

**User Experience Research Plan** 

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# **Executive Summary**

#### Introduction

No Dice enhances board games for everyone, whether you're a board game enthusiast or a brand new player. Like other tactile hobbies, board games have fallen out of relevancy with the rise of smart technologies and video games. No Dice acts as a space to connect the board game community, who have long been limited to physical discourse, digitally. No Dice is a mobile app designed for iOS using SwiftUI and XCode. The app features three main pages: a feed of personal board game reviews from friends, a game library for board game information, and a dice rolling simulator.

#### **Research Goals**

In implementing UX testing, our main goal is to gain insights about what parts of the app work easily and logically according to our prospective users and what areas may need to be reworked. Specifically, we want to test our feed, posting, and game library interfaces to learn what users are expecting from the app in terms of functionality and layout. Results from this testing will inform how future iterations of No Dice adapt and change as we move closer to launch in May 2024. This user testing will be invaluable by showing us what areas of the app might be a source of delight, fun, or even frustration. The two primary hypotheses we want to test given the goals of our research are:

- Users want to share their experiences with friends in a way that is customizable and personal, but also easy and straightforward.
- The board game information that users view at a glance are crucial to whether or not a user decides to learn more about a game or add it to their collection.

# Methodology

#### **Roles**

As the sole member of the No Dice team, I will be responsible for all the different roles in user testing. While this may seem like a lot to juggle, I have a plan for how I will be able to sufficiently act as the interviewer, data collector, photographer, and notetaker.

Ideally, a majority of user testing will be held in-person. In addition to administering the tests face-to-face, I will record each trial to review after the test is completed. This will help me serve as the interviewer, notetaker, and data collector at the same time, as I can go back through the recordings after the trial to update and add any notes that may have been missed the first time around. As far as note taking and data collecting, I plan on using a similar format the UGA-bility testing assignment, where questions are organized in columns so that notes and task success are placed right next to each corresponding question.

# Sampling

No Dice's target population consists of young adults, age 18-30, in North America who are active on social media and play board games at least once a month. The geographic location of the sample will be centered on Athens, and more specifically, the Rook and Pawn board game cafe. The Rook and Pawn is a popular spot among college students and young adults in Athens, and it is also one of the prominent locations to play board games in town. The combination of these factors make the Rook and Pawn an ideal spot to gather participants for the study. The following personas describe what No Dice users might look like based on demographics, interests, and hobbies.

#### **Persona 1: Michael Catan**



### **Demographics**

Gender: Male

Age: 22

Occupation: Student Location: Athens, GA Marital Status: Single

#### Goals

To stay connected with his board game friends online.

# **Background**

Michael likes to play board games with some of his friends from college. About once a week, they go to a local game store and play a couple different games, some old and some new. He uses No Dice to look at new games and share funny stories and anecdotes with friends.

#### **Behaviors**

Active Social Media User
Plays Games 4-5 Times per Month

#### **Values**

Playing games with friends Connecting with friends online

# **Expectations**

To easily be able to see his friends reviews and view game information.

#### Persona 2: Fran Scrabble



### **Demographics**

Gender: Female

Age: 28

Occupation: Barista Location: Athens, GA Marital Status: Married

#### Goals

To learn about a board game before playing with friends

### **Background**

Fran is a barista at a local coffee shop, and on the weekends she hangs out with friends. She uses No Dice to keep in touch with what her friends have been playing, to revisit games she played that she really enjoyed, and to learn about new games before playing them.

#### **Behaviors**

Semi-Active Social Media User Plays Games 1-2 Times per Month

#### **Values**

Relationships with friends Having the weekend off

## **Expectations**

To find board game information easily at a glance, only needing to read what is necessary.

### **Sampling Frame**

When gathering our sample, we are aiming for 8-12 subject that are representative of our target population. Getting a representative sample of this size should be pretty attainable, but there are a couple of different skews and biases that I could foresee skewing the sample. For example, I need to be sure to include subjects from a range of ages and backgrounds, otherwise there is a strong chance the sample will be biased towards college students.

When administering user testing, the sample and I will meet at the Rook and Pawn. Meeting at this location ensures that subjects have an affinity for board games, and I will administer the testing in person. The trials will be recorded as described earlier to help with detailed note taking. As the sole member of the No Dice team, I will be directly responsible for recruiting participants, administering the user testing, and analyzing the results.

### **Opportunities and Challenges**

A major opportunity I see with user testing is by leveraging my employment at the Rook and Pawn to get great participants from the local board game community. Another benefit of using subjects from Rook and Pawn is that participants will have a wide range of familiarity with board games, from people who play frequently to those who only play on occasion. In addition, I may be able to compensate participants with a free game pass or coffee.

As detailed above, a challenge I can see running into is having too many college students in the study, which could potentially skew the data. It will be incredibly important to make sure that participants are recruited across the entire population age range, rather than just college students.

# **Testing Instruments**

The following methods are describing the procedure of administering a user test to a subject, starting with an opening script, getting the participant's consent, testing questions, and ending with post interview questions. UX Testing will be facilitated in person using an XCode build to simulate an iPhone. All timed tasks will be measured by the interviewer.

### **Script**

Hi [Participant Name]. My name is Ben, and I will be walking you through our session today. Before we get started, I just wanted to cover some information for you. If you have any questions during this section, feel free to ask me at any time. 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 use No Dice, an app for board game players that is still under development.

The first thing I want to make clear right away is that we're testing the app, not you. You can't do anything wrong here, so don't stress. As you use the app, 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. Also, please don't worry that you're going to hurt our feelings. We're doing this to improve the app, so we need to hear your honest reactions.

If you have any questions as we go along, just ask them. I may not be able to answer them right away, since we're interested in how people do when they don't have someone sitting next to them to help. And if you need to take a break at any point, just let me know.

Any questions so far?

With your permission, I'm going to record what happens on the screen and our conversation. The recording will only be used to help me figure out how to improve the website, and it won't be seen by anyone except me. Please read the following and let me know if you have any questions.

[Walk the subject through the consent form. After signing, proceed]

Thank you.

Before we get started with our session, please fill out the following survey. Don't worry, there are no wrong answers, this is just to gather a little bit of information about you, your social media habits, and your familiarity with board games. Here is the form, please let me know when you have finished filling it out.

[Administer Pre-Test Survey]

Thank you. I am now going to start our user testing session.

[Start Recording]

We are going to start on the log in page. I am going to read you a series of tasks that ask you to do something within the app. When you feel you have completed the task, please let me know by saying, "I have completed the task." Once again, I am going to ask that you speak about your thought process out loud to give us the best insights as to improve the app. If you would like me to repeat the task at any point, please just ask. Are you ready to begin?

[If yes, administer tasks 1 & 2]

#### [Navigate to main feed]

Alright. Moving right along, this screen is the main feed. We are going to move forward with testing from here. Once again, please let me know if you would like me to repeat the task at any point. In addition, some of the upcoming tasks are going to be timed, but remember, I'm testing the product, not you. Don't stress, but feel free to hold you feedback until after completing the task if you feel that speaking aloud will affect the speed with which you complete the task. Ready to move onto the next section?

#### [Administer questions 3-10]

That completes the set of tasks I had for you. Thank you so much for participating in this session. Your feedback is crucial for improving the app as we get closer to launching in the summer. Before we wrap up, I am going to ask you to do a few more things.

Before you is a list of adjectives, called Product Reaction Cards. Please look over the list, and when you are ready, please list five of these adjectives that you feel best describe your experience using No Dice today. With each word you choose, please elaborate a bit about why that particular word stuck out to you.

#### [Administer Product Reaction Cards]

Thank you. Finally, similar to the beginning of our session, I am going to have you fill out this Post-test survey. It will ask you a few questions about our session today. Please answer the questions as honestly as possible, and when you are done, please let me know. Once again, thank you so much for your feedback and helping make No Dice a better app.

#### [End Recording & End of Session]

#### **Consent Form**

#### What is this test?

No Dice is conducting a usability study with young adults who are active on social media and familiar with board games. This test is to see whether or not the app works as intended. As you work through the tasks, remember that we are testing the app, not you. Your honest feedback will also be crucial to help improve the app. This study should only take about 20 minutes.

#### **Procedures**

You will be asked to complete the following:

- Pre-Test Survey
- Usability Tasks
- Post-Test Survey
- Product Reaction Cards

#### Will this information be shared?

Your responses will be confidential, only to be accessed and used by the No Dice team. Any responses mentioned in future statistics or presentations will remain anonymous.

With your consent, I am going to record our session here today. This will only serve as a reference to help us improve the methods of this study and better the development of No Dice.

You may withdraw from testing at any time. If you have questions or concerns following our session here today, feel free to email me at bra32690@uga.edu. If you agree with the information presented before you, please sign below.

### **Pre-Test Survey**

The following link will guide participants to the pre-test survey. The survey will ask them a multitude of questions regarding their attitudes and behaviors regarding social media and board games. The primary motivation in administering this pre-test survey is to make sure each participant's familiarity with social media and board games is noted to best connect our sample to No Dice's true target population. The closer we can get to this target population, the more representative our sample will be, and the more accurate our data will be.

Pre-Test Survey Link: https://forms.gle/FSoxheDpjHjBRugK9

### **Pre-Test Survey Header**

# No Dice: Pre-Test Survey

Please fill out this form to the best of your ability prior to completing No Dice UX Testing. This survey should take around 5 minutes to complete.

The purpose of this survey is to gather information regarding your social media and board game habits. There are no wrong answers here, and your honest answers will help us greatly as we continue to develop this project.

### **Pre-Test Survey Questions**

Please enter your name *	
Your answer	

# **Pre-Test Survey Questions (Likert Scales)**

I am an active social media user							
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
Many of my friends use	Many of my friends use social media *						
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
I am interested in learning about and playing board games *							
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	

# **Pre-Test Survey Questions (Semantic Differential Scales)**

I find board games								
	1	2	3	4	5			
Boring	0	0	0	0	0	Fascinating		
I talk about bo	I talk about board games online							
	1	2	3	4	5			
Never	0	0	0	0	0	All the time		
I play board games with friends *								
	1	2	3	4	5			
Never	0	0	0	0	0	Frequently		

# **Pre-Test Survey Questions**

How often do you play board games? *	
Less than once a month	
1-2 times per month	
3-5 times per month	
6-10 times per month	
More than 10 times per month	
Do you have any board games apps currently? *	
Yes	
○ No	
What kind of board games interest you?	
Your answer	
What social media platforms to you use?	
Your answer	

1. You just got done playing a board game, and one of your friends suggests signing up for this new app called No Dice. You open the app to this page (The log in page). Please Navigate to the page where you would create an account.	Task Success/Failure	Notes:
2. On the create an account page, please add a profile picture from the sample library.  Post-task question: Do you think the order of information on this screen is logical?	Task Success/Failure	Notes:
3. Now that you have created an account, you are able to view posts on the main feed. You want to read more of your friends most recent review. Please expand the post to view the full review.	Task Success/Failure	Notes:

4. In this expanded view, please tell me how long the user played that game for.  Post-task question: Are these icons self-explanatory, or do you think they could be improved with labels?	Task Success/Failure	Notes:
5. Now you want to check out some games. Navigate to the game library.	Task Success/Failure	Notes:
6. In the game library, a game catches your eye called "Sagrada." How long would it take you to play a game of Sagrada?	Task Success/Failure	Notes:
Post-task question: Of the information presented in this view, is there any information you feel isn't necessary?	Time on Task:	

7. The game you just played with you friends is called "Betrayal at the House on Hill." Please add this game to your collection.	Task Success/Failure	Notes:
8. Now that you have found the game you just played, you want to leave a review. Please open the posting interface.	Task Success/Failure	Notes:
Post-task question: Do you think the button for creating a post is logically placed, or do you think it belongs somewhere else?		

9. You overall had a wonderful time playing the game, played with 3 players total, and the game took about an hour. Please enter this data into your post.  Post-task question: Is there any other information you feel players might want to share in addition to these stats?	Task Success/Failure Time on Task:	Notes:
10. You find yourself playing a game with friends, but you lose one of your dice under the table. You search and cannot find the piece immediately, but you want to finish the game real quick. Please use the Dice Rolling Simulator.	Task Success/Failure	Notes:

### **Post-Test Survey**

After completing the user-testing, participants will be asked to fill out the following post-test survey. This survey will be crucial in gathering data about how users feel directly after interacting with the software. Unlike the pre-test survey, the post-test survey will have a heavy focus on their experience using No Dice as opposed to their general thoughts and behaviors relating to board games and social media. To end the survey we ask a few open-ended questions that will do well to inform us on what specific parts of the app that users found particularly well designed.

Post-Test Survey Link: <a href="https://forms.gle/FSoxheDpjHjBRugK9">https://forms.gle/FSoxheDpjHjBRugK9</a>

### **Post-Test Survey Header**

# No Dice: Post-Test Survey

Please fill out this form to the best of your ability after completing No Dice UX Testing. There are no wrong answers here, and your honest feedback will help us greatly as we continue to develop this project.

### **Post-Test Survey Questions**

Please enter your name	
Your answer	

# **Post-Test Survey Questions (Likert Scales)**

I would use this app again to talk about board games with friends.						
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
No Dice is an app that is straightforward and easy to use. *						
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
No Dice portrays board game information well. *						
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree

# **Pre-Test Survey Questions (Semantic Differential Scales)**

I felt that No Dice's interface was						
	1	2	3	4	5	
Scattered	0	0	0	0	0	Organized
Overall, No Dice's interface seems						
	1	2	3	4	5	
Crowded	0	0	0	0	0	Balanced
Finding games i	n the libra	ry was *				
	1	2	3	4	5	
Simple	0	0	0	0	0	Difficult
Adding information to a new post was *						
		1 2	3	4	5	
Straightforwa	rd (	0	0	0	0	Confusing

# **Post-Test Survey Questions**

What was your favorite aspect of the app? *	
Your answer	
Would you consider using No Dice? *	
Yes	
○ No	
If yes, would you recommend it to a friend?	
○ Yes	
○ No	
O Maybe	
Any further comments or suggestions?	
Your answer	

#### **Product Reaction Cards**

Finally, before wrapping up the session, I will give the participant a list of Product Reaction Cards. I will instruct the subject to pick five words from the list that best describe their experience using No Dice. I will instruct them, similar to before, to use "think aloud" protocol to voice their opinions and describe why they chose the cards they did. These cards will have adjectives on them that reflect a variety of emotions that could describe their experience, ranging from positive emotions like "cutting edge" and "responsive" to negative emotions like "crowded" or "frustrating".

This list was originally sourced from Microsoft Corporation, and each participant will receive identical cards presented in the same, alphabetical order. Responses will be noted on the sheet as well as in the table below.

Product Reaction Cards Link: <a href="https://docs.google.com/document/d/1Mx-bA6disrefSOig9MgozJ1xKCOSkLBYHiY06fmZhM0/edit?usp=sharing">https://docs.google.com/document/d/1Mx-bA6disrefSOig9MgozJ1xKCOSkLBYHiY06fmZhM0/edit?usp=sharing</a>

# **Response Table**

PRC Cards Selected	Reasoning

# **Analysis**

#### **Task Metrics**

When analyzing the data collected in testing, the main metrics I will use will be **Task Success** and **Time on Task**. Based on which task is being tested, these metrics will do well to measure which areas of the app function well and which might be potential pain points.

A majority of the tasks presented in testing will be measured using task success. This is simply whether or not they achieved the task that was given successfully. This will give us a good look at what the true population success rate might be, and if the task success rate is not high enough, work will need to be done to adjust the app.

In tasks where the participant will be looking for key information, like task 6, using time on task will help us gauge how easy the game library is to use. This metric may also provide insights that our information could benefit from a different layout, the search bar could be reworked, or even that some information is missing.

### **Survey Metrics**

When analyzing the data collected from the pre-test and post-test surveys, we will use a variety of metrics to interpret the data. For the Likert and Semantic Differential scale questions, it will be important to not only look at the mean and median responses, but also to check that answers were evenly spread out across the spectrum of responses. For example, if participants only answered on the far ends of the answer spectrum, the mean would be the average value when subjects were clearly polarized.

### **Product Reaction Card Analysis**

We are asking users to select five cards from the list and briefly describe why they selected each one. Based on what they select, I will know what areas are effective and logically laid out for users and which might be potential pain points, which is at the core of our research goals. If they select terms or phrases that reflect a negative experience with the app, I can then look at the app through the participant's lens to see where exactly they might have struggled or been frustrated. On the other hand, if they respond with positive terms from the list, we can try our best to capture those feelings and bring them to other areas of the app and use it to market the app as well.

## **Communicating Results**

For communicating our metrics and results, we will use confidence intervals constructed to a 95% alpha value. This will give us a range for what the true population success rate with a given task is, but we need to adjust this confidence interval to account for the size of our sample. Since we are only testing 8-12 users, we need to use an Adjusted Wald to make our statistics more representative of the true population.

In communicating our results in future presentations, we will use a variety of bar graphs, pie charts, and statistics in the form of percentages and confidence intervals to portray our findings in easily digestable ways. These representation of the data collected through testing will help reinforce our target audience and demonstrate the effectiveness and efficiency of the app.

# Conclusion

### **Summary**

No Dice is a mobile designed to act as a space for users to connect with each other and learn about board games. With the completion of the Beta Version of the app, the next step in the project's development is to gather data about how users interact with the product.

In an effort to better understand and cater to our target audience, we will conduct user testing to learn as much about our users as possible. We will administer a number of different testing instruments to learn about these users, including pre-test surveys to gather background information, task-oriented usability testing to test the app, and post-test surveys and reaction cards to gauge attitudes pertaining to the app.

The overarching goal of the study is to gather data like this from a sample of 8-12 people who are representative of the true target audience. With the willing participation and feedback of these individuals, we can make changes that enhance the overall user experience of our audience. The continuous cycle of testing, feedback, and implementation begins with this study, but will evolve and change in an attempt to constantly improve No Dice's user experience as we approach the end of the spring.