

Attachment E

CDC Solve the Outbreak Mobile Application User Experience (UX): Scenarios

What will be tested?

The following scenarios have been developed to test various aspects of CDC's Solve the Outbreak mobile application. While the participants complete the scenarios, qualitative and quantitative data will be captured by the facilitator and note takers.

PLEASE NOTE:

This copy of the scenarios/questions is the facilitator copy and to be used as a verbal guide by the facilitator. This version will not be provided on paper to participants.

Prior to the usability scenarios, the facilitator will explain the purpose of the usability test and will conduct all of the pre-test activities.

Each usability test may only include a subset of the questions below. The probing questions (included below) will vary from participant to participant and will be based on the facilitator's judgment of what to test and the time allotted in the session.

The scenarios on the following pages will be provided to the users, so that all of the participants see the exact same questions. Scenarios may be presented to users in random order in order to avoid learning biases.

Lastly, the estimated times below are simply an estimate of the time it will take for each scenario.

Solve the Outbreak Mobile Application

#	TOPIC TO BE TESTED	SCENARIO	ITEMS TO PROBE ON
1	Download the app (iTunes, Google Play Store) Time: 0:02 min	Let's begin by looking at the Solve the Outbreak application in iTunes (OR Google Play). Please take a look at this page. Based on the description, what do you think you could do with this application?	<ul style="list-style-type: none">• What do you think of the description on this page?• Does this look like an application that you would download or use for your personal interests? Why or why not?• Does this look like an application that you would download for use in your classroom? Why or why not?• Do you think this looks like an app that your students would download? Why or why not?• What can we do to improve this page to make the app more appealing?
2	Tutorial Screen Time: 0:01 min	Let's begin by opening the application. What do you think of this page?	<ul style="list-style-type: none">• Are the instructions clear on this page?• Is the information easy to understand?• Do you have any questions about how to use the application?• How could this page be improved?
3	Initial Impressions of the Home Screen Time: 0:02 min	What is your initial impression of this screen?	<ul style="list-style-type: none">• What catches your eye first on this screen?• If you opened this app on your own, what would you do first?• What is your reaction to this screen?• What do you like best about this screen?• What you like least about this screen?• Is there anything missing from this screen or anything that you would like to see added?• What do you think the orbs do? Is this interaction clear?• What do you think about the information provided on each outbreak? What other types of information would

#	TOPIC TO BE TESTED	SCENARIO	ITEMS TO PROBE ON
			<p>be helpful to you?</p> <ul style="list-style-type: none"> • How many outbreaks do you think are available? (Do users notice that they can swipe to see more outbreaks?) • How do you think these outbreaks are organized? (Would users like to see the outbreaks organized in a different way, if so, how?) • What do you think the Quick Menu will do? (Do users notice the Quick Menu on their own or does the facilitator have to point it out?) • What do you think the 24x7 tab will do? (Do users notice the 24x7 tab or does the facilitator have to point it out?) • Do you have any recommendations for improvement?
3	Select an Outbreak Time: 0:01 min	If you came to this screen on your own, which outbreak would you try to solve first?	<ul style="list-style-type: none"> • Which outbreak would you choose first? Why? • What made you select this outbreak? (Probe to find out if users choose an outbreak based on the title, the image, the number of people sick, the order in which the orbs are presented, etc.) • Which outbreak do you think your students would choose first? Why? • Would it be helpful to have a matrix of the outbreaks (for teachers only) that includes a list of the science and public health concepts included in each outbreak?
4	Solve an Outbreak Time: 0:08 min	Let's go ahead and select an outbreak. As you work through the outbreak, please tell me your thoughts as you solve the outbreak.	<p><i>Items for the facilitator to note while observing the teacher working through an outbreak:</i></p> <ul style="list-style-type: none"> • What do users think of the mission screen?

#	TOPIC TO BE TESTED	SCENARIO	ITEMS TO PROBE ON
		<p>I'll let you read through the outbreak, but if you have anything you'd like to share as you work, please let me know.</p> <p>Facilitator:</p> <p><i>Please note which outbreak the participant selected:</i></p> <p>-----</p> <p>-----</p>	<ul style="list-style-type: none"> • Would users be likely to share their status on Facebook or Twitter from the mission screen? • Once users accept the mission, are they able to view all of the related content screens (i.e. Data, Health Tips, Definitions, etc.) • Do users notice the links within the content? Do they click on them? What do they expect the links to do? • Do users notice the links to Learn, Scores, About, and Help in the bottom right hand corner? • What do users think the Learn section will include? If users do not visit the Learn section, the facilitator will take the user to the Learn section at the end of the session and will probe on the content included. • Are users able to navigate to the next clue? • What do users think of the scores on the answers page? • What do users think of the length of the outbreak? Is the outbreak too long, too short, or just right? • What were users' reactions about the tone of the content? Was it easy to understand? Too detailed? Not detailed enough? • Do teachers think that the information provided is educational? • What do teachers think about the level of difficulty of each outbreak? Is it too hard, too easy, or just right? • What grades do teachers think that the app is best suited for? High school students, middle school students, etc.? • What do users think about the science-y elements, i.e. the definitions, the tips, and the "learn" section? Are these items written at a level that students can understand? Is the information educational? How could the content be improved? • Do teachers think that the information provided would

#	TOPIC TO BE TESTED	SCENARIO	ITEMS TO PROBE ON
			<p>be interesting to their students?</p> <ul style="list-style-type: none"> • How do teachers think students will react to the content? Do they think it will be informative? Educational? How could the content be improved to be more useful/helpful in a classroom? • How could the presentation of the information be improved? • Based on using the app, would teachers use the app in their classroom? Why or why not? • What changes could be made to make the outbreaks more effective for use in the classroom? • What do users think of the scores page at the end of the outbreak? • Do users notice the information about how the real disease detectives solved a similar outbreak? If not, take the teachers to this page and probe about this page to find out what teachers like about this content and how it can be improved.
5	Home Screen Time: 0:01 min	Now that we've finished this outbreak, what would you do next?	<ul style="list-style-type: none"> • Do users select "Solve Another Outbreak" to go back to the home screen? • Once users return to the homescreen, do users notice that the orb has changed in color to show that it has been completed?
6	Learn Screen Time: 0:02 min	Now, I'd like to show you the Learn section of the outbreak. Can you tap the "Quick Menu" at the bottom of the screen? I'd like to get your feedback on this section of the app.	<ul style="list-style-type: none"> • What is your initial impression of the Learn section? • What do you like best? • What do you like least? • What do you think about the topics covered? • Is there anything missing that you would like to see added?

#	TOPIC TO BE TESTED	SCENARIO	ITEMS TO PROBE ON
			<ul style="list-style-type: none"> • What do you think about the tone of this content? • Do you think this content is educational? If so, what age-group or grade-level do you think this content is best suited for? • How could this content be improved?
7	<p>Scores Screen</p> <p>Time: 0:02 min</p>	Next, I'd like to show you the scores screen and get your feedback on this section of the app.	<ul style="list-style-type: none"> • What is your initial impression of the Scores section? • What do you like best? • What do you like least? • What do you think about the badges offered? What do you like about the badges? Is there anything you don't like about the badges? • Would you be willing to share your badges on Facebook or Twitter? Why or why not? • Do you think you students would be willing to share their badges on Facebook or Twitter? Why or why not? • What do you think happens once you reach Disease Detective? • What do you think about the Levels? What do you expect will happen with Level Two? What would you like to see included in Level Two?
8	<p>For Teachers Only: Use in the Classroom / Lesson Plans</p> <p>Time: 0:02 min</p>	Now, that you've used the app, would you be interested in using this app in your classroom? Why or why not?	<ul style="list-style-type: none"> • What features would you like to see added to the app? • Would you like a "reset" feature to clear all of the scores in the app? • Would you like a matrix of the public health / science concepts offered in each outbreak? • Would you like lesson plans to help with the app? What types of lesson plans would be helpful? How should the lesson plans be distributed, through the app, through a website, etc.?

#	TOPIC TO BE TESTED	SCENARIO	ITEMS TO PROBE ON
			<ul style="list-style-type: none"> • What features or functionality would be helpful to you, as a teacher? • What could we do to make the app more appealing to your students? • What could we do to the app to make it more educational or useful in your classroom? • Do you have any suggestions for how we could increase awareness of this app with teachers? With students?
9	Post-Test Reactions Time: 0:02 min	Based on your experiences with the app today, what do you think about the app?	<ul style="list-style-type: none"> • Who do you think is the main audience for the application? • What two things did you like best about the application? • What two things would you like to see improved?