero. Names/Levels are unchanged.
- **Master Reset.** Clears ALL data, including names, play levels and time and rounds data. Clears Trophy Case data. Essentially, restarts the game to initial conditions.

Options Menu

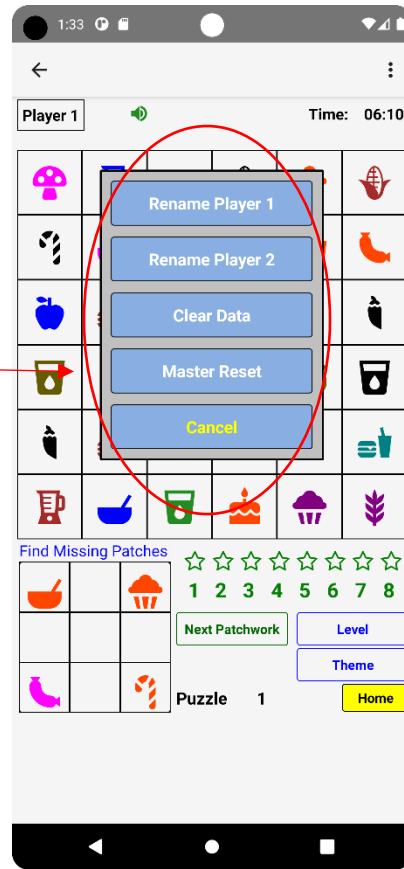
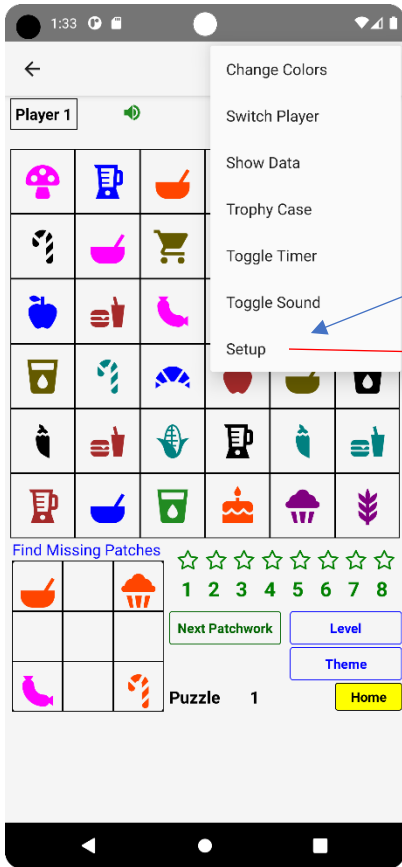
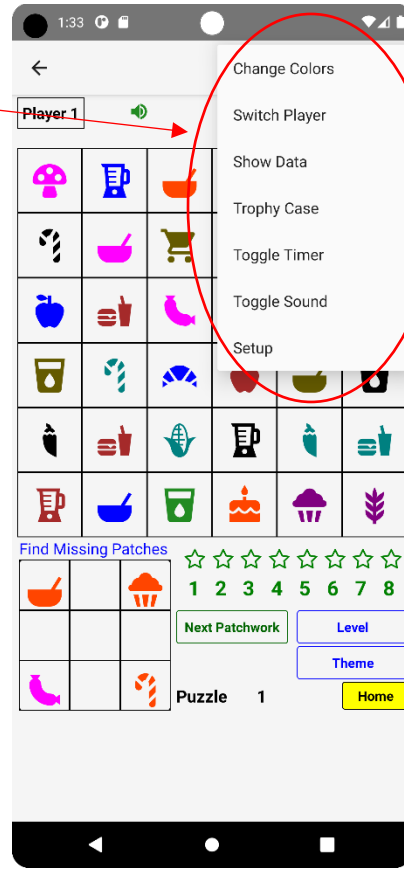


- Player. Toggles current player selected
- Data. Displays the Data Panel
- Trophy Case. Displays the Trophy Case
- Timer. Toggles the timer visible/invisible. Timer runs regardless.
- Color. Chooses between a color or a Black/White patches.

Appendix W. Windows Menus



Appendix A.
Android Menu



Product Name: Patchwork Puzzles (Junior Edition)

Copyright: 2023

Company: TurboSoftSolutions.Com

Programmer: Neil Rohan

