


# Peer-graded Assignment: Weekly challenge 1: Build a research plan for your portfolio project

Deadline Jul 16, 11:59 PM +08

 It looks like this is your first peer-graded assignment. [Learn more](#)

## Ready for the assignment?

You will find instructions below to submit.

## Instructions

## My submission

In this exercise, you're going to build out a research plan for your portfolio project. Research plans help you better plan your products and achieve actionable results.

## Discussions

A research plan consists of seven key components:

A project background

Research goals

Detailed research questions

Key performance indicators (KPIs)

Methodology

Participants

A script of questions you'll ask participants

For this exercise, you'll learn how to indicate a clear goal, outline at least one sample research question, define a measurable outcome, and describe how you intend to test this outcome. You should also indicate how you intend to recruit participants and briefly outline a sample script for an example test session.

## Review criteria

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Your completed research plan will be assessed out of seven points using the following criteria:

**1 point:** Introduced project by providing project background

**1 point:** Defined research goals

**1 point:** Identified research questions that contain specific tasks being tested

**1 point:** Defined KPIs, which detail the elements that should be measured and the goals that the results can be compared against

**1 point:** Explained the methodology used to conduct the study

**1 point:** Developed participant recruitment plan

**1 point:** Created a sample session script

Additionally, you will provide feedback for two of your peers. Use these same guidelines when critiquing your peers' work.

## Part 1: Step by Step Instructions

## Step 1: Access the template

To use the template for this course item, click the link below and select “Use Template.”

Link to template: [UX Research Study - Plan \[Template\]](#)<sup>[↗]</sup>.

OR

If you don’t have a Google account, you can download the template directly from the attachment below.

 [Google UX Design Certificate - UX Research Study Plan \[Template\].pdf](#)  
PDF File

## Step 2: Start your introduction

You’ll use the introduction section of the research plan to provide a high-level overview of the project for your audience.

The first four parts of the introduction are the simplest. You should:

- . Write the project title, including a few words about your study’s focus.
- . Name the project authors, including their full names, job titles, and email addresses.
- . Identify any stakeholders with their names and roles.
- . Include a date in this section, which you should update every time you edit the plan.

## Step 3: Write your project background

Next, you’ll write your project background. This summarizes the situation leading to the need for this research, and also serves as a brief explanation you can give to anyone who asks why you’re doing this research.

Establishing a project background is important because it gets the team on the same page at the beginning of the study.

Everyone on the team needs to have a common grasp of the history leading up to the current situation. When you write out your project background, you should keep the following three things in mind:

**Identify the signals that indicated research was necessary.** Ask yourself why you’re doing this research and if there’s a problem you’re trying to solve.

**Describe any previous research,** such as another iteration of usability testing or concept testing, that has been conducted or solutions that have been tried. How have previous attempts brought us closer to solving the problem?

**List insights the research will generate.** An insight is an observation about people that helps you understand the user or their needs from a new perspective. In the project background, you should include how the insights will be used and what decisions will be made based on those insights.

## Step 4: Write your research goals

Your research goals will state the specific ideas that you want to learn from the research, or what you would like the outcomes of the research to be. That’s why identifying your research goals is so important. Essentially, they drive the entire study.

The goals of your research will differ from project to project. But they’ll fit into one of these three categories, depending on when you run your research during the product life cycle.

**Foundational research goal:** If you run research before you start the design process, your research goal should help you understand why, or if, you should build the product, or if there’s a need for it at all.

**Design research goal:** If you run research during the design phase, your goal should help you understand how to build the product. Research at this time is called design research, and it will give you the answers you need to move forward through the design process with confidence.

**Post-launch research goal:** If you run research on a product after it's launched, your research goals help you understand if the product worked as expected. This type of research is called post-launch research, and the goals reflect whether you have successfully completed what you set out to do.

First, you should identify what part of the product life cycle you're running your research in. Then, you should write either a foundational, design, or post-launch research goal.

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## Part 2: Step by Step Instructions

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### Step 5: Write your research questions

Your research questions are the handful of questions you plan to answer during the study. They'll provide focus and structure for your research study, and also be the main topics you cover during your presentation. You should write five research questions for your mock research plan.

You should keep the following things in mind as you write your research questions:

**A good research question should be actionable.** You should be able to identify a clear way to attempt to answer the question. And you should know when you've found the answer you're searching for.

**Make sure your research questions are specific and not too broad.** You want to answer specific questions and produce meaningful data.

**Make sure your research questions aren't leading.** Questions should be neutrally phrased so that they don't sound like you're assuming a particular answer to your question.

**You should include one quantitative and one qualitative research question.** Quantitative research focuses on data that can be gathered by counting or measuring (think: numbers). Qualitative research focuses on observations about why and how things happen (i.e., "written descriptions"). This will help you obtain a greater diversity of data.

### Step 6: Choose your KPIs

When conducting research, you'll want to have a way to measure the effectiveness of your product or prototype. For this, we use Key Performance Indicators. These are critical measures of progress toward an end goal.

You should select at least two KPIs for your research plan based on your research questions. If you're having trouble coming up with KPIs, common ones for UX designs include:

Time on task

Use of navigation vs. search

User error rates

Drop-off rates

Conversion rates

System Usability Scale (SUS)

You can search online for more if you're having trouble finding one that works for you.

## Step 7: Explain your methodology

Next, you'll outline your methodology. List the procedures you'll use while collecting the information you need to answer your research questions. This should include the time and place of the product tests and interviews, as well as who will conduct them and how.

Outlining your methodology is important because it will inform your stakeholders of what will happen during the study, give them confidence in your study's results, and make it easier for researchers to repeat the study in the future.

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## Part 3: Step by Step Instructions

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### Step 8: Identify your participants

Your research plan should include a list of the primary characteristics of the people you will recruit to participate in the study. The types of participants you select should be based on your research goals.

You should specifically identify your participants' characteristics, any relevant demographic information about them (e.g., age, gender, location), and the number of participants. You should also consider users with diverse perspectives and abilities for every product you design — which means considering how your product might function for people with visual impairments, auditory processing challenges, and more. Also, think through how the prototypes need to be presented and moderated. This may also affect what platforms are selected for the test itself, as not all remote platforms are accessible with various kinds of assistive technology.

In addition, you need to think through how to get participants to be part of your study, known as the incentive. The incentive also provides a way to thank participants for their time and feedback. For example, you could compensate them with cash, a gift card, or enter them into a raffle for a prize.

### Step 9: Write your script

A script, also called a discussion guide, is a list of tasks and questions a researcher references when interacting with participants in the interview portion of a usability study. Using a script in your research plan gives you a clearer understanding of what a user is trying to do, how they think and feel, and what their problems are.

A well-rounded script contains questions that are:

**Consistent:** Questions should be read directly from the script and worded identically for each participant.

**Open-ended:** Questions should encourage discussion and reflection rather than short "yes" or "no" responses.

**Objective:** Questions shouldn't try to lead participants towards a particular answer or introduce the researcher's personal bias.

**Goal-oriented:** Questions should relate directly to the research goal.

In addition, interviewers should:

**Encourage elaboration:** The interviewer should encourage the participant to elaborate when they get stuck.

**Be flexible:** The interviewer should change the wording of questions they've already asked in order to gain new insights into the original question.

**Follow the participants' lead:** If the participant explores a different area than what was otherwise expected but it turns out to be important, then leave time to explore that too.

**Maintain privacy:** The interviewer shouldn't mention other participants during the interview to uphold each participant's privacy. This also prevents any outside opinions from affecting the data.

Now that we've covered the elements of a successful script, let's examine how to begin an interview:

Welcome your participants and thank them for their time. Take some time to build rapport, for example, and ask how their day is going. This gives everyone a chance to warm-up.

If the interview is being observed or recorded, make sure to ask for the participant's consent beforehand.

Ask for basic information such as name, age, and occupation.

Reassure the participant that the interview is not a test and that there is no such thing as a "right" answer.

Remind participants to think out loud throughout the interview.

Set their expectations around what works and what doesn't work in the prototype they will be testing.

Be an open book! Assure your participants that it's okay to ask questions, ask for clarification, or take a break at any time.

This is a good way to remind them that participation is voluntary.

Explain why you're collecting this data and what it will be used for.

Assure participants that their privacy will be respected and that any identifying features or information will be scrubbed from video and notes.

In the interview, you'll be assigning tasks to your participants and recording how they respond. You'll write a prompt for each task you want your participants to complete. Here are a few tips when coming up with tasks for your usability study:

Tasks should be based on your research goals.

Tasks should be specific.

Tasks should make participants take direct action.

Tasks shouldn't provide clues on how to complete a task. These could be explicit clues and implicit clues too, like using the same name of a call-to-action button in the UI as part of the question itself.

Once you've done that, you should identify your questions or the tasks you want users to perform as prompts.

This research plan is your playbook for learning first-hand about your users experiences with your prototype. Consider how the feedback you receive here helps you perfect your plan to make the most of the time you have with your research participants.

When complete, submit your research plan for peer review by uploading a PDF. After submitting your assignment, make sure to give feedback to at least two peers.

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## Example Submissions

Exemplar

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Below is an example of a research plan from a team that wants to update the Zia's Pizza ordering app. You can use this as a guide to examine your own work, before submitting it for peer review. You can examine the plan by accessing the plan in Google Docs, or review the pictures below:

To see the completed exemplar for this course item, click the link below and select "Use Template."

Link to exemplar: [\*\*Zia's Pizza UX Research Study\*\*](#)<sup>↗</sup>

**OR**

If you don't have a Google account, you can download the exemplar directly from the attachment below.



[Google UX Design Certificate - Zia's Pizza UX Research Study.\[Exemplar\]](#)

[DOCX File](#)

Introduction	<ul style="list-style-type: none"> <li>• <b>Title:</b> Creating an ordering app for Zia's Pizza</li> <li>• <b>Author:</b> Cameron Coder, UX researcher at AppDesign Consulting. Email: ccoder@appdesign.net</li> <li>• <b>Stakeholders:</b> Zia's Pizza customers, Zia's Pizza CEO and CFO</li> <li>• <b>Date:</b> 12/17/2020</li> <li>• <b>Project background:</b> We're creating a Zia's Pizza app to attract and retain customers in our online system. We noticed that our competitors offer dedicated mobile apps for their customers to order through, and they have been very successful. We want to create a product that can compete in the market, improve sales, and increase customer satisfaction.</li> <li>• <b>Research goals:</b> We'd like to figure out what specific difficulties users encounter when they try to complete the core tasks of the Zia's Pizza app: item selection, ordering, and in-app navigation.</li> </ul>
Primary research questions	<ul style="list-style-type: none"> <li>• How long does it take for a user to select and order a pizza in the app?</li> <li>• Are users able to successfully order the pizza that they want?</li> <li>• What can we learn from the steps users took to order a pizza?</li> <li>• Are there any parts of the pizza ordering process where users are getting stuck?</li> <li>• Is the payment process easy for the customer?</li> </ul>
KPIs	<ul style="list-style-type: none"> <li>• Time on task: how much time users spend ordering a pizza</li> <li>• Conversion rates: how many pizzas customers are ordering</li> <li>• User error rates: how often users get stuck trying to order the pizza they want</li> <li>• System Usability Scale: a questionnaire to evaluate customer feedback</li> </ul>
Methodology	<ul style="list-style-type: none"> <li>• Unmoderated usability study</li> <li>• Location: United States, remote (participants will go through the usability study in their own homes)</li> <li>• Date: Sessions will take place between January 15-22.</li> <li>• 7 participants will order a pizza through the app. Each participant will then complete a questionnaire on their experience.</li> <li>• Each session will last for 25-30 minutes</li> </ul>
Participants	<ul style="list-style-type: none"> <li>• Participants are anyone who orders out at least once a week.</li> <li>• Participants need to reside in metropolitan and suburban areas.</li> <li>• Participants should be between 18 and 62.</li> </ul>

	<ul style="list-style-type: none"> <li>• Participants should include a fairly even distribution of genders across the spectrum and people with different abilities including: <ul style="list-style-type: none"> <li>◦ 1 user of assistive technologies</li> <li>◦ 1 user with a visual impairment</li> <li>◦ 1 user with an auditory impairment</li> <li>◦ 1 user who isn't fluent in English</li> </ul> </li> <li>• Incentive: a \$25 electronic gift card to Zia's upon completion of the questionnaire.</li> </ul>
Script	<ul style="list-style-type: none"> <li>• Prompt 1: From the home screen, create a profile <ul style="list-style-type: none"> <li>◦ Prompt 1 Follow-Up: How easy or difficult was it to create a profile? Is there anything you would change about the process?</li> </ul> </li> <li>• Prompt 2: Start building a customized pizza <ul style="list-style-type: none"> <li>◦ Prompt 2 Follow-Up: How easy or difficult was this task to complete? Is there anything you would change about the process of starting a pizza order?</li> </ul> </li> <li>• Prompt 3: Choose a topping to add to your pizza <ul style="list-style-type: none"> <li>◦ Prompt 3 Follow-Up: How easy or difficult was the customization process? Is there anything you would change?</li> </ul> </li> <li>• Prompt 4: Confirm your order and complete the checkout process <ul style="list-style-type: none"> <li>◦ Prompt 4 Follow-Up: How easy or difficult was it to complete your order? Is there anything you would change?</li> </ul> </li> <li>• Have the participant complete the System Usability Scale. Participants are asked to score the following 10 items with one of five responses that range from Strongly Agree to Strongly disagree: <ul style="list-style-type: none"> <li>◦ I think that I would use this app frequently.</li> <li>◦ I found the app unnecessarily complex.</li> <li>◦ I thought the app was easy to use.</li> <li>◦ I think that I would need the support of a technical person to be able to use this app.</li> <li>◦ I found the various functions in this app were well integrated.</li> <li>◦ I thought there was too much inconsistency in this app.</li> <li>◦ I would imagine that most people would learn to use this app very quickly.</li> <li>◦ I found the app very cumbersome to use.</li> <li>◦ I felt very confident using the app.</li> <li>◦ I needed to learn a lot of things before I could get going with this app.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>◦ I found the payment system frustrating.</li> <li>◦ I found the ordering process cumbersome.</li> </ul>