



**Game Design Document**

**Version 1.0**

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# Introduction

This document should be seen as a starting point for the game Video Puzzle. How to put this product on the market is not fixed. Different elements can be removed or added to the game to fit the purpose or goal, elements like the Store, credits and account system depend on the final use of the game.

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# Game Overview

## Game Design Goals

### Goal #1

This game creates a new experience where players can win big prizes based on their skill level. It gives casual players the chance to win big with every day a new prize with a new challenge. The first CASUAL game with big prizes based on skill!

### Goal #2

The game needs to be simple to learn but hard to master. It must give players enough fun for their purchase every day. It must be based on skill only and there must be no possibility of cheating. Also important that the game must feel and look different every day to keep it 'fresh' and new.

### Goal #3

The game should be usable as a platform for marketing, commercials and product placement. The player must play with the brand/product/message in a fun way, without them knowing it.

# Common Questions

## What is the game?

Video Puzzle is a 5x3 sliding puzzle with a twist. The image is a movie cut into 15 different pieces. Every piece of the puzzle starts playing at a different moment. When you place a piece next to one of the right pieces, both pieces will show the movie playing at the same time (combo mechanic). Players buy credits to play and every day the best player based on moves and time will win a prize!

## Why create this game?

A game where casual players can win big prizes without a gambling focus is new. Everybody knows how a sliding puzzle works and with a small twist it gives the puzzle a new life and makes it perfect for this goal. Players will immediately understand what to do without copying the exact sliding puzzle. The marketing potential is big and should make it a perfect fit for brands and companies to promote a product or message.

## Where does the game take place?

The game has roughly a home screen and a game screen. The home screen gives all the information like prizes, high scores, winners, store, tutorial, credits and a play button to start the game. The game screen is a 5x3 grid with a pause/back button, a move counter and a timer.

## What do I control?

There is one empty square. The player can slide the pieces in a vertical and horizontal manner by touching a piece that they want to move. When that piece is next to the empty square it will slide to the position of the empty square. When you want to move a whole row or column just select the piece from where you want to slide the whole column or row and it will slide that row or column.

## What is the main focus?

The main focus of the game is to solve the puzzle and try to get the highest score to win the prize of that day!

## What's different?

Everyone knows sliding puzzles, but with the movie twist it creates a complete new game. The combo mechanic rewards players to play, but still makes it a challenge. A game where you can win real prizes every day is unique and should give players an extra choice next to the gambling and poker options. Again the marketing potential is big.

# Feature Set

## General Features

- 5x3 Sliding puzzle
- Solve movies
- Every day new prizes
- Easy to learn, hard to master
- Beat High Scores

## Gameplay

- Win with a combination of moves and time
- Touch to move the pieces
- Move complete columns or rows
- Pause the game to continue later on

## Specifications

- 1 player
- Android, iOS and Windows phone
- Max 15 minutes playtime a day
- Credits based

# The Splash Screen

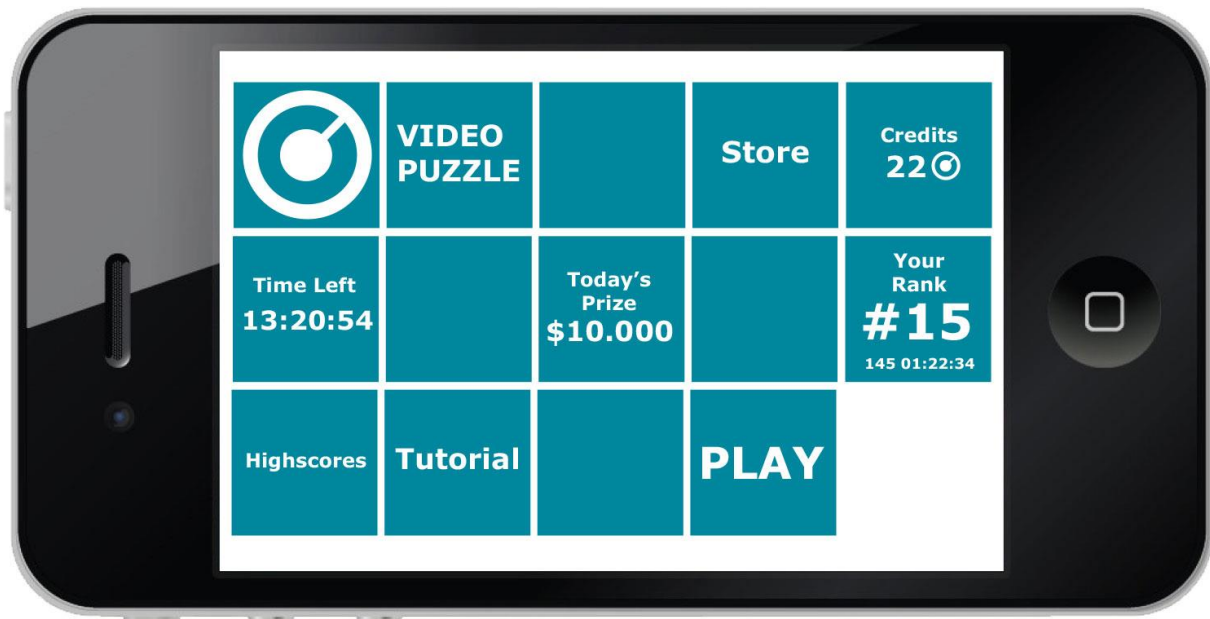


## Overview

The splash screen is showed at the beginning when the game is started. This screen shows the logo of the company or game. The splash screen is only showed a brief moment, it should not interfere with the experience of the player.



# The Home Screen



## 1. Home Screen

### Overview

The Home Screen is the first thing players will see after the splash screen, this screen gives access to all the parts of the game. The Home Screen has the following information: Store, Credits, Time, Prize, Rank, Tutorial, High Scores and Play. The following squares are buttons:

- Tutorial
- Store
- Play
- High Scores
- Prize

### Content

The home screen has the following content:

#### Store

The store button shows offers, these offers are pushed from the server. The button gives access to the Store Screen.

#### Credits

The credits are your current amount of credits; the credits are connected with your account. Every time you buy or spend a credit it will connect with the server to subtract or add credits.

#### Time left

For every challenge players have 24 hours to place a high score in the rankings. The timer starts from 24:00:00 and shows hours, minutes and seconds. With 24 hours everyone in the world has a fair chance, because it will always include your other daily activities. It's possible to count down per

area, country or time zone depending on the scale of the game. This information is pushed from the server.

### **The prize**

The prize of that day is pushed from the server and showed on this tile. The button gives access to the Prize Screen. It's possible to have multiple prizes.

### **Rank**

The rank you currently hold in the high scores of that day. Time and amount of moves is also accessed from the server. The ranking will be updated every time something changes.

### **The high scores**

The number one high score is pushed from the server and the amount of winners who can win that day. The button gives access to the High Scores Screen.

### **Tutorial**

The tutorial button only accesses the tutorial screen and does not need to get information from the server.

### **Play**

The game checks with the server if you have already started a game and paused it. You must finish a game before you can restart. When you must continue a game, the button will read 'Continue Game'.

## **Tiles**

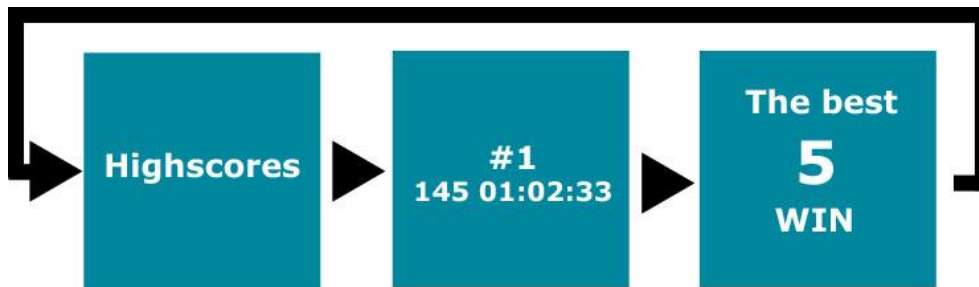
The squares give information in a fun way, by turning around and giving new information. This happens random and one at a time (around every 3-10 seconds). By clicking on a tile that's not a button you can cycle through the different states.



### **2. Tiles Turning Home Screen**

In illustration 2 we see one example of a turning tile. It first gives a complete overview of your rank with moves, time and the current rank. But when it turns it only shows your rank. The cycle has a 1 second interval and stops when it reaches the beginning again. The following cycles are present for the different tiles:

## High scores



### 3. High Scores Cycle

The high scores button when pressed gives access to the High Scores Screen. When idle, the cycle first shows the text 'High scores', the number 1 score of that day and the amount of winners that will win that day. Finally the button stops again at the first button image.

## Store



### 4. Store Cycle

The Store button when pressed gives access to the Store Screen. When idle, the cycle first shows the text 'STORE', an icon of shopping cart and (if applicable) an offer of that day. Finally the button stops again at the first button image.

## Rank



### 5. Rank Cycle

The Rank button when pressed cycles through this cycle. When idle, the cycle first shows your rank, moves and time, your rank, your moves and your time. Finally the button stops again at the first button image.

## Prize



### 6. Prize Cycle

The Prize button when pressed gives access to the Prize Screen. When idle, the cycle first shows the prize and an icon or image of the prize. With money it gives a money icon, but when a car is the prize, an image of that car will be shown. Finally the button stops again at the first button image.

## Tutorial



### 7. Tutorial Cycle

The Tutorial button when pressed gives access to the Tutorial Screen. When idle, the cycle first shows the text 'Tutorial' and a question mark icon. Finally the button stops again at the first button image.

## Time



### 8. Time Cycle

The Time button when pressed cycles through this cycle. When idle, the cycle first shows the time left and a clock icon. Finally the button stops again at the first button image.

## Interaction

### Access other screen



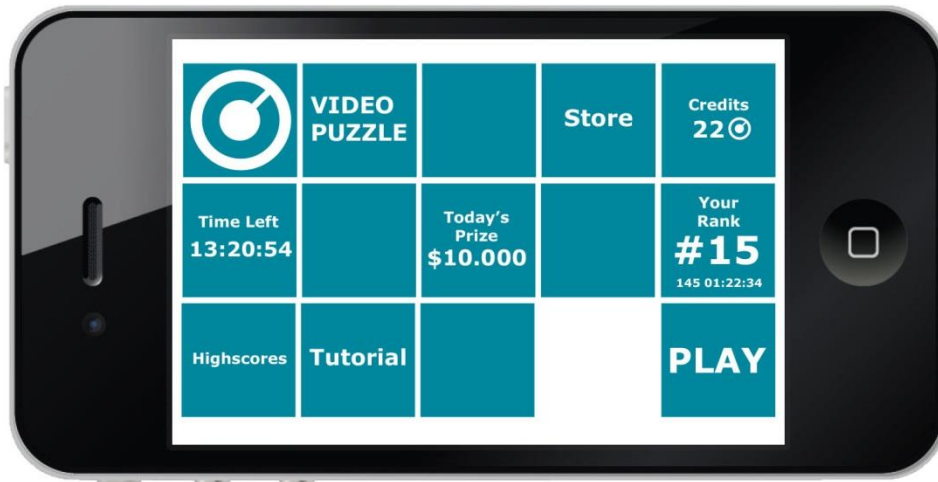
#### 9. Touch Button to Access Other Screen

To access a different screen or navigate through the game touch and release a button to get access to the new screen. The button will have a touch over image.

### Start Game

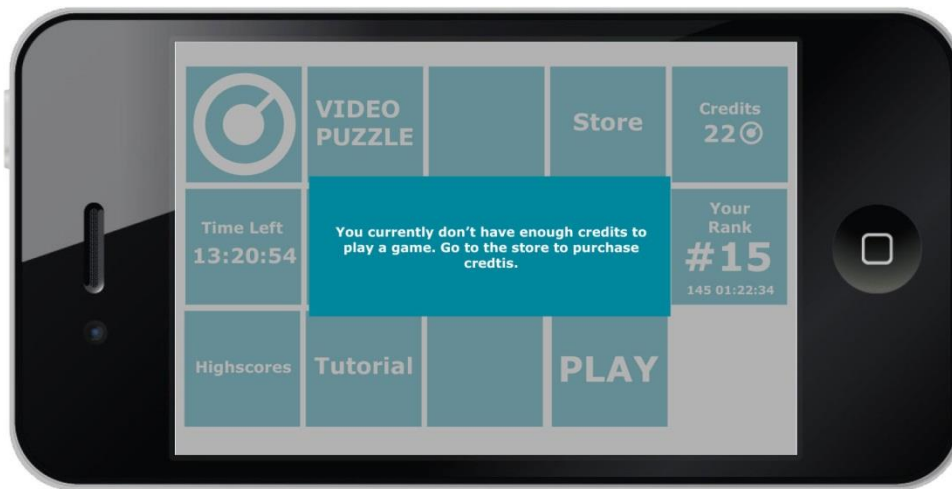


#### 10. Touch Play Button



### 11. The Play Button Moves to the Right

To start the game touch and release the play button with your finger. The button will have a touch over image. The game will check with the server if you have a positive amount of credits, subtract one if possible and start the game. It will send the start of the game to the server. When you release the button the play tile will move/slide to the right and then the game screen is opened. If the player does not have enough credits it will show a message. It will also check with the downloaded video for the puzzle. The player cannot start a game when there is no video. The player will receive a message that the puzzle must be downloaded first.



### 12. Message No Credits Available

## Cycles



### 13. Touch to Start Cycle

To start a cycle just touch and release the button and the cycle will start. The button will have a touch over image.

# The Store Screen



14. Store Screen

## Overview

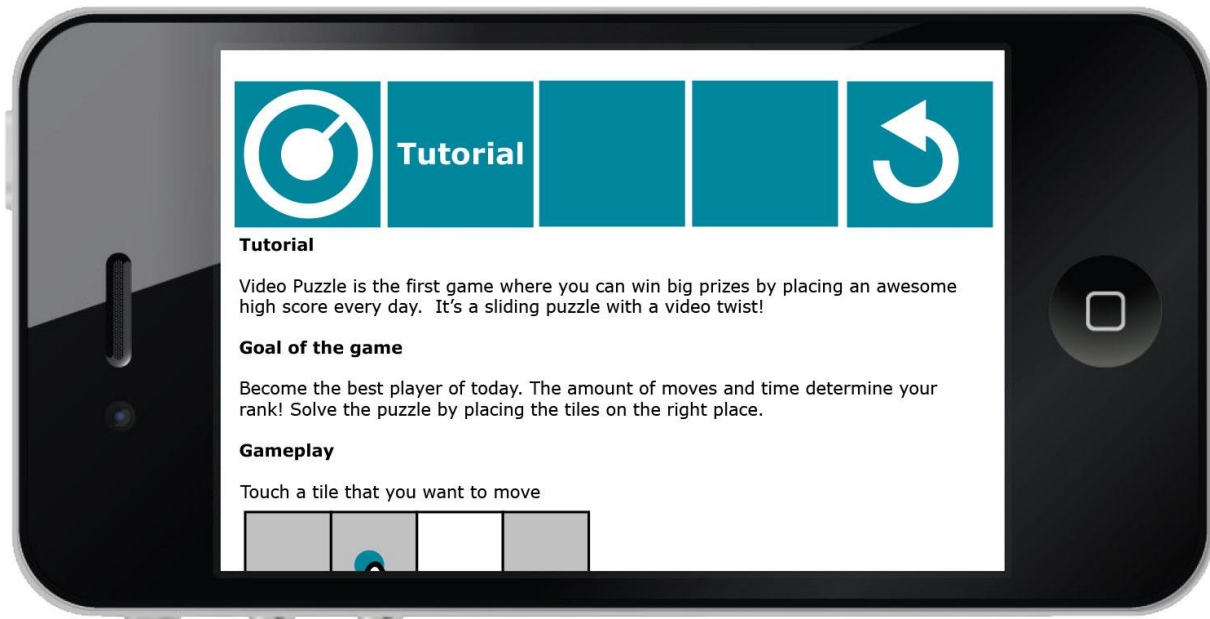
The Store screen is where you can buy more credits in different combinations. Just select an item you want to buy and then the game will show a message if you agree with the purchase. Cancel or buy the item. The top right shows your current amount of credits. To return back to the Home Screen press the circular arrow. Your purchases are connected with your account.



15. In App Purchase



# The Tutorial Screen



## Overview

The tutorial screen is to give the player extra information about the game, controls and winning conditions. The following information can be found on this screen:

**Tutorial**

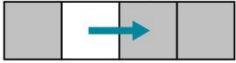
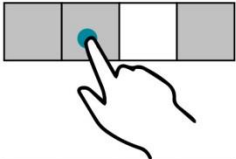
Video Puzzle is the first game where you can win big prizes by placing an awesome high score every day. It's a sliding puzzle with a video twist!

**Goal of the game**


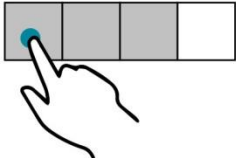
Become the best player of today. The amount of moves and time determine your rank! Solve the puzzle by placing the tiles on the right place.

**Gameplay**


Touch a tile that you want to move



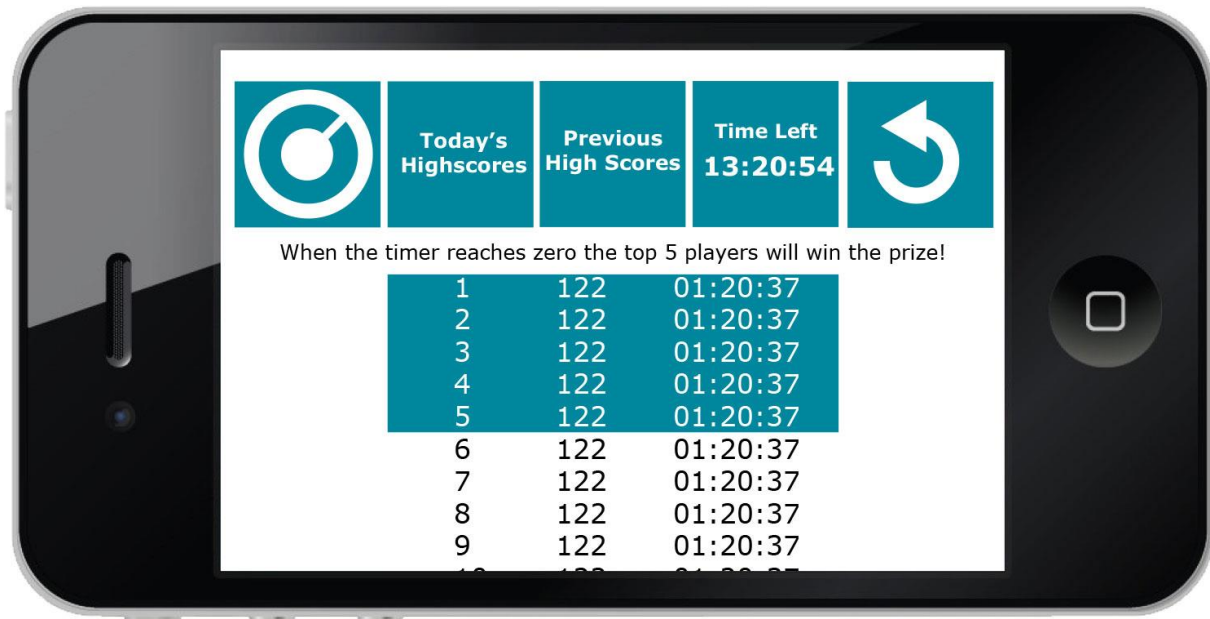
You can move a (piece of a) row or column by selecting a tile from what point you want to move the column or row.



You can pause the game by pressing on the return/pause button. You will immediately be returned to the Home Screen. The time and moves will be saved.



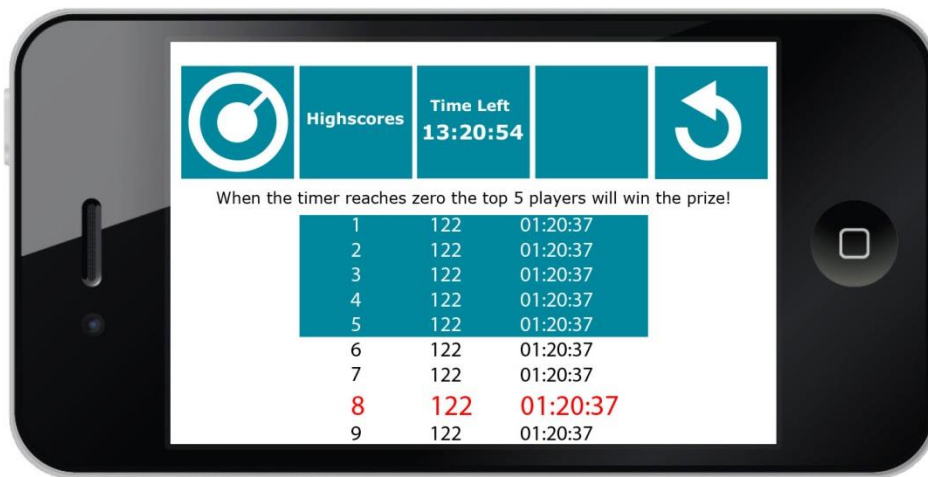
# The High Scores Screen



16. High Scores Screen

## Overview

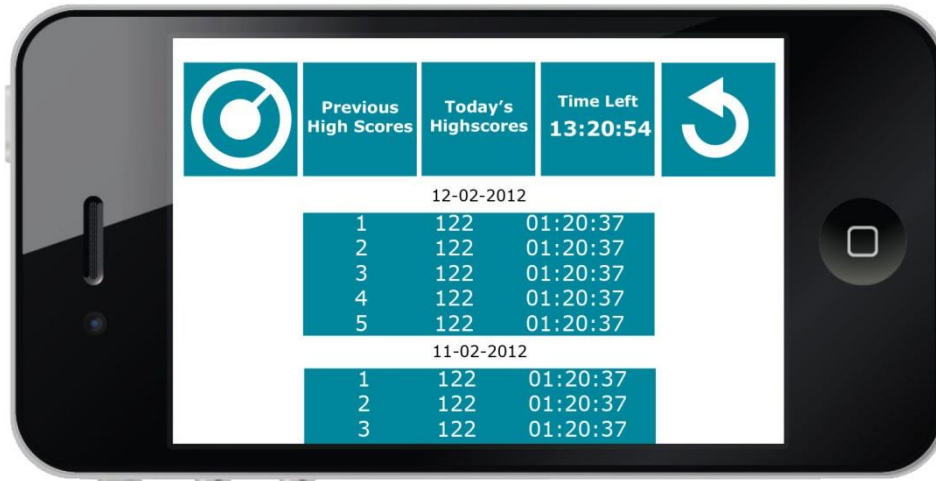
The High Scores screen gives access to the high scores of that day or previous high scores. The time left is shown in the right corner. The blue area showcases the amount of winners and what score you must try to beat. Scroll up or down by sliding your finger vertically. Press the Previous High Scores button to see the high scores of different dates. To return to the Home Screen press the circular arrow.



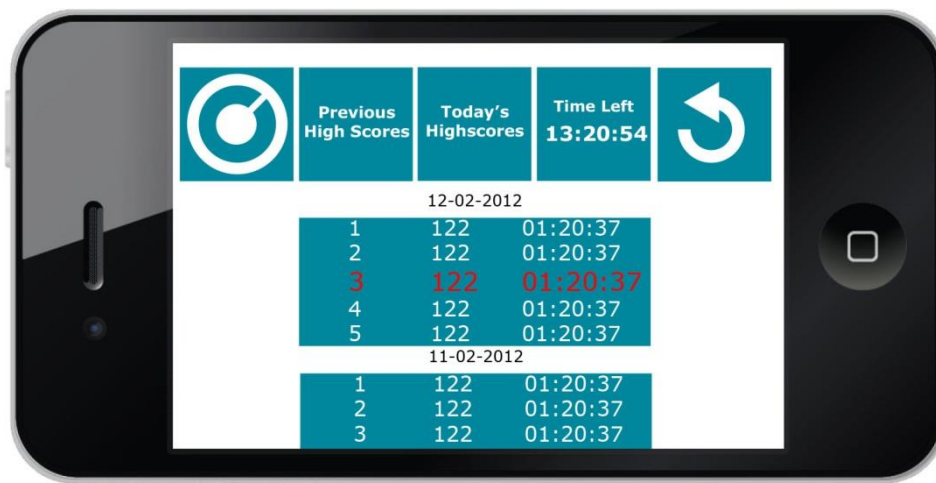
17. High Scores Screen With a Score of Player in Red

## Previous High Scores Screen

The Previous High Scores Screen shows the winning scores per day. Scroll down to see more high scores. To return back to Today's High Scores touch and release the Today's High Scores button. To return to the Home Screen press the circular arrow.

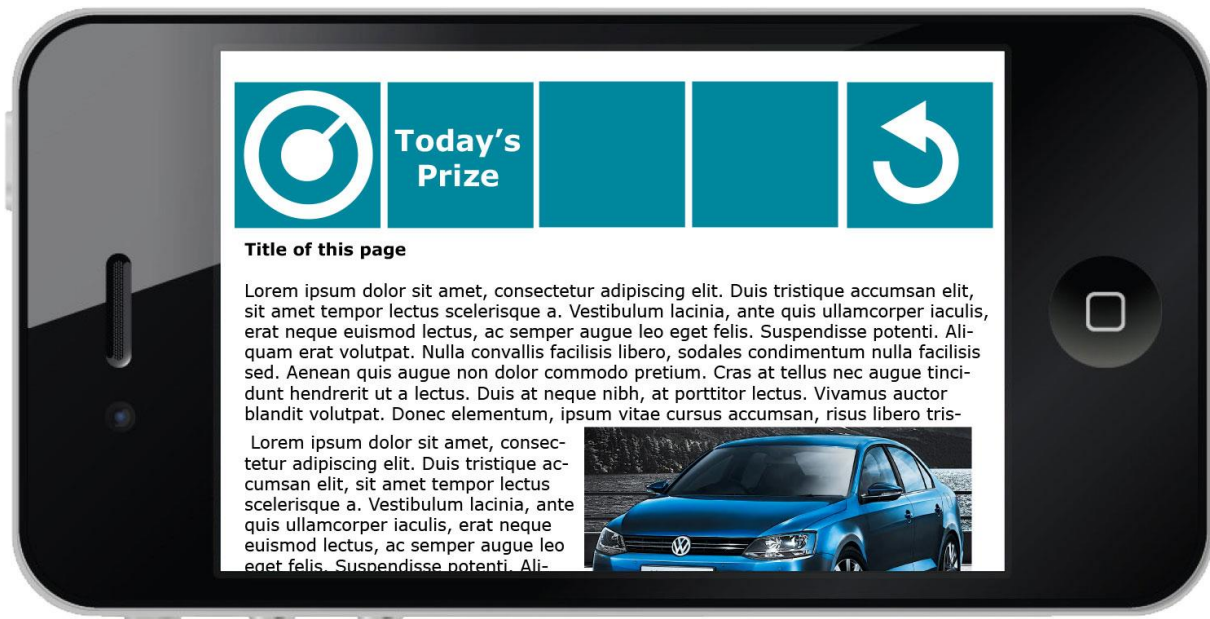


18. Previous High Scores Screen



19. Previous High Scores Screen With Score of the Player in Red

# The Prize Screen



## Overview

The prize screen gives more information about the prize of that day. When a sponsor donates a product, the sponsor can add more information on this page. This is also the place for extra conditions. Scroll up or down by sliding your finger vertically. To return to the Home Screen press the circular arrow.

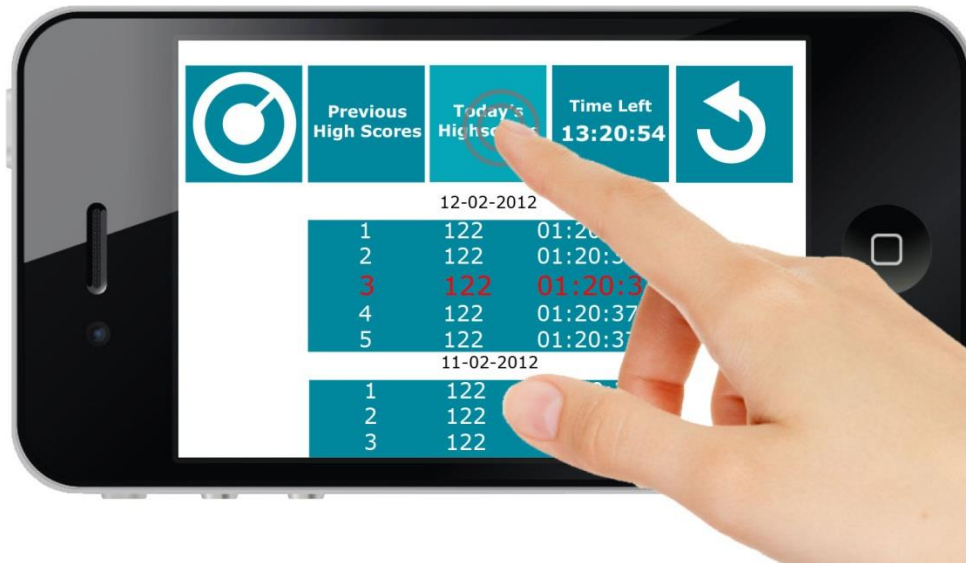
# Interaction Screens

## Overview

The puzzle, prize, tutorial and high scores screen have some unexplained interaction. The buttons and scrolling are not explained.

## Buttons

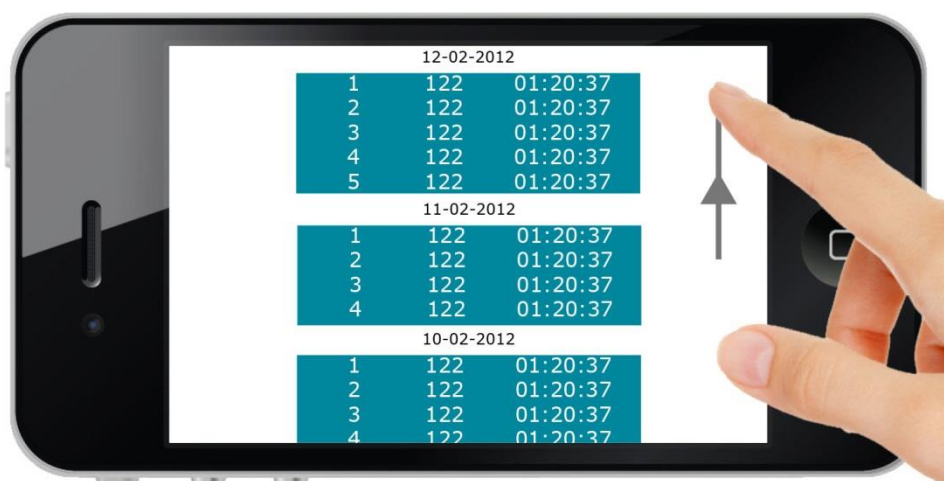
The buttons have touch over image.



## 20. Buttons Screens

## Scrolling

Place your finger on the screen and move vertically up to scroll down and vertically down to scroll upwards.



## 21. Scrolling on a Screen

# The Game Screen



## Overview

The game screen is where the actual game is played. The sliding puzzle is in a 5x3 grid and the right lower square is empty. The lower left UI shows the time (in hours, minutes, seconds) and the lower right UI shows the amount of moves. The middle button with the circular arrow is the back/pause button. The amount of moves starts at zero.

## Gameplay

In this chapter the gameplay will be explained. The start of the game, the gameplay, controls and the rules.

### Start

The game starts by randomizing the position of the squares, every square must be on a different location than the correct position to guarantee the same difficulty. The tile movies start at random moments, creating a collection of tiles displaying the same movie, but at a different points in the timeline of the movie. The music of the movie follows the correct timeline of the solution. The count down starts, displaying 3,2,1 and finally 'START'. During the count down the player cannot perform any actions. The timer will start counting upwards when start is displayed.



22. Count Down 3





23. Countdown 2



24. Count Down 1



25. Count Down Start

## Rules

- You can only move a single tile when it is next to the empty tile and counts as 1 move.
- You can only move a piece of a row when the empty tile is in that row and counts as 1 move.
- You can only move a piece of a column when the empty tile is in that column and counts as 1 move.
- The timer starts when the count down reaches zero.
- The timer pauses when you pause the game.
- When a tile is next to the right tile the movies will play at the same time.
- You complete the puzzle when all the pieces are on the right position.
- When you complete the puzzle the timer stops and you receive a message.

## Controls

The game controls are really simple and intuitive. By pressing on a tile you want to move, that tile will move to the empty spot if possible.



**26. Touch Tile Game Screen**



But sometimes you want to move a complete row or column without losing the huge amount of moves. The game features an option to touch and release a tile from what point you want to start the column or row. Moving a piece of a row or column only counts as a single move.



**27. Touch a Piece of a Row**





28. A Piece of a Row Moved

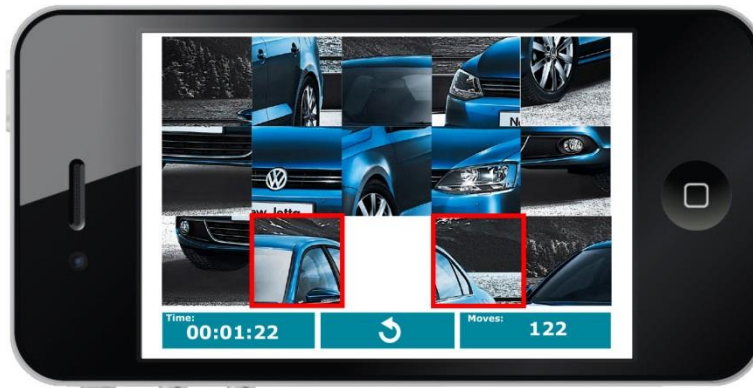
## Videos

Before the video is cut into a grid, the video is adapted to cover the whole grid. We don't want any black borders, because this gives an easy hint of the borders pieces. For the game we use 720p movies as the basis and we will scale from there. A 720p movie is 1280 x 720 pixels. But this cannot be cut into equal squares. We need to transform the movie into 1200 x 720 pixels by cutting 40 pixels from the left and right border. The video is cut into a 5x3 grid with equal sized squares (240 x 240 pixels). Every tile is a part of that movie. The videos of the tiles are looped and start at a random point on the timeline.



29. HD Movie 720p Cut into 240 x 240 pieces

When a piece is located next to a right piece (for example piece 3 is next to 2 the movie is played from the right timeline).



30. Tiles (red border) are Not Next to Right Tile.



31. Tiles (red border) are Next to Right Tile.

## Puzzles

Every puzzle is randomly generated for every player on the server and the server sends it to the player. This makes it possible to replay the same puzzle and it also prevents cheating.

## Pause

When pressed the game is paused and the player is immediately returned to the Home Screen.



32. Pause Game

## Difficulty

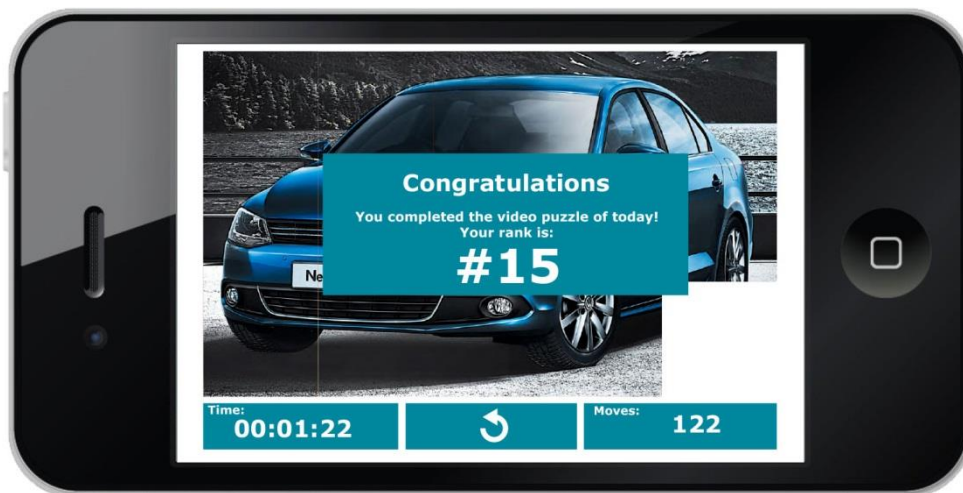
To make the game easier there are two different options: an easier video or making the grid smaller. Making the grid smaller locks the left and right side, resulting in a 3x3 grid for novice players.



33. 3x3 Mode

## Solve Puzzle

A puzzle is solved when all the pieces are on the right position. When a puzzle is solved a message is showed that you have completed the challenge and your current rank. The final amount of moves and time is still shown in the left and right lower corner. The player cannot perform any actions. When the player touches and releases the screen, the player is returned to the Home Screen.

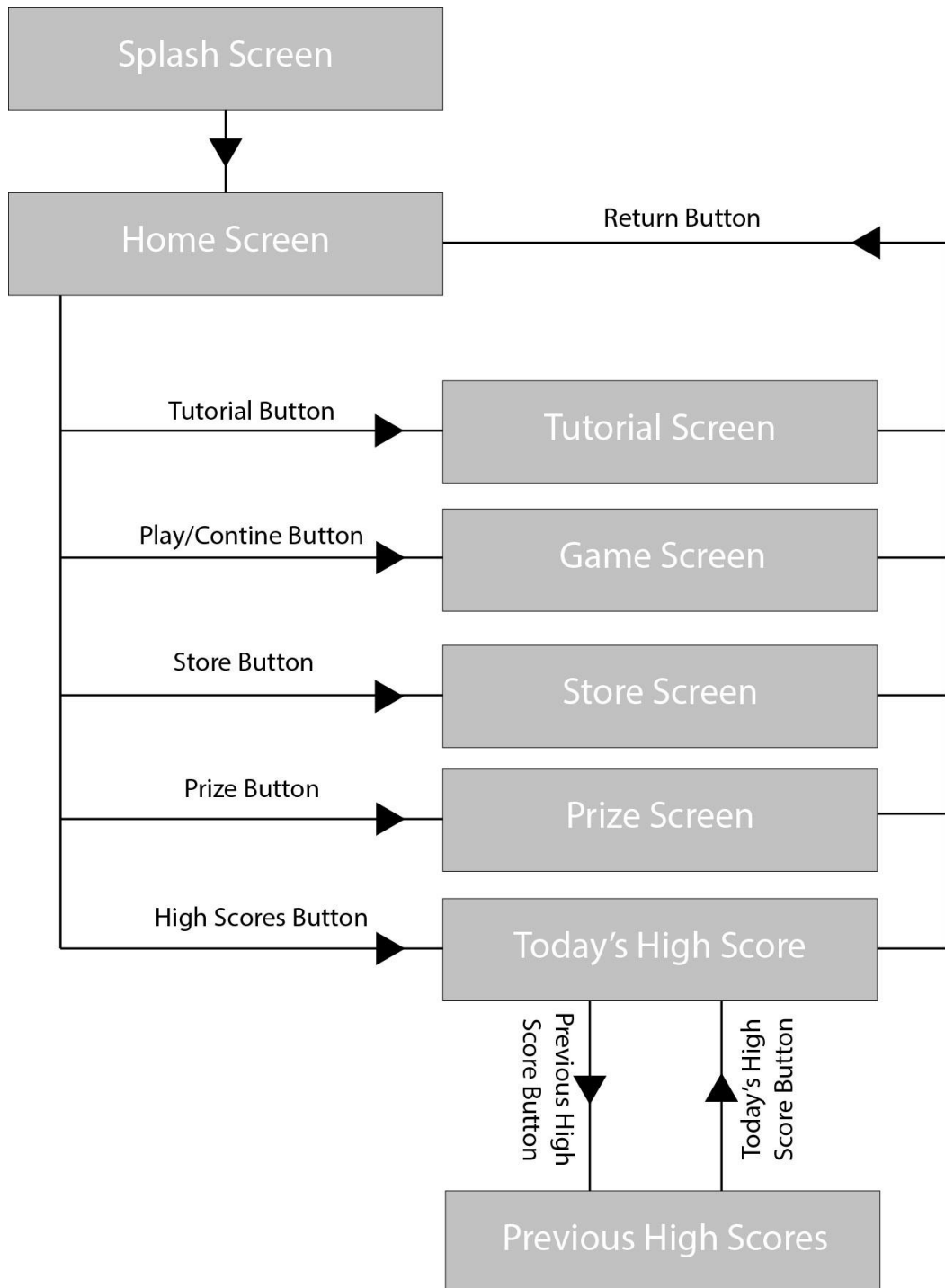


34. Congratulations message

# Flow

## Overview

The following flowchart explains the flow and navigation in the game.



35. Flowchart

# Art & Sound

## Art

### Logo



This is the logo of the game with the name. The name Video Puzzle can be changed in the future.

### App Icon



This app icon is placed on the user's smart phone or tablet screen to access the game.

### Colors

Background: #FFFFFF  
Tile: #00889E  
Tile-Over: #04A6B7

### Transitions

The transition between the screens is a simple fade out, fade in.

### Orientation

The whole game is locked on landscape mode.

### Display Ratios

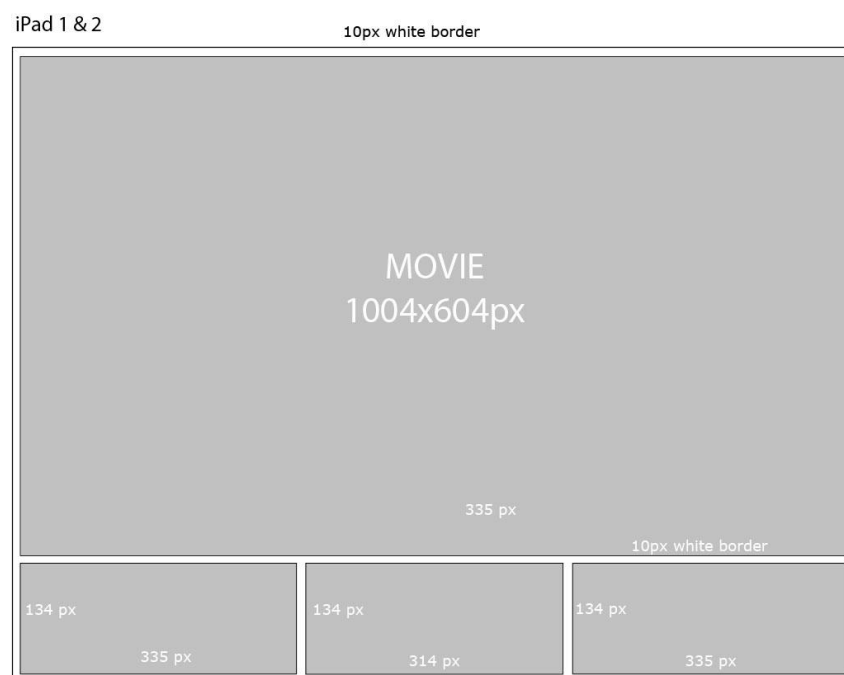
Because of the different display ratios and the movie that needs to keep the same ratio it is needed to explain the handling/scaling of the different objects. The basis of all the ratios is the iPhone 4 & 4s. From this basis the other screens are formed.

Every screen must have a 10 pixel white border. The items are scaled until one of the sides cannot become any bigger without losing the 10 pixel white border.



### 36. Ratios iPhone 4 & 4s

A screen of tablet is a different ratio and the left and right side first reaches the border. But this leaves a large white space above and below. To use this empty space the height of the buttons and time/move interface are increased.



### 37. Ratios iPad 1 & 2

In the case of an iPhone 5 we apply the rules. First we scale the iPhone 4 images until we go over a 10 pixel white border at one of the sides. Then we look if we can increase the height of the buttons. But we cannot increase the width of the movie without losing the information on the buttons. So we simply don't do anything.



### 38. Ratios iPhone 5

## Music and Sound Effects

### Overview

The music and sound effects are explained in the section below.

### Music

There are two different sections with different music:

#### Game Screen

The music during the game is the music of the video. The music is looped during this part of the game.

#### Other Screens

The other screens, for example tutorial, home and prize screen, have an ambient soundtrack which is the main theme of the game. It should be relaxing and something that is recognizable for this game. The main theme is looped.

### Sound Effects

This is a list what parts of the game and what actions in the game should have sound effects. The sound effects should be simple and not too notable. The sound effects first describe a sound effect and then which actions require the sound effect. The sounds in this list should be different from each other.

- Touch Button/Tile
  - Return button
  - Tiles on the Home Screen
  - Today's High Scores Button
  - Previous High Scores Button
- Release Button/Tile
  - Return button
  - Tiles on the Home Screen
  - Today's High Scores Button
  - Pause Button
  - Previous High Scores Button
- Move Row/Column
  - Move Row
  - Move Column
- Move Single Tile
  - Play Button
  - Move Single Tile
- Touch and release that can't be moved
- Cycle Tile Turn
- Win/Congratulations Message
- Pause Button
- Count Down Beep
  - 3
  - 2
  - 1
  - Start



# Miscellaneous

## Overview

Here you can find some different elements which need to be explained and don't fit in a different chapter.

## Localization

All the text in the game should be placed in some kind of xml sheet to make the complete game localizable. Even the buttons and messages should be fit for translation. The language of the game is picked from the language of the platform.

## Security

The security of this game is very important. The video, credits and payment system need to be safe. The high score connection should all be secure. It's also important that the system cannot fail and credits are not lost during a crash of a device. That's why everything substantial is stored on a server and not on the device of the user. The data is connected with a user account.

## User Data

The data of the user is only used during payment and when a prize needs to be sent to the player. We are not using the user data in any other kind.

## Prizes

We need to be able to send prizes in any form to the winners. This can be tickets through e-mail, money to a bank account and objects through mail. To play this game we need access to this data to send prizes to the players. The best way to handle this would be to make it automatic and without any difficult emails send back and forth with the winner.

## Game Data

The game data we will store. It's important to know the following data (more is always better) to inform possible sponsors or partners:

- Play and game duration
- Access to prize information page
- How often players replay
- How much people spend