



PvZ Heroes Test Design Kit

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Screening Questionnaire

Introduction

Hello, my name is Leah Martin. I am a member of a usability study team at University of Washington Tacoma. Our team is gathering information about a mobile game and looking for people who play games on their mobile devices to participate in the study. The purpose of the study is to see how well the game is working and how it can be improved. The study will be an hour long. It would involve meeting with our team where we will provide you with a mobile phone which you will use to play a game while being observed and answering questions about it.

Would you be interested in participating?

If not interested:

Thank you for taking the time to speak with me. If you know of anyone else who might be interested in participating please have them email me, Leah Martin, at leahm8@uw.edu.

If interested:

I need to ask you a couple of questions to determine whether you meet the eligibility criteria. Do you have a couple of minutes?

Screening

Occupation/Education

1. Are you currently working/studying in the field of UX/UI Design, Usability Research, Web Design?
 - a. Yes
 - b. **No**

Age

1. Are you 18 years old?
 - a. **Yes**
 - b. No

Cell Phone Use and Plants vs Zombies: Heroes

1. Do you own a cellphone?
 - a. **Yes**
 - b. No
2. Do you play mobile games?
 - a. **Yes**
 - b. No
3. Do you enjoy playing mobile games?
 - a. **Yes**
 - b. No
4. Have you played Plants vs Zombies: Heroes?

- a. Yes
 - b. No**
5. How many hours per week do you play mobile games?
- a. 6 or less
 - b. 7-12**
 - c. 13+

Plants vs Zombies Franchise

1. Have you ever played any Plants vs Zombies franchise games?
 - a. Yes**
 - b. No**
2. How often do you play any of the Plants vs Zombies franchise games?
 - a. More than 3 days per week
 - b. 3 or less days per week
 - c. A few times per month
 - d. Once a month or less**
 - e. Used to play it often, but not anymore**

Types of Games

1. Have you ever played mobile card games?
 - a. Yes**
 - b. No**
2. How often do you play mobile card games?
 - a. At least 5 days per week
 - b. 1-3 days per week
 - c. A few times per month
 - d. Once a month or less**
 - e. Used to play it often, but not anymore**
3. Do you play strategic turn-based games?
 - a. Yes**
 - b. No
4. Do you enjoy playing strategic turn-based games?
 - a. Yes**
 - b. No

Those are all the questions I have for you.

Scheduling

If participant meets criteria

Your background fits the criteria for this particular evaluation. As a compensation for your time at the end of the usability study you'll receive a \$10 Starbucks gift card.

We would like to be able to record the session. The recording will be of your voice and interactions with the game. These recordings will only be used to make improvements of the

product and will be shared only with our research team, product team at Electronic Arts(EA) and class.

1. Do you agree to be recorded during the study?

a. **Yes**

b. No

Can you please provide us with your contact information, name, email address and a phone number, as well as preferred times/ways for contacting you. We have a range of sessions to choose from, please take a look and pick one that best fits your schedule:

- Mondays from 4:00 PM to 7:00 PM
- Tuesdays from 10:30 AM to 2:30 PM
- Wednesdays from 4:00 PM to 7:00 PM

This study will take place in UWT's Snoqualmie Building which is located inside the Snoqualmie Library. The campus address is: 1900 Commerce Street Tacoma, WA 98402. Once we reserve the room, we will reach out to you to confirm the appointment and give you room number.

If participant does not meet criteria

Unfortunately, your background doesn't fit the criteria for this particular evaluation. Thank you for taking the time to speak with me.

Facilitator Script

Hello, good afternoon. My name is Adam, and I will be facilitating this usability study today. Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything. You probably already have a good idea of why we asked you here, but let me go over it again briefly. We're asking people to try using a mobile phone app game that Electronic Arts (EA) is working and the purpose for the study is to see how well the game is working and what can be done to improve it. The session should take no more than an hour.

The first thing I want to make clear right away is that we're testing the game, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes. As you play the game, I'm going to ask you as much as possible to try to think out loud: to say what you're looking at, what you're trying to do, and what you're thinking. This will be a big help to us. Also, please don't worry that you're going to hurt our feelings. We're doing this to improve the game, so we need to hear your honest reactions.

If you have any questions as we go along, you may set this red card face up and I will assist you to the best of my ability. However, keep in mind that we're interested in how well players do without outside assistance so only make use of the red card if you absolutely need help. Otherwise, if you have any questions once we finish, I'll try to answer them then. Also, if you need to take a break at any point, just let me know.

I will like to ask you a few questions before we begin the study. These should only take a few minutes.

Give participant the pre-study questions.

Do you have any questions so far? Please take a look at the consent form. With your permission we would like to record today's session via audio capture, which allows us to go back later. And it helps me, because I don't have to take as many notes.

Give them the consent form.

Do you have any questions or concerns?

Begin recording.

Let's begin.

Hand the participant the first scenario, and read it aloud. Watch and take notes of task 1.

Scenario 1: Your friend recommended a mobile game called Plants vs. Zombies Heroes. You downloaded and installed it. Now figure out how to play it.

Task 1: Figure out how to play Plants vs. Zombies Heroes.

Alright. Do you have any questions at this point? Let's begin task 2.

Hand the participant the second scenario, and read it aloud. Watch and take notes of task 2.

Scenario 2: You just saw how to play the game and now want to play and win a battle. Play a battle against your opponent.

Task 2: Play a battle against your opponent.

Alright. Do you have any questions at this point? Let's begin task 3.

Hand the participant the third scenario, and read it aloud. Watch and take notes of task 3.

Scenario 3: You have been trying to win a battle, but haven't been able to. You realized you need a stronger group of cards than your opponents to win it. Create a group of cards that will give you a better chance of winning.

Task 3: Create a group of cards that will give you a better chance of winning and name it "Winner".

Before going further do you have any questions or need a quick break? Let's begin task 4.

Hand the participant the fourth scenario, and read it aloud. Watch and take notes of task 4.

Scenario: Your friend told you there are other ways of getting new cards apart from winning battles. Find out how to get new cards.

Task 4: Find out how to get new cards apart from winning a battle.

Any questions come to mind at this point? Let's begin task 5.

Hand the participant the fifth scenario, and read it aloud. Watch and take notes of task 5.

Scenario: Your friend told you there are other options you can do in this game. Check out what else can you do.

Task 5: Open end play - check out what else can you do in this game.

Do you have any questions for me, now that we're done?

Answer any questions or concerns.

There are some post-study questions that note takers and I would like to ask you. I will start first.

Give participant post-study questionnaire

Give participant debriefing interview questions

Open to questions for note takers

Thank you for your time. Your input was greatly appreciated. Here is a thank you gift for participating in this study.

Hand the participant a Starbuck gift card

Have a wonderful day!

Stop the recording.

(Script adapted from Krug)

Consent Form

UNIVERSITY OF WASHINGTON TACOMA CONSENT FORM FOR PARTICIPATION IN A USABILITY STUDY FOR PLANTS VS. ZOMBIES:HEROES

Contact: Emma Rose, Assistant Professor, UWT
Instructor of TWRT 355: Usability Testing and Research
ejrose@u.washington.edu

Student Team:

Lola Howell
Adam Alrashedy
Thinh Huynh
Leah Martin

You are being asked to participate in a research study examining Plants VS Zombies: Heroes. This consent form provides information concerning the study to help you decide whether or not you wish to participate.

Please read this form carefully. Feel free to ask questions about the purpose of the research or

any of the activities. When all your questions have been answered, you can decide if you want to be in the study or not. Taking part in this study is voluntary and you can stop at any time. All information about your participation in this study is confidential.

PURPOSE AND BENEFITS

As part of a class, student researchers are conducting several usability studies to investigate how to improve the design of their product. The results of this study will be used as a learning experience for the students and the data collected today may also lead to design recommendations.

PROCEDURES

As a participant in this study, you will be asked to do one or more of the following:

- do a set of tasks using a product
- think out loud while doing these tasks
- complete a questionnaire
- answer interview questions

The student research team will also be observing your use of the product and taking notes. In addition, you may be videotaped.

RECORDING

We would like to record today's session. The recording will be of your voice and interactions with the game. We will share the recordings with anyone without your permission. Portions of these videotapes may be presented in educational settings or shared with product designers. While your name will not be included in these presentations, someone who knows you may recognize your voice or face.

We request your permission for the research team to use the videotape in the following way:

- ☐ For the research team to review the results of study
- ☐ Internal presentations to the product designers or study sponsors
- ☐ None of the above

Signature of Student Research Team Lead _____ Date _____

The study described above has been explained to me, and I voluntarily consent to participate in it.

Signature of Participant _____ Date _____

(please print name) _____

Pre-study Questionnaire

1. What kind of phone do you play mobile games on?
2. Do you enjoy mobile games that contain animation clips?

3. If you play or played mobile card games, which one is your favorite and what do you enjoy the most in that game?
4. Which strategic, turn-based game is your favorite?
5. If you play or played any of the PvZ franchise games, which one is your favorite and why?
6. If you enjoy collecting objects in mobile games, what kind of objects do you collect?

Scenarios and Post-Task Questionnaire

Scenario 1

Your friend recommended a mobile game called Plants vs. Zombies Heroes. You downloaded and installed it. Now figure out how to play it.

Task 1: Figure out how to play Plants vs. Zombies Heroes.

Metrics

Success:

- Participant didn't receive any assistance.

Partial Success:

- Participant receives assistance 1 time.

Fail:

- Participant receives assistance 2+ times.

Post-Task Questionnaire

1. How confident are you with the game play? What do you find confusing?
2. What do you find enjoyable?

Scenario 2

You just saw how to play the game and now want to play and win a battle. Play a battle against your opponent.

Task 2: Play a battle against your opponent.

Metrics

Success:

- Participant defeats 1 Zombie Hero
- Participant completes the task on the first attempt.
- Spends 5 minutes or less on the task.
- Participant didn't receive any assistance.

Partial Success:

- Participant defeats 1 Zombie Hero.
- Participant completes the task on the second attempt.
- Participant spends more than 5 minutes to accomplish the task.
- Participant receives assistance 1 time.

Fail:

- Participant fails to defeat 1 Zombie Hero.
- Participant completes the task on the third attempt.
- Participant receives assistance 2+ times.

Pathways

- Start on the main dashboard of the game.
- Tap on “Plant Missions” on the top right of the screen.
- Tap green button “Play” on the bottom of the screen.

Post-Task Questionnaire

1. What do you find confusing?
2. Would it be helpful if you could go back to the tutorial?

Scenario 3

You have been trying to win a battle, but haven’t been able to. You realized you need a stronger group of cards than your opponents to win it. Create a group of cards that will give you a better chance of winning.

Task 3: Create a group of cards that will give you a better chance of winning and name it “Winner”.

Metrics

Success:

- Participant was able to find the menu location to customize their deck and properly swap new cards with cards that were available originally.
- Participant is able to change the name of the deck of cards to “Winner”.
- Participant spends no more than 1 minute to accomplish the task.
- Participant accomplishes the task on the first attempt.
- Participant didn’t receive any assistance.

Partial Success:

- Participant spends more than 1 minute to accomplish the task.
- Participant accomplishes the task on the second attempt.
- Participant receives assistance 1 time.
- Participant creates custom deck, but can’t change it’s name to “Winner”.

Fail:

- Participant wasn’t able to create a custom deck.
- Participant wasn’t able to change the name of custom deck to “Winner”.
- Participant receives assistance 2+ times.
- Participant completes the task on the third attempt.

Pathway 1

- Start on the main dashboard of the game
- Tap “Collection” on the bottom of the screen
- Tap “Decks” on the top right side of the screen
- Tap a large plus sign titled “Create Custom Deck”

Next

- Tap “Finish For Me”

Or

- Tap on any available card
- Tap add
- Repeat previous until deck is full

Continue

- Tap “Green Shadow #1”
- Type “Winner”
- Tap “Ok”

Pathway 2

- Start on the main dashboard of the game
- Tap on “Plant Missions” on the top right of the screen
- Tap on the deck of cards on the bottom of the screen above “Play” button
- Tap a large plus sign titled “Create Custom Deck”

Next

- Tap “Finish For Me”

Or

- Tap on any available card
- Tap add
- Repeat previous until deck is full

Continue

- Tap “Green Shadow #1”
- Type “Winner”
- Tap “Ok”

Post-Task Questionnaire

1. How would you describe the steps you took in finishing this task?
2. What do you find confusing?

Scenario 4

Your friend told you there are other ways of getting new cards apart from winning battles. Find out how to get new cards.

Task 4: Find out how to get new cards apart from winning a battle.

Metrics

Success:

- Participant got new pack of cards.
- Participant spends no more than 1 minute to accomplish the task.
- Participant accomplishes the task on the first attempt.
- Participant didn't receive any assistance

Partial Success:

- Participant spends more than 1 minute to accomplish the task.
- Participant accomplishes the task on the second attempt.
- Participant receives assistance 1 time

Fail:

- Participant didn't get a new pack of cards.
- Participant completes the task on the third attempt.
- Participant receives assistance 2+ times

Pathway

- Start on the main dashboard of the game
- Tap "Packs" on the bottom of the screen
- Tap green button that indicates number of gems needed to purchase the pack

Post-Task Questionnaire

1. How would you describe the steps you took in finishing this task?
2. What do you find confusing?

Scenario 5

Your friend told you there are other things you can do in this game, apart from playing battles against opponents. Check out what else can you do.

Task 5: Open end play - check out what else can you do in this game.

Metrics

Success:

- Participant is able to find other game features such as news, weekly challenge, daily challenge
- Participant didn't receive any assistance

Partial Success:

- Participant is able to find all other features of the game
- Participant is not able to understand 1 to 2 features of the game

Fail:

- Participant is not able to find all other features of the game
- Participant is not able to understand all other features of the game

Post-Task Questionnaire

1. Explain what you found?
2. What do you find confusing?

Post-study Questionnaire

Please indicate how you felt while playing the game for each item, using the following scale:

Questions	Not at all 0	Slightly 1	Moderately 2	Fairly 3	Extremely 4
1. I enjoyed it					
2. I felt competent					
3. I was interested in the					

game's story					
4. I thought it was fun					
5. I was fully occupied with the game					
6. I felt happy					
7. It gave me a bad mood					
8. I thought about other things					
9. It was visually pleasing					
10. I felt good					
11. I felt bored					
12. I felt my imagination run wild					
13. I felt that I could explore things					
14. I was quick at accomplishing the game tasks					
15. I felt challenged					
16. I found it impressive					
17. I felt frustrated					
18. It felt like a rich experience					
19. I felt pressed for time					
20. I had to put a lot of effort into it					

Debriefing Interview Questions

1. How would you describe your experience playing PvZ Heroes? What did you like? What did you not like? What did you enjoy the most?
2. If you could give a personality to the app game you just played, what type of personality would it be?
3. Is there anything you would like to share with us? Is there something you would like more/less of in this game? Any recommendations or concerns?

Data-logging and Note-taking Form

[Data-logging and Note-taking Form Google Sheet](#)

References

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