# **Testing The Phuzzlings App**

App Version: V0.9.x Document Revision: B

Target Audience: Internal/Closed/Open Testers

## Introduction

This document includes step-by-step instructions that describe how to test all the various features of the Phuzzlings app.

## **Terms Used**

#### **Main Controls**

The four icons in the corners of the screen:

- The XP Control at the top-left of the screen. Tapping this brings up the Badges screen.
- The Coins Control at the top-right of the screen. Tapping this brings up the Gift Shop.
- The Bonus Control at the bottom-right of the screen. Tapping this brings up the Bonus screen.
- The Service Bell control at the bottom-left. Tapping this brings up a menu with options for Help, How To and Settings

# **Top Controls**

Just the the XP Control and Coins Control

## Phuzzle

A puzzle created from an image. These are created within the app, played as the mini-game, managed in the Library, and shared and imported.

# **Test Scripts**

# Script 1: New User Part 1 - Fresh Install

- 1. Delete the app if it is already installed
- 2. Install the app
- 3. Run the app

- 4. Verify the introduction shows and you can go backwards and forwards using the buttons and also by swiping
- 5. On the last panel verify that the Terms and Privacy buttons open the correct web pages
- 6. On the last panel verify that the third button says "Agree!"
- 7. Tap on "Agree!"
- 8. Verify the Lobby shows
- 9. Tap on the service bell
- 10. Tap on "How-To" and then "Show Intro Again"
- 11. Verify the introduction shows and you can go backwards and forwards using the buttons and also by swiping
- 12. On the last panel verify that the third button says "Okay!" (not "Agree!")
- 13. Tap on "Okay!"
- 14. Verify the Lobby shows

#### Script 2: Walkthrough

- 1. Delete the app if it is already installed
- 2. Install the app
- 3. Run the app
- 4. Verify the walkthrough messages are shown
- 5. Verify the walkthrough button glowing works (light blue glowing)
- 6. Verify following the walkthrough take the user through
  - 1. Quick Start
  - 2. Starting a Phuzzle
  - 3. Playing a Phuzzle
  - 4. Using the search feature
  - 5. Viewing the Level/Badges/Score screen
  - 6. Viewing the Multiplier screen
  - 7. Entering the Gift Shop

# Script 3: Quick Start

- 1. Tap on the Quick Start button in the lobby
- 2. Verify the device image gallery is shown
- 3. Verify using the device's cancel/return option takes the user back to the Lobby
- 4. Tap on the Quick Start button again

- 5. Choose an image from the device image gallery
- 6. Verify the user is taken to the Workshop
- 7. Tap on a difficulty to choose it
- 8. Tap on Paint by Numbers to start the mini-game
- 9. Verify the painting mini-game starts successfully

# Script 4: New User Part 2 - Level 1 Completion

- 1. Tap on the XP Control
- 2. Note the requirements to complete level 1
- 3. Hint: completing other test plans "Create" "Search" "Play" will help meet these requirements.
- 4. Verify that as you meet each requirement the relevant confetti burst is shown
- 5. Hint: the shortest path to complete level 1 is this
  - 1. Watch 6 ads.
  - 2. Create a Phuzzle (see Create a Phuzzle below), play it on "Easy" (see Play a Phuzzle below), and use the "Solve Phuzzle" tool to complete it.
  - 3. Create two more Phuzzles and play them as above.
  - 4. Play three more phuzzles (see Play a Phuzzle below) the same way.
- 6. Verify that as you meet the last requirement relevant confetti burst is shown and then the Level 2 confetti burst is shown

# Script 5: Plan Gift Shop

- 1. From the Lobby tap on the coin icon top left
- 2. Verify the Gift Shop Shows
- 3. Tap on the XP Control
- 4. Tap on "Ads Watched" and note the number of ads that have been watched
- 5. Verify the Main Controls work as expected
- 6. Tap on "Watch Ad"
- 7. Verify an ad or a test ad is shown
- 8. Verify coins are added to the Coin Control
- 9. Verify XP is added to the XP Control
- 10. Tap on "Ads Watched" and note the number of ads has increased

- 11. Tap on "Watch Ad" until the button is disabled (up to 8 watches total) and then "Next Ad" is shown with a timer counting down.
- 12. Come back to the Gift Shop after the timer has expired and verify that one more ad can be watched.

## Script 6: Daily Multiplier

- 1. Note the current bonus shown by the Bonus Control (None, 20%, 40% etc)
- 2. From the Lobby tap on the Bonus Control
- 3. Verify that the Bonus Screen is shown
- 4. Verify there is a timer counting down.
- 5. Note the tasks left to complete to reach the daily bonus award
- 6. Verify that the bonus confetti is shown when the last task is completed
- 7. Verify the current bonus shown by the Bonus Control has increased (up to 100%)
- 8. Tap on the Bonus Control
- 9. Verify that the Bonus Screen is shown
- 10. Verify there is a "Refresh in" timer counting down

# **Script 7: Settings**

- 1. Tap on the Service Bell
- 2. Tap on Settings. The Settings screen opens.
- 3. Verify that you can edit the player name
- 4. Verify that you can change the volume
- 5. Set the "Work-In-Progress Features" setting to "Enabled"
- 6. The "Initial Canvas" setting controls whether the starting canvas you see when you play a Phuzzle is completely white or has a faint watermark of the image. Verify changing the setting alters the canvas when you play a Phuzzle.
- 7. Tap on the screen orientation using the circular rotate button next to the exit button
- 8. Verify the screen orientation changes and the UI is correctly displayed in the new orientation
- 9. Close the app

- 10. Restart the app
- 11. Confirm the changed settings are honored (volume etc) and the Settings screen shows the saved settings.

#### Script 8: Create a Phuzzle

- 1. In the Lobby tap on "Create". The Art Room is shown.
- 2. Tap on "Camera".
- 3. Verify you see the "Picking an image" screen as the camera opens.
- 4. Verify the device's camera opens and you can take a picture.
- 5. Verify the image cropping screen is shown.
- 6. Tap on "Original".
- 7. Confirm the "New Phuzzle" screen is shown.
- 8. Tap on "Play".
- 9. Verify the Workshop is shown.
- 10. Tap on the different difficulty options and make sure they highlight
- 11. Tap on "Paint By Numbers".
- 12. Verify the mini-game starts
- 13. Complete or quit the game
- 14. In the Lobby tap on "Create". The Art Room is shown.
- 15. Tap on "Gallery".
- 16. Verify the device's image selection options are shown and you can pick a photo.
- 17. Verify the image cropping screen is shown.
- 18. Verify you can flip and rotate the image.
- 19. Tap on "Crop".
- 20. Confirm the "New Phuzzle" screen is shown.
- 21. Confirm the image shown is correctly cropped and rotated.
- 22. Tap on "Play".
- 23. Verify the Workshop is shown.
- 24. Tap on "Paint By Numbers".
- 25. Verify the mini-game starts
- 26. Verify the image in the mini-game is correctly cropped and rotated.
- 27. Complete or quit the game.
- 28. Repeat from step 13 but choose "File" and verify the device's file picker is shown.

# Script 9: Play a Phuzzle 1 - Starting

- 1. Either
  - 1. Create a Phuzzle (see Create a Phuzzle) and chose to play it.
  - 2. Search for an image (see Search) and chose to play it.
  - 3. Tap on an image in your Library in the Lobby
- 2. Verify the Workshop opens.
- 3. Verify the Main Controls are shown and work as expected
- 4. Verify you can exit the Workshop back to the Lobby
- 5. Enter the Workshop again
- 6. Verify you can select a different difficulty
- 7. Tap on "Paint by Numbers"
- 8. Verify that the progress bar is shown as the Phuzzle is initialized
- 9. Verify that the progress bar is animated
- 10. Verify that the progress bar completed in an acceptable time period (15-60 seconds depending on the device)
- 11. Verify that the mini-game is shown
- 12. Verify the clock is ticking.
- 13. Tap on the XP Control
- 14. Verify the Score screen is shown. Wait a few seconds.
- 15. Close the Score screen and verify the game is paused.
- 16. Tap on "Resume" and verify the clock had paused while the Score screen was open.
- 17. Tap on the Coins Control.
- 18. Verify the Gift Shop screen is shown. Wait a few seconds.
- 19. Close the Gift Shop screen and verify the game is paused.
- 20. Tap on "Resume" and verify the clock had paused while the Gift Shop screen was open.
- 21. Tap on the Pause button (bottom left).
- 22. Verify the pause screen is shown.
- 23. Tap on "Resume" and verify the clock had paused while the pause screen was open.
- 24. Tap on the help button (bottom right).
- 25. Verify the help screen is shown.
- 26. Disabled for now [Tap on the screen orientation using the circular rotate button next to the exit button]
- 27. Disabled for now [Verify the screen orientation changes and the UI is correctly displayed in the new orientation]

- 28. Close the help screen and verify the clock had paused while the help was open
- 29. Enter the Workshop when the coin balance is very low (< 30).
- 30. Verify the "Paint by Numbers" option is disabled.

#### Script 10: Play a Phuzzle 2 - Playing

- 1. Start a Phuzzle mini-game (see Play a Phuzzle 1)
- 2. Verify there is at least one colored region on the canvas (typically brown)
- 3. Tap on them
- 4. Verify the progress bar on the right of the canvas advances
- 5. Verify when all the colors have been tapped on the progress bar resets and different colored regions appear.
- 6. Tap on the magnifying glass icon
- 7. Verify canvas is zoomed
- 8. Verify no coins were used
- 9. Verify you can drag the canvas with your finger
- 10. Verify you can tap on colored regions to complete them
- 11. Tap on the magnifying glass icon to reset the zoom
- 12. Verify the whole canvas is shown
- 13. Tap on the "Show Hi-Lites" tool (next to the magnifying glass)
- 14. Verify that coins are used
- 15. Verify the active regions on the canvas change color from their default -> pink -> green -> blue -> default.
- 16. Verify that coins are only used once and the cost is then "Free"
- 17. Tap on the "Palette" tool (the one with the grid of colors)
- 18. Verify that coins are used
- 19. Verify that tapping on different colors in the palette shows different regions on the canvas
- 20. Verify that the color selected matches the regions on the canvas. For example if you tap on a blue color in the palette and then tap on those regions on the canvas they become the same blue color.
- 21. Verify that tapping on the first icon in the palette changes the sort order of the colors. The sorting is "small-to-large", "large-to-small", "dark-to-light", "light-to-dark", "color hue"
- 22. Verify tapping on the "Palette" tool shows and hides the palette

- 23. Verify that coins are only used once and the cost is then "Free"
- 24. Tap on the "Solve Color" tool.
- 25. Verify that the current color is solved and the next set of regions are shown on the canvas.
- 26. Verify that coins are used every time
- 27. Verify that as you play the mini-game the coin balance goes down slowly (1 coin every 2 minutes)
- 28. Switch away from the app and switch back to it
- 29. Verify the pause screen is shown
- 30. Wait until the device goes into locked mode or turns off
- 31. Wake the device
- 32. Verify the pause screen is shown
- 33. Verify that if you stop interacting with the mini-game it will pause itself after 1 minute of inactivity.
- 34. Tap on "Solve Phuzzle" tool (the one with the gold cup and medals).
- 35. Verify that the Phuzzle solves itself.
- 36. Play a second Phuzzle
- 37. Verify that all of the tool options have been fully reset
- 38. Play a Phuzzle with a low coin balance
- 39. Verify that the tool options become disabled as the coin balance gets lower. You can use the "Solve Color" tool to spend coins 10 at a time to lower the balance gradually.

# Script 11: Play a Phuzzle 3 - Ending

- 1. Start a Phuzzle mini-game (see Play a Phuzzle 1 and 2) and complete it.
- 2. Verify the Top Controls are shown
- 3. Verify the Pause, Tools, and Help buttons are not shown
- 4. Verify the clock has stopped
- 5. Verify there is a "Show Me" button
- 6. Tap on "Show Me"
- 7. Verify the paint by numbers canvas is replaced with the original image
- 8. Verify there is are "Next" and "Export" buttons.
- 9. Tap on "Export"
- 10. Verify there are choices to remove the Phuzzlings logo
- 11. Tap on "Forget It"

- 12. Verify the previous screen is shown.
- 13. Tap on "Export"
- 14. Tap on "Just Export"
- 15. Verify the device's share feature is shown.
- 16. Chose a destination for the image
- 17. Tap on "Thank you"
- 18. Verify the previous screen is shown.
- 19. Verify that the image was exported and has the Phuzzlings logo in the bottom left corner
- 20. Tap on "Export"
- 21. Tap on "Use 50" Chose a destination for the image
- 22. Verify that the image was exported without the Phuzzlings logo in the bottom left corner
- 23. Tap on "Next"
- 24. Verify the Phuzzle end screen is shown with the Phuzzle details, social media links, and points.
- 25. Verify the "Export" buttons is there.
- 26. Note the number of points to be earned.
- 27. Tap on "Points x2"
- 28. Verify an ad is shown
- 29. Verify the number of points to be earned has double.
- 30. Tap on "Okay"
- 31. Verify the points are added to the XP control.

# Script 12: Phuzzle Library

Make sure that you have some Phuzzle created before this test is done.

- 1. In the Lobby tap on "Library" or the edit icon next to it.
- 2. Verify the Library screen is shown.
- 3. Verify the number of Phuzzles and the library size is shown at the bottom of the screen.
- 4. Verify you can toggle the heart icon of Phuzzles
- 5. Verify that the "Sort by" option changes the sort order to put or not put the favorites first. The Phuzzles should be sorted with the most recently played ones first.
- 6. Long press on a Phuzzle
- 7. Verify the Phuzzle details box is shown

- 8. Verify that the Phuzzle details are correct (name, description, dates, times played, thumbnail)
- 9. Tap on "Delete"
- 10. Verify you are asked to confirm the deletion
- 11. Verify the Phuzzle is deleted if you confirm
- 12. Verify the Phuzzle is not deleted if you do not confirm
- 13. Long press on a Phuzzle
- 14. Tap on "Share"
- 15. Verify the device's share feature is shown
- 16. Chose where to share the Phuzzle
- 17. Verify that the share worked correctly outside of Phuzzlings
- 18. Create Phuzzles until the Library is full
- 19. Try to create a new Phuzzle
- 20. Verify you are given the option to buy more library space with coins.
- 21. Verify that buying more space works

### Script 13: Phuzzle Customization

To test this make sure that "Work-In-Progress Features" in Settings is enabled. Use different combinations of the possible settings for a Phuzzle

- 1. Create a Phuzzle, pick and image and crop it (see Create a Phuzzle)
- 2. Verify that there is an "Edit" button on the "New Phuzzle" screen
- 3. Tap on "Edit"
- 4. Verify that the screen rotates to landscape if it was on portrait mode
- 5. Edit the name and description for the Phuzzle
- 6. Tap on the green "2" button
- 7. Provide a start message and a winning message (sometimes)
- 8. Verify that character limits are enforced
- 9. Tap on the green "3" button
- 10. Change the minimum difficulty level (sometimes)
- 11. Provide a time limit and a losing message (sometimes)
- 12. Play the Phuzzle and verify the settings chosen above are used
- 13. Verify the start message is shown (if set)
- 14. Verify the winning message is shown when the Phuzzle is completed (if set)
- 15. If you chose a time limit verify the Phuzzle has a timer that counts down from the correct number of minutes.
- 16. Verify if the countdown reaches 0 the losing message is shown (if set)

#### Script 14: Search

- 1. In the Lobby tap on "Search"
- 2. Verify the Search screen opens
- 3. Tap on the edit box and type in a search term
- 4. Tap on the green button next to the edit box (with the magnifying glass icon)
- 5. Verify that images are shown in the main panel
- 6. Verify that you can change page using the green forward and backward buttons
- 7. Tap on an image
- 8. Verify the image details box is shown
- 9. Tap on the social media links for the photographer and verify the correct web pages open
- 10. Close the image details box
- 11. Tap on a different image
- 12. Tap on "Play"
- 13. Verify that the image cropping screen is shown.
- 14. Tap on "Crop" or "Original" and verify the Workshop is shown.
- 15. Verify you can play the Phuzzle (see Play a Phuzzle).
- 16. Quit the app and restart it.
- 17. In the Lobby tap on "Search"
- 18. Verify the Search screen opens
- 19. Verify the last search term used is in the edit box

# Script 15: Import

- 1. In the Lobby tap on "Library" or the edit icon next to it.
- 2. Verify the device's file picker is shown
- 3. Pick a Phuzzle file that you have shared to your files or someone has sent to you
- 4. Verify that the Phuzzle Library is shown
- 5. Verify that the Phuzzle file has been imported
- 6. Verify that you can play the Phuzzle

# Script 16: Help

- 1. In the Lobby, Art Room, or Workshop tap on the Service Bell
- 2. Tap on "Help"

- 3. Verify the Help screen is shown
- 4. Verify the buttons launch the correct web page. Do not worry about the contents of those pages.

## Script 17: How-To

- 1. In the Lobby, Art Room, or Workshop tap on the Service Bell
- 2. Tap on "How To"
- 3. Verify the How To screen is shown
- 4. Verify the buttons show in-game instructions. Do not worry about the correctness of those instructions.
- 5. Verify the "Show Intro Again" button shows the introduction again and on the last slide the button now says "Okay" instead of "Accept"

#### Script 18: Test Program

- 1. In the Lobby tap on the "Test" button.
- 2. Verify the Test Program button is shown
- 3. Verify you can change the tabs ("Info", "Feedback", "Logs")
- 4. Verify the contents of each tab are scrollable (depending on the device orientation).
- 5. Tap on the "Feeback" tab
- 6. Select some feedback options
- 7. Tap on "Send Feedback"
- 8. Verify the device's share feature is shown
- 9. Choose Gmail
- 10. Verify a populated email is shown with the "To" address, subject, feedback options that were chose and device information.
- 11. Send the email
- 12. Tap on the "Logs" tab
- 13. Verify that there is an ACTIVITY LOG section and sometimes a CRASH LOG section.
- 14. Verify that there are no email addresses or any personal information in the logs.
- 15. Tap on "Email Logs"
- 16. Verify the device's share feature is shown
- 17. Choose Gmail

- 18. Verify a populated email is shown with the "To" address, subject, and device information.
- 19. Verify there is a text file attachment.
- 20. Send the email

## Script 19: Offline

- 1. Turn Wi-Fi and tethering off on the device
- 2. Verify that the app starts okay
- 3. Verify that the app does not crash when you try to search or watch ads
- 4. Verify that the app displays useful messages about the internet connection

#### Script 20: Memory

- 1. Create and/or play 20 Phuzzles
- 2. Verify the app does not crash
- 3. Create a Phuzzle using a large image (200-megapixel or least 16k x 12k)
- 4. Verify the app does not crash

# Script 21: File Association

- 1. Close the Phuzzlings app
- 2. Double tap on a .phuzz file in an email or in a folder
- 3. Choose to open the file with Phuzzlings (if that choice is shown)
- 4. Verify that Phuzzlings is started
- 5. Verify that a message is shown about the file
- 6. Tap on "Save it"
- 7. Verify that a success message is shown. Either
  - 1. Tap on "Play it" and verify it plays successfully.
  - 2. Tap on "Later..." and verify it has been added to the Library