

# Peanut Hero Game



User Testing  
Results & Recommendations  
June 27, 2019

## Overview

Peanut Hero is a game created to highlight the tasks and responsibilities involved in growing peanuts. Assuming the role of the main character, Farmer Fred, the player performs basic tasks required to grow a healthy crop, from capturing irrigation water to planting seed in the furrow to weeding the fields to harvesting the mature crop.

These tasks are completed through repetitive actions such as clicking a button. A score accumulates to allow the player to keep track of his farming success.

The game is created for players ages 3 to 7 years old, with a secondary target audience of 35- to 44-year-olds (likely their parents). The product would be most interesting to the peanut industry – including researchers, extension experts, farmers and processing/marketing companies – that is interested in promoting peanut with young consumers and educating them about the process of growing the crop.

Users were recruited among friends and family for the first of two planned rounds of usability studies.

A total of four males and seven females tested the game.

Age of testing  
participatnts  
Two 3-year-olds  
Two 4-year-olds  
Two 5-year-olds  
Two 6-year-olds  
One 7-year-old  
Two 9-year-olds

## Approach

The first round of testing focused primarily on the usability of the game. The test mainly evaluated whether the player engaged with and understood the mechanics of the game; secondarily, I evaluated whether the child understood the content of the game.

A subsequent round of testing with a different group of kids will explore more deeply how deeply players engage with and understand the content of the game.

## Process

### Recruitment

Players were recruited among family and friends. Appointments were scheduled via email and text; tests were conducted at the player's home, in a restaurant where the family was meeting and at an office the family was visiting – in other words, children were asked to play in places they typically would play a mobile game.



## Waiver

Parents were asked to sign a waiver form (Appendix A) explaining the purpose of the test. Both parents and children were informed that the test intended to evaluate the game, not the child or the child's ability to play the game. The evaluator guaranteed that children would be identified only by age and gender in reports about the testing.

## Testing

Players were provided an Amazon Fire tablet (the main device used by this age group) and told that they would play a video game. If they asked how to play, they were told to play however they wanted.

The test began with the splash screen that opens the game and ended when the player finished all levels of the game or decided to stop playing. (Some children asked to repeat levels to try to improve.)

## Description of game play

The Peanut Hero game begins with a splash screen that identifies the name of the game, introduces the player to the main character and begins to play the theme music. After a few seconds, the splash screen automatically goes to the main scoring screen, where the player faces clickable icons set in an farm scene.

Types of screens  
Splash  
Home  
Runner  
Explainer

Once the player chooses an icon (Rain, Weeds, Planting or Harvesting) the screen changes to a 20-second runner game that requires the player to perform easy, repetitive gestures for the player to move and complete a simple (but fantastical) job on the farm. For example, in the Rain runner, the farmer character runs left and right along a scrolling screen, collecting raindrops in a task meant to

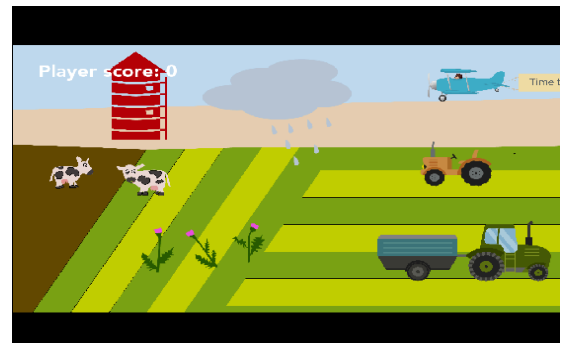
demonstrate the importance of rain and irrigation.

After 20 seconds of play, a timer runs to 0 and the screen begins to scroll text that explains how the actual task is done on the farm. When the text is complete, the screen returns to the Home page, where the player can choose another level to play.

## Observations

1. Players are confused about how to move the main player. In two of the Runner screens, the player is moved by touching a button on the left or right side of the view (which correspond to the direction the player should move), but most players tried to drag the main character back and forth in the space, rather than push buttons to move him to the left and the right.

2. Players click any object on the screen to see what it will do. Whether on the Home screen or the Runner screens, players clicked all objects to see what would happen.

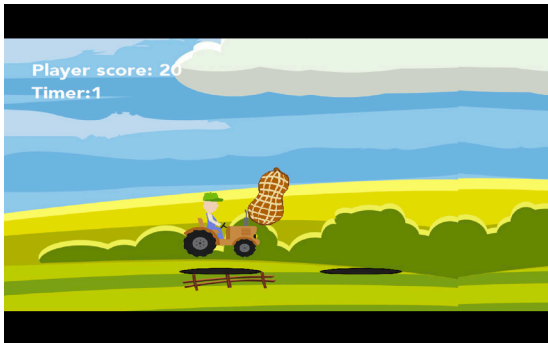


Players engaged with the Home page and tapped every object to explore how it would respond.

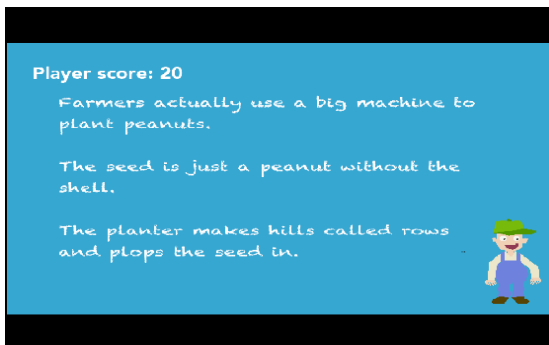


Rather than tap the peanut buttons on the left and right sides of the Rain Runner screen to move Farmer Fred, players attempted to drag him back and forth.

3. Players will not read Explainer text. Very few children read the Explainer text and those who did admitted that they did it to please the tester – because they thought they were supposed to read it, but probably would not if the tester was not there.



Players enjoyed the mechanics of the Planting Runner screen the most, because the object itself responded to a touch. (above)



Players did not respond to the scrolling text (above). Older kids read the text out of obligation, but tapped the character to try to advance the screen.

4. Players are very interested in the progress of the game, asking often, "Did I win?" but a numerical score is not rewarding to them. (Older players did understand a numerical score, but still weren't gratified by it.

### Recommendations before next round of testing

1. Recode the player movement mechanism to use a tap-and-drag gesture, rather than click to move.
2. Give all large objects a response, even if the object is environmental and does not trigger a runner game. For example, the Home screen includes cattle and an airplane, but since players want to engage them to see what they do, these objects should make noise when tapped (a moo and an engine sound, respectively) so that the player receives a response and moves on to the next object.
3. Explainer text should be cut to one sentence with an animated explanation of the task. For example, a screen that explains how irrigation works would include just one line that says the farmer uses a machine called a pivot, while a cartoon appears to show the farmer turning on a moving pivot.
4. A Performance screen should be added between the Runner screen and the Explainer screen to give the player a sense of his accomplishment.

"I'm trying to catch rains and mow weeds." -- Jack, 5, explaining his strategy when playing Peanut Hero

"He's trying to plant peanuts." -- Merrill, 7

"I got it! Let me try again." -- Daniel, 4

"The game teaches you what happens on a farm, on a peanut farm," -- Dylan, 9