#### **Overview**

In this exercise you will conduct a usability study with one subject and a wireframe to collect human performance metrics. The protocol has four parts: (1) a pre-task survey, (2) task simulation, (3) a post-task survey, and (4) qualitative feedback solicitation.

During this process, and especially during the simulation, you must be careful not to bias the subject in any way. You may give the subject instructions pertaining to the study, and you may describe what they see on the screen if there is pertinent information not shown in the wireframe. (For instance, if the wireframe has a placeholder for the total price, you can tell the subject what number is displayed there.) However, you may not say anything to help the subject understand the GUI or complete a task.

### **Tasks**

You will use the following tasks to evaluate your GUI:

- A. Navigate from the main menu to the "Select Coin" screen
- B. Search for "Ethereum" (mock data) and select it.
- C. View Bitcoin's price history for the last 7 days.
- D. Attempt to submit a historical price request without selecting a date.
- E. Return to the main menu after viewing historical prices.
- F. Encounter and resolve a mock error message when viewing historical prices.

## Part 1: User Expectations, Pre-Task Survey

Have the subject answer the following questions about each task:

- 1. I expect this task to be, overall: (a) very difficult to accomplish, (b) difficult to accomplish, (c) easy to accomplish, or (d) very easy to accomplish.
- 2. I expect the time spent on this task to be: (a) very long, (b) long, (c) short, or (d) very short.
- 3. I expect the information I need/needed to find for this task to be: (a) very difficult to find, (b) difficult to find, (c) easy to find, or (d) very easy to find.
- 4. I expect the information I need/needed to enter for this task to be: (a) very difficult to enter, (b) difficult to enter, (c) easy to enter, or (d) very easy to enter.

	Task A				Task B					Tas	sk (	3	Task D				Task E				Task F			
Question 1	a	b	C	d	a	b	c	d	a	b	C	d	a	b	c	d	a	b	c	d	a	b	c	d
Question 2	a	b	C	d	a	b	C	d	a	b	c	d	a	b	c	d	a	b	C	d	a	b	c	d
Question 3	a	b	C	d	a	b	c	d	a	b	C	d	a	b	C	d	a	b	C	d	a	b	C	d
Question 4	a	b	C	d	a	b	C	d	a	b	c	d	a	b	c	d	a	b	C	d	a	b	C	d

#### Part 2: Observations

Simulate each of the tasks above in order. Encourage the subject to explain what they are trying and why. Remind the subject that they should make a good-faith effort to finish each task, but the GUI may be flawed, and it is

okay if there is a task they cannot complete; you can still use data about how long it takes them to conclude that the task is impossible. If you are running low on time, you may end a task early and mark it as incomplete.

For each task, record whether the subject was able to complete it in a reasonable amount of time, the number of steps (e.g., taps, scrolls, drags, etc.) they took, and the number of those steps that you as a designer would consider to be extra steps.

	Task A	Task B	Task C	Task D	Task E	Task F
<b>Task Completion</b>	Y	Υ	Υ	Υ	Υ	Υ
Steps Taken	2	4	5	3	2	4
Extra Steps Taken	0	1	1	1	0	1

(If you have time, and the GUI under test is complicated enough, you can also measure learnability by resimulating a task and comparing the number of steps taken in a second attempt to the number of steps taken in the original attempt.)

# Part 3: User Expectations, Post-Task Survey

Have the subject answer the following questions about each task:

- 1. I experienced this task to be, overall: (a) very difficult to accomplish, (b) difficult to accomplish, (c) easy to accomplish, or (d) very easy to accomplish.
- 2. I experienced the time spent on this task to be: (a) very long, (b) long, (c) short, or (d) very short.
- 3. I experienced the information I need/needed to find for this task to be: (a) very difficult to find, (b) difficult to find, (c) easy to find, or (d) very easy to find.
- 4. I experienced the information I need/needed to enter for this task to be: (a) very difficult to enter, (b) difficult to enter, (c) easy to enter, or (d) very easy to enter.

		Task A				Task B				Task C				Task D				Task E				Task F			
Question 1	a	b	C	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	
Question 2	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	
Question 3	a	b	c	d	a	b	c	d	a	b	C	d	a	b	c	d	a	b	c	d	a	b	c	d	
Question 4	a	b	C	d	a	b	C	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	C	d	

## **Part 4: Additional Comments**

Record any additional comments from the subject below:

"This was very simple and easy to use. The project made sense and was easy to follow. all the data is applicable and user friendly, the chart is very helpful."