

Goals:

The goal for this test is to accumulate general feedback on the design and user friendliness of the mobile application using example wireframes and document what improvements to the wireframes need to be considered before implementing a solution in Android Studio. The wireframes will be presented to the test user in a 'Wizard of Oz' style paper-based prototype and a pre and post-test questionnaire will be completed by each test user to gather feedback.

What is being Measured:

The test will measure the design layout, interactivity, user friendliness and aesthetic of each page of the mobile app.

Scenario:

Go Phish is a mobile game application that focuses on phishing email scams and the signs to look out for when viewing them. The app is targeted towards self-employed people and people who want to be more cyber-aware, providing a fun 'brain-training' exercise to verse themselves in signs of a potential phishing email. Unlike traditional 'Crash courses' where users would spend a day learning about cyber-awareness, Go phish is a 'On-the-Go' mobile app that allows the user to freshen their memory of potential phishing signs and highlights what to look out for when viewing one. Though this is not the final version, this test plan is designed to collect feedback on the design and functionality that will influence the creation of the final solution.

Task List:

- 1) When opening the app, you will begin on the landing screen "#1", please select the 'Tutorial (training mode)' button.
- 2) When selecting the Tutorial button, you will view the image view screen "#2", please press on the image within the check box to view the image in Fullscreen.
- 3) Now press back to return to the image view screen "#2" and select the 'Continue' button.
- 4) When selecting the 'Continue' button, you will view the image guess screen "#3", please press on the image in the check box to view the image in Fullscreen.
- 5) Now press back to return to the image view screen "#3" and select the button options that apply.
- 6) Once you have selected your options press the 'Continue' button.
- 7) When selecting the 'Continue' button, you will view the Score screen "#7". Here you will be able to see the amount of correct signs you had guessed and the level which you are on. Now return to the landing screen "#1".
- 8) When on the landing screen, please select the 'Play (testing mode)' button.

- 9) When selecting the Play button, you will view the level select screen “#4”. Here you are able to input the number of levels (phishing emails) you would like to test yourself against, once you have selected a number please press the ‘Begin Session’ button.
- 10) When selecting the ‘Begin Session’ button, you will view the test version of image view screen “#5”. Here you will have a 30 second countdown to identify the signs of phishing email on the image below. Additionally, you will be able to view your current level out of the amount you have selected previously. Press the image in the check box to open it in full screen.
- 11) Now press back to return to the testing image view screen “#5” and select the ‘Continue’ button.
- 12) When selecting the ‘Continue’ button, you will view the test version of the image guess screen “#6”, unlike the training mode you will not have the image to help you. Please select the appropriate signs from the options and press ‘Continue’.
- 13) When selecting the ‘Continue’ button, you will view the Score screen “#7”. Here you will be able to see the amount of correct signs you had guessed and the level which you are on. Now press the ‘Continue to Next Level’ button.
- 14) When selecting the ‘Continue to Next Level’ button you will view the test image view screen “#5” again however the image in the check box will be a new random image. The 30 second countdown will have reset.
- 15) Repeat Tasks (10-13).

Pre-test questionnaire:

- 1) Do you consent to participating in this test?
- 2) What is your name?
- 3) How old are you? (As per Ethical Approval all test users must be 18+)
- 4) Do you consider yourself a vulnerable adult? (As per Ethical Approval all test users must not be vulnerable adults)
- 5) Have you had any prior experience with Mobile apps before? If so, can you give examples?
- 6) Do you use mobile apps regularly?
- 7) To you, what makes an effective mobile app?

Post-test questionnaire:

- 1) What did you think about the visual design of the landing page?
- 2) Did you find the Tutorial and Play buttons easy to locate?
- 3) What design changes, if any, would you consider for the landing page?
- 4) What did you think about the visual design of the training image view page?
- 5) Did you find pressing on the image to open in full screen intuitive?
- 6) What design changes, if any, would you consider for the training image view page?

- 7) What did you think about the visual design of the training image guess page?
- 8) Did you find the 'press on the image' tip useful?
- 9) Are the button options easily understandable?
- 10) What design changes, if any, would you consider for the training image guess page?
- 11) What did you think about the visual design of the level select page?
- 12) Did you find the Begin session button easy to locate?
- 13) What design changes, if any, would you consider for the level select page?
- 14) What did you think about the visual design of the testing image view page?
- 15) Did the 30 second countdown offer a fun challenge compared to the training screen?
- 16) What design changes, if any, would you consider for the testing image view page?
- 17) What did you think about the visual design of the testing image guess page?
- 18) What design changes, if any, would you consider for the testing image guess page?
- 19) What did you think about the visual design of the Score page?
- 20) What design changes, if any, would you consider for the Score page?
- 21) Was the Score / total understandable?
- 22) Did you prefer the Training session or the Testing Session?
- 23) Are there any additional comments you would like to add?

Test User 1:

Pre-Test Questionnaire:

1. Yes
2. Rachel Cleverley
3. 48
4. No
5. Yes: eBay, NatWest Banking, Weather, Calculator
6. Sometimes
7. Something that can be used easily

Post-Test Questionnaire (notes):

1. Design was good, Name for app was good
2. Yes
3. Refer to train and test as Tutorial and Play to make it less confusing
4. Design was good
5. yes but only because the tasks said too. An onscreen tip may be helpful
6. None
7. Design was good
8. Yes
9. No, should be more specific to the scam presented / options should be explained beforehand
10. None
11. Design was good but selecting number of "levels" seemed confusing
12. Yes
13. Remove the page entirely, otherwise design is fine
14. Design was good
15. No, 30 seconds was not enough time to understand what to do
16. Add more time or explain what to do beforehand
17. Design was good
18. None
19. Design was good
20. None
21. Yes, assuming they would be filled in correctly
22. Once the game was understood, play (testing mode)
23. Improvements:

Explain what the app is and does to the user.

In tutorial, show an example of each phishing sign option, highlighting the sign example.

Add specific options: (i.e. Financial Shock value)

Remove Level select screen and only have 1 level you play.

On the image view screens, display possible sign options alongside the image.

On the image view and test screens, insert the number of signs you are looking for per phishing scam.

30 seconds on play was not enough time to read through properly.

On score page, change “Continue to next level” button to “Play Again” and add a “Redo Level” button.

Test User 2:

Pre-Test Questionnaire:

1. Yes
2. James Cleverley
3. 44
4. No
5. Yes: Mail, Facebook, NatWest Bank, Tesco
6. Daily
7. Easy to use and look professional

Post-Test Questionnaire (notes):

1. Design looks good and was easy to navigate
2. Yes
3. None
4. Design looks good and is professional
5. Yes
6. None
7. Design looks good and is professional
8. Not really
9. Yes
10. Resize the text within the button options to look more uniform and professional
11. Design looks good though page purpose was unclear
12. Yes
13. No design changes but would change level select to "how many signs to spot"
14. Design looks good and is professional
15. No, though was adequate time
16. None
17. Design looks good
18. None
19. Design looks good
20. None
21. Yes
22. Training
23. Improvements:

Change Level select to "Select number of signs". Only have one level

30 seconds was a good amount of time but was not challenging or 'Fun'.

In tutorial show hints towards the signs via highlighting what parts of the phishing email should be looked at.

Conclusion:

After analysing the feedback provided by the User testers within both the questionnaire and the improvement suggestions, we can conclude that the overall design decisions made within the prototype stage are easy to use and look professional. However, the user testers have provided feedback regarding a lack of understanding and expressed that the mobile app doesn't do well to introduce new players to how the app works.

User tester 1, Rachel, suggested that the "Training" element of the mobile app should be renamed to "Tutorial" and recommend that new players start off playing the tutorial first. From there the tutorial mode should be able to provide examples of each sign option, highlighting what part of the phishing email the sign option refers to. Then the tutorial can continue through the normal game loop but the prior explanation making it easier to know what to look for.

User tester 2, James, suggested that the Level select page of the play loop should be removed and replaced with a feature that lets you pick how many sign options a player has to look for; making the game, harder or easier depending on how many sign options the player wants.

Both of these suggestions, as well as others documented within the post-test questionnaire, are ideas that should be considered moving forward with the project however the scope and time to implement these features must also be considered.