# Jigsaw Overview History Mystery

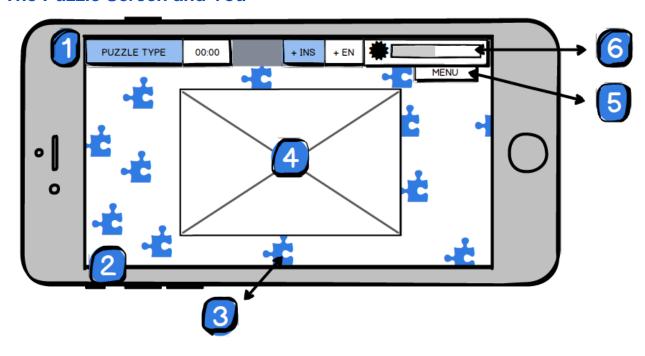
Overview _	
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The jigsaw puzzles are a core feature of gameplay and will be used throughout the entirety of the game. Players will encounter several jigsaws throughout each chapter, each one revealing a new location for the player to explore and interact with.

Jigsaws take place when the player is traveling to a new area that they will eventually be able to interact with after completing the puzzle. Players are constructing/clarifying the location in space time they wish to go to by completing the puzzle.

Jigsaw areas of the game need to be **replayable and grindable.** They should be designed to have some sort of element or elements that allow the player to return to the same art, but find new excitement in them.

## The Puzzle Screen and You



The puzzle screen is comprised of the following elements

· · /	Lets the player know what type of puzzle variant they are currently solving (ie 'Standard', 'Edges
	they are currently solving the Standard, Luges

	Only') and provide a timer if necessary for game mode. Timer should be hidden if not needed.
(2) The Table	The whole space which the player has to solve the puzzle. In traditional puzzles this space would be the table which the puzzle is placed on. This table is bigger than the screen players should be allowed to scroll to the left and right, top and bottom of the screen and view pieces off the screen. This space is filled with puzzle pieces and grouped puzzle pieces. It houses the puzzle space.
(3) Puzzle Pieces	Pieces of the puzzle. This includes singular puzzle pieces and connected groups of puzzle pieces.
(4) The Puzzle Space	The empty space where the puzzle will go. This is where players place puzzle pieces. Over the course of the puzzle this space will become the finished puzzle as players complete the jigsaw.
(5) The Puzzle Dashboard	UI Element. A drop down menu that players can access for several tools when solving puzzles. See more info below
(6) Resource Counter	Compound counter for Energy (hard currency) and Insight (soft currency) and a progression bar and level gage for experience.

# The Puzzle Type & Timer

This fixed tab should be a compartmentalized tab displaying the current puzzle variant and the puzzle timer.

## **Puzzle Type**

The puzzle variants name should be shown here. The names should be descriptive enough that a player who has forgotten how they should be playing the puzzle can glimpse this title and have an understanding of what to do.

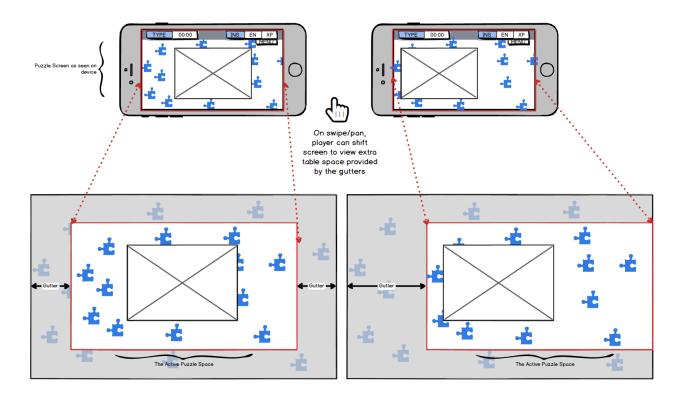
## **Timer**

The timer should only be utilized if the current puzzle variant requires it. If it is not in use the timer compartment should resort to its inactive state. If the variant does require a timer it should be visible and keep track of time digitally (format should be 00:00)

## States

active	Timer panel contains a live digital clock with the capability of counting down or up depending on the level design and variant.
inactive	Timer panel has no timer visible and instead shows a visually appealing and non active element.

## **The Table**



Much like an analog jigsaw puzzle, the table space is much larger than the actual puzzle itself. We represent this digitally by allowing the player to pan their view around so they can see all of the table provided and sort their puzzle pieces as they see fit.

## **Interactions**

Action	Gesture	Result	
Pan	Player places their finger on a portion of the table not occupied by a puzzle piece, menu or puzzle and moves their finger directionally.	Screen follows the movement of their finger, allowing player to pan their view to an unviewed portion of the table.	
Zoom In	Player uses the standard "pinch zoom" gesture bringing two fingers closer together	View zooms in to a maximum of x% where x is a variable dictated by level design.	
Zoom Out	Player uses the standard "spread" gesture, starting with pinched fingers and spreading them out.	View zooms out to a maximum of y% where y is a variable dictated by level design.	

## **Variables**

The following should be exposed for design:

panSpeed	Velocity at which the screen shifts with the player's gesture
zoomInMax	The max distance a player can zoom in on a puzzle screen. This could be set on a per level basis, but should have a default value for when level design does not call for a variation.
zoomOutMax	The max distance a player can zoom out of on a puzzle screen. This could be set on a per level basis, but should have a default value for when level design does not call for a variation.

## **Puzzle Pieces**

The puzzle pieces make up the brunt of the player's interaction during the jigsaw sequence and therefore should grant us the most control over the gameplay experience.

Puzzle pieces should be viewed as children of the table, and therefore should pan and zoom in and out with their parent.

## **Interaction and Functionality**

The following are a list of interactions the player can have with a puzzle piece and pieces as a whole.

Interaction	Feedback
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Player taps puzzle piece	In Standard Levels: No result In Rotational Variant: Piece is rotated 90 degrees clockwise. Sound feedback.	
Player drags puzzle piece	Piece is moved with player's gesture.	
Player drops puzzle piece	Piece is dropped at location player's hand leaves the screen.	
Player connects two puzzle pieces that correctly fit together. **See below**	Pieces snap together to form a connected group of puzzle pieces. This group is now movable as one unit and should be treated as a singular puzzle piece. It can still continue to be dragged and dropped until it is placed correctly in the puzzle.	
Player places puzzle piece correctly in proper puzzle location. **See below**	Piece snaps into place with animation and audio cue. Piece can no longer be dragged, dropped or rotated.	

## The Snap and the Place

The snap of two correct puzzle pieces to each other or their proper place in the puzzle needs to be of the utmost satisfaction to the player. These two instances of gameplay are referred to as **Snap** and **Place** 

## Snap

Snap or Snapping refers to two puzzle pieces or grouped pieces that have correctly been placed next to each other and snap together forming one loose grouped piece. When connected or close enough to each other (as defined below in the distance variable) the pieces should connect with a sound cue. A subtle flash or animation should signify the pieces coming together. The experience should be akin to placing two powerful magnets near each other. The pieces should immediately connect after passing the distance threshold

#### Snap Variables

snapDistance	The greatest distance two pieces can be from eachother when snapping together. Any value lower than this should snap.
snapEaseIn	Animation value controlling the ease of pieces beginning to move towards one another.
snapEaseOut	Animation value controlling the ease of pieces beginning to move towards one another.

#### Place

Place or Placing refers to when a puzzle piece or grouped piece is placed correctly within the puzzle space. This experience should be slower than pieces snapping together, but include audio feedback as well as an animation.

#### Place Variables

placeDistance	The greatest distance the piece or grouped piece can be from its spot in the puzzle space when it is placed. Any value lower than this should place.
placeEaseIn	Animation value controlling the ease of a piece beginning to move towards their correct place
placeEaseOut	Animation value controlling the ease of pieces beginning to move into their puzzle space.

In addition to these basic interactions, players will have access to the puzzle dashboard which provides them with additional puzzle tools and functionality.

## The Puzzle Space

The puzzle space should be shown as a footprint on the table where the puzzle will go. On entry this footprint should be empty. The puzzle is completely finished when the puzzle space has been filled entirely with pieces.

The puzzle space should be viewed as the child of the table, so if the table view is panned or zoomed in or out the puzzle space should also travel with it.

## The Puzzle Dashboard

The puzzle dashboard is a drop down menu located in the top right of the screen. Its default state is hidden. When the menu icon is tapped by the player, the menu will slide down, allowing the player to access the puzzle tools.

Feature Name	Type of element	Function	Priority
Scatter & Sort	Button	Scatters all loose puzzle pieces to the edge of the screen and	High

		aligns them according to the difficulty of the level. This does not affect correctly placed pieces. This should place all puzzle pieces within the viewable area of the screen, and remove them from the gutter edges of the table	
Filter Edges	Toggle	Hides non-edge pieces from view. Players should only see edge pieces. This does not affect correctly placed pieces. When tapped again the blind is removed and all pieces can be viewed. Option for premium currency	Low
Preview**	Toggle	Toggles a preview window with the completed puzzle at ¼ scale. On second tap of toggle preview window is closed.	High (but without all the functionality described below)
View Lock	Toggle	Prevents players from zooming or scrolling their view. On second tap view is unlocked again.	Low

## **Preview Window**

The preview window created by the the Preview Toggle is unique in that it can be dragged and dropped to any location on the puzzle screen. This allows players to place it as they wish and reorganize the puzzle space.

The Preview window should be at ¼ scale [tunable] to the actual puzzle and cannot be scalable.

In addition to the toggle in the dashboard, The preview window should have small overlay cancel in the top right ( X ) that will allow the player to close the preview window.

(!!!) When the preview window is closed via the cancel, the toggle should be set back to its default state (non-active