



# Ethnographic Research Study: Property Claims Augmented Reality (AR) iPhone App

## Moderator's Guide

In-Home Usability Sessions in the Boston area: April 4-5, 8-9  
Location: Boston area

### **Research Leads**

Robert L. (Bob) Thomas  
Director, User Experience  
(e) [robertl.thomas@libertymutual.com](mailto:robertl.thomas@libertymutual.com)

Susan Yates  
User Research Intern  
(e) [susan.yates@libertymutual.com](mailto:susan.yates@libertymutual.com)

## Study Goals and Key Questions

---

### Goals:

1. The primary goal of this study is to see if this proof-of concept app is **desirable** to customers.
2. A secondary goal is to see if this app is **viable** for Liberty Mutual. For example, can it collect enough information to bypass physical visits by adjusters to customers' homes.

### Key Questions:

- Would customers like using it?
- Do customers understand the app and process flow?
- How do customers react to the app emotionally?
- Does the AR work for measurements?
- Does the manual method work for measurements?
- Do participants demonstrate a preference between the two measurement methods?

## Logistics:

---

**STUDY DATES:** Thursday, April 4 – Tuesday, April 9

**DESIGN:** A total of 12, 90-minute, in-home interview sessions

**SCHEDULE:** below; 3 sessions per day, with at least 60-minute breaks in between

**INCENTIVES:** \$200 in compensation

- **IN-PERSON OBSERVATION:** Room 470, 9<sup>th</sup> Floor, WeWork, 501 Boylston Street, Boston
- **REMOTE OBSERVATION:** Validately links have been sent to the team

### Testing Schedule: 12 slots 90-minute, in-home interview sessions

Date	Participant	Time
<b>Thursday, 4/4</b> <b>Observer: DSG</b>		Please ensure that the UX team has enough time (one hour) between sessions to travel to the next home/condo.
<b>Moderator: Bob</b> <b>Notetaker: Susan</b>	<b>1</b>	<b>10:00 a.m. – 11:30 a.m.</b>
<b>Moderator: Bob</b> <b>Notetaker: Susan</b>	<b>2</b>	<b>1:00 p.m. – 2:30 p.m.</b>
<b>Moderator: Susan</b> <b>Notetaker: Bob</b>	<b>3</b>	<b>3:30 p.m. – 5:00 p.m.</b>
<b>Friday, 4/5</b> <b>Observer: DSG</b>		Please ensure that the UX team has enough time (one hour) between sessions to travel to the next home/condo.
<b>Moderator: Susan</b> <b>Notetaker: Bob</b>	<b>4</b>	<b>10:00 a.m. – 11:30 a.m.</b>
<b>Moderator: Bob</b> <b>Notetaker: Susan</b>	<b>5</b>	<b>1:00 p.m. – 2:30 p.m.</b>
<b>Moderator: Susan</b> <b>Notetaker: Bob</b>	<b>6</b>	<b>3:30 p.m. – 5:00 p.m.</b>

<b>Monday, 4/8</b> <b>Observer: Jake</b>		Please ensure that the UX team has enough time (one hour) between sessions to travel to the next home/condo.
<b>Moderator: Mali</b> <b>Notetaker: Robin</b>	<b>7</b>	<b>10:00 a.m. – 11:30 a.m.</b>
<b>Moderator: Robin</b> <b>Notetaker: Mali</b>	<b>8</b>	<b>1:00 p.m. – 2:30 p.m.</b>
<b>Moderator: Mali</b> <b>Notetaker: Robin</b>	<b>9</b>	<b>3:30 p.m. – 5:00 p.m.</b>
<b>Tuesday, 4/9</b> <b>Observer: None</b>		Please ensure that the UX team has enough time (one hour) between sessions to travel to the next home/condo.
<b>Moderator: Robin</b> <b>Notetaker: Mali</b>	<b>10</b>	<b>10:00 a.m. - 11:30 a.m.</b>
<b>Moderator: Mali</b> <b>Notetaker: Robin</b>	<b>11</b>	<b>1:00 p.m. – 2:30 p.m.</b>
<b>Moderator: Robin</b> <b>Notetaker: Mali</b>	<b>12</b>	<b>3:30 p.m. – 5:00 p.m.</b>

# Informed Consent, Introduction & Pre-task Questionnaire

---

**(10 Minutes)**

*Have the participant read the consent agreement, ask any questions, and sign the consent agreement form if they agree.*

Welcome & Introductions

- Thank you very much for allowing us into your home today. My name is \_\_\_\_\_ and I work for my company in the digital experience department and these are my colleagues \_\_\_\_\_, who will be taking notes so we can improve our designs based on your feedback and \_\_\_\_\_ who will be observing today.
- Our goal is to learn whether people like you would be interested in using our app. We want to evaluate how easy or difficult our products are to learn and use.
- The session will take about 90 minutes, so we'll be done at \_\_\_\_\_. Is that OK?
- The most important thing to keep in mind, it is the **software we are testing, not you.**
  - If there's anything difficult or unclear, that's exactly the type of thing we're looking to fix. We want to hear your open and honest feedback on what is clear and what is unclear to you. You are the expert.
- I'll guide you through today's session and ask some questions as you are running through the tasks.
- During the tasks, you'll be working with a prototype, or early design. Any information you enter today will not be saved and will therefore be thrown away.
- I'd like you to think aloud while going through the tasks today.
  - Describe your steps, what you are looking for, what you're expecting to see, etc.
- We'll be recording the session, and others may be observing remotely.
  - We'll be recording the screen and a headshot of you, so we can show people that we're having real people look at our designs and help evaluate those designs with us.
  - Recordings are used for research purposes only, so you don't need to worry about showing up in an ad or anything. Only our small team has access to the recordings.
- We can stop conversations at any time, we want you to be comfortable. We can't thank you enough for taking the time to help us. Any questions before we begin?

## Pre-Task Questionnaire

---

Participant can fill out ahead of time or onsite while we're setting up the tech.

### LINK TO QUALTRICS SURVEY

Which do you use more, an iPhone browser or iPhone apps? Why?	<input type="checkbox"/> iPhone browser	<input type="checkbox"/> iPhone apps	<input type="checkbox"/> Both equally
When do you prefer to use an iPhone app vs. an iPhone browser?			
Approximately how many apps do you have on your iPhone? How often do you use them?	<input type="checkbox"/> Fewer than 10	<input type="checkbox"/> 10 - 20	<input type="checkbox"/> More than 20
How do you define an app that is really "helpful"?			
What features in an iPhone app do you find "helpful"?			
What iPhone app do you find most helpful, and why?			
What is your email address?			

## Setup

---

[SETUP: USE BLUE TAPE or POST-IT NOTES. Floor. Wall. Personal Property. GET MEASUREMENTS OF ENTIRE ROOM. DON'T PUT TAPE OR POST-ITS ON WALLPAPER.]

**WiFi: Ensure that both the iPhone and the usability computer are on the same WiFi network. You can use the MiFi:**

- MiFi Network
- MiFi Password

## Task 1: Pre-Task Questions (5 Minutes) – Not in the Survey, First Part of In-Person Interview

Great. I know when you were invited to participate in this research study, we asked you a few questions. I have a few more for you before we begin testing the app.

### Pre-Task Questions

Who is your current property insurance provider?	
How long have you been with them?	
Have you ever had to file a homeowner's or condo owner's insurance claim?	
<p><b>If yes:</b> When was the last time?</p> <p>What happened that caused you to file a claim? (I'm sorry to hear that happened.)</p> <p>Did it turn out okay?</p> <p>What did you like best and least about filing your claim? What worked well? What didn't work well?</p>	
How did you file the claim?	Desktop / mobile website / app / phone call / in person
<b>If no:</b> If you had water damage in your home, how would you go about filing a claim?	Desktop / mobile website / app / phone call / in person
If there was water damage in one room of your house what would you do?	

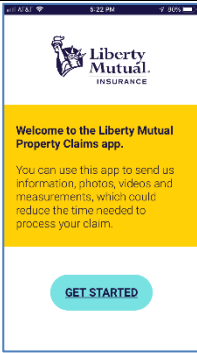
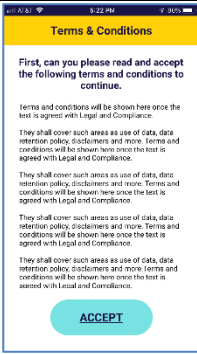
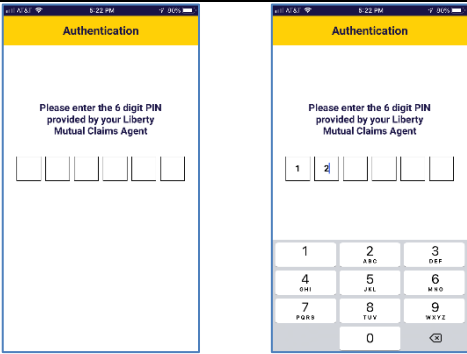


## Task 2: Scenario

Imagine that you have had a water leak that resulted in some minor damage to a room in your home. You have called your insurance company and after asking you some questions, the representative suggests you provide information through an app. You have decided to try it. Please open the app and tell me what you would do.

[SETUP: USE BLUE TAPE. Floor. Wall. Personal Property. GET MEASUREMENTS OF ENTIRE ROOM. DON'T PUT TAPE ON WALLPAPER.]

If you can speak out loud as you're completing this task, I will listen.

	<p>May have to enter a password to start</p>
	
	<p>Enter any six-digit code</p>

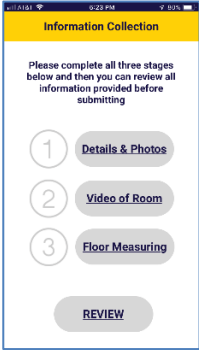
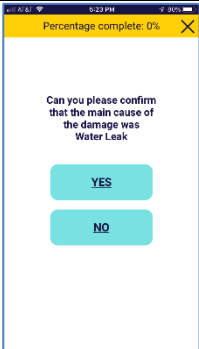
## Task 3A: Enter Information – 1. Details & Photos

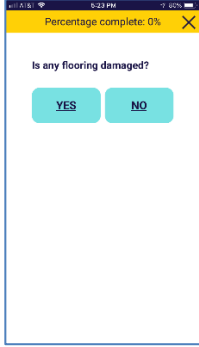
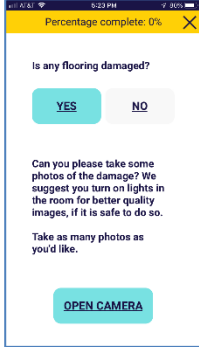
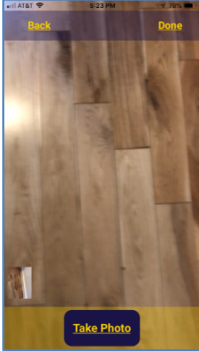
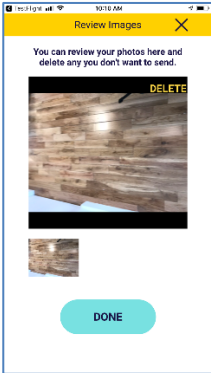

Now that you have launched the app, please walk me through what you would do. Note that in this task, you have floor, wall, and personal property damage.

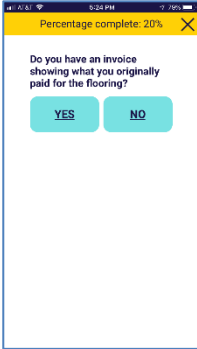
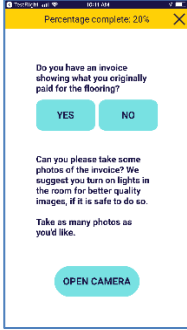

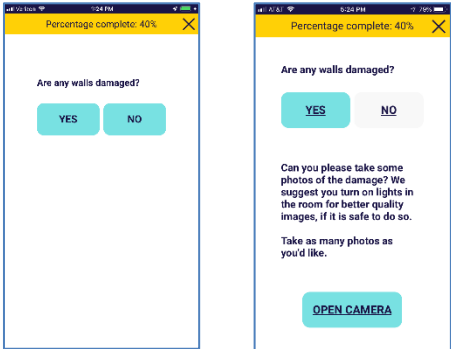
### Task Questions

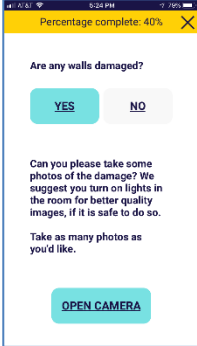
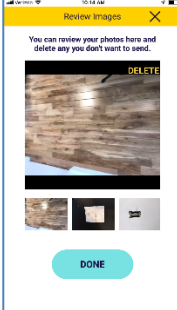
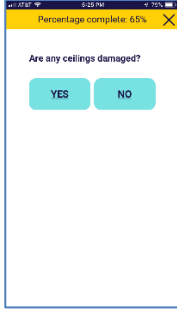
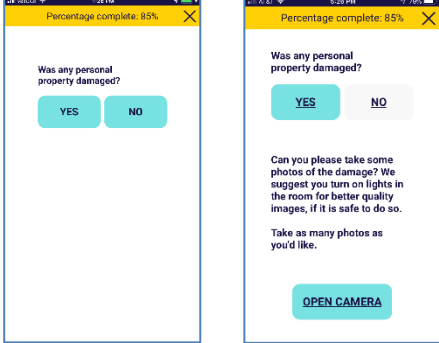
Note down the following:

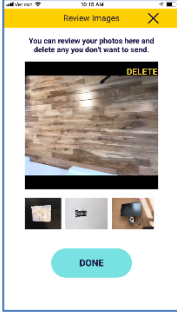
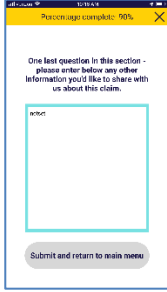
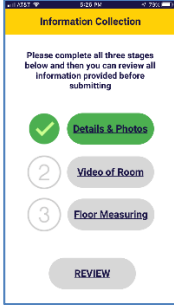
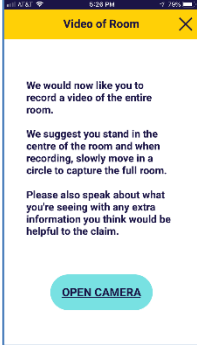
- Are they able to follow the instructions without prompting?
- Which method of floor measuring do they choose?
  - a. Are they able to understand the directions for the AR measuring?
- What causes confusion?

	
	Participant should choose YES

 	<p>Ask P to select YES</p>
	
	
	

	<p>Yes response will provide P with the same screen but with an option to open the camera and take a photo of the receipt.</p> <p>No response will take the P to screen (1) below</p>
	
	
	<p>(1) Have P select YES</p>

	
	
	<p>Have participant select NO</p>
	<p>Have participant select YES</p>

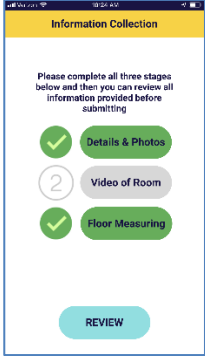
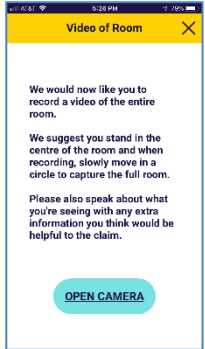
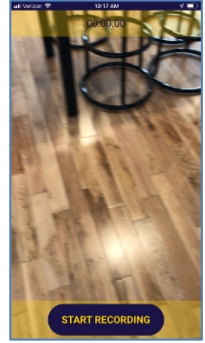
	
	
	
	


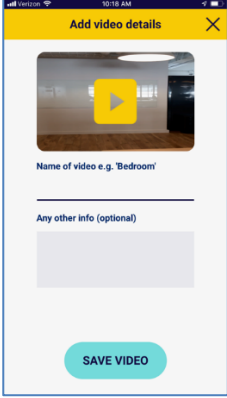
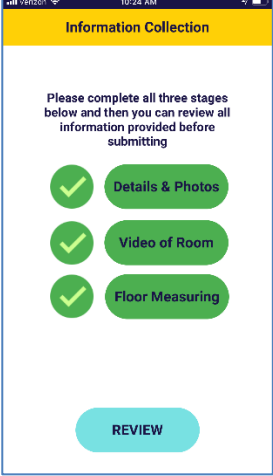
## Video Task (5 Minutes)

Please show what you would do.

### Note to Moderator:

- Stop screen sharing in Validately
- Audio only for observers
- Remote observers will not be able to observe this task

 <p>The screenshot shows a mobile app interface titled "Information Collection". It contains the following text: "Please complete all three stages below and then you can review all information provided before submitting". Below this are three items: "Details &amp; Photos" with a green checkmark, "Video of Room" with a grey circle containing the number 2, and "Floor Measuring" with a green checkmark. At the bottom is a blue "REVIEW" button.</p>	
 <p>The screenshot shows a mobile app interface titled "Video of Room" with a close button (X) in the top right. The text reads: "We would now like you to record a video of the entire room. We suggest you stand in the centre of the room and when recording, slowly move in a circle to capture the full room. Please also speak about what you're seeing with any extra information you think would be helpful to the claim." At the bottom is a blue "OPEN CAMERA" button.</p>	
 <p>The screenshot shows a mobile app interface with a video recording view. It displays a wooden floor and the legs of a chair. At the bottom is a blue "START RECORDING" button.</p>	



### ***Video Capture***

1. Did you expect to need to take a video of the property damage? Comment on your preferred approach.
  - a. Do you feel you were required to take a video to continue?
  
2. Did you receive the feedback you need to know that you have taken the video?
  
  
3. [if necessary] How would you expect this screen to work?
  
  
  
4. [if necessary] What would make this screen easier to understand?

## Task 3B: Enter Information – 3. Floor Measuring

Please walk me through what you would do next.

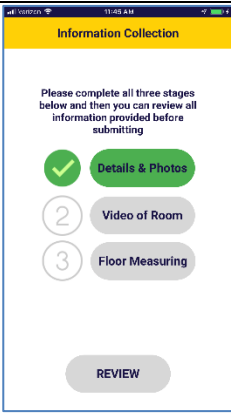
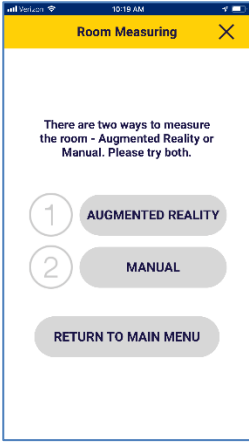
### Note to Moderator:

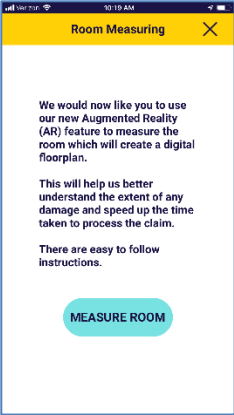
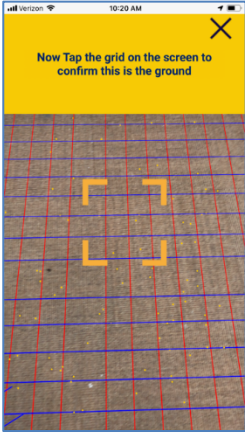
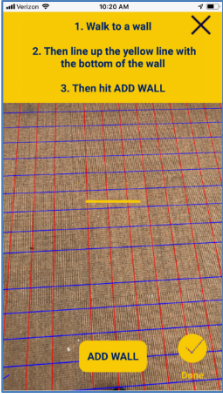
- START screen sharing in Validately

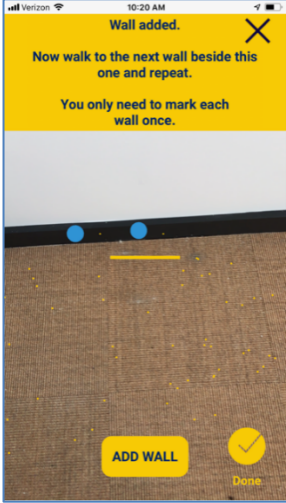
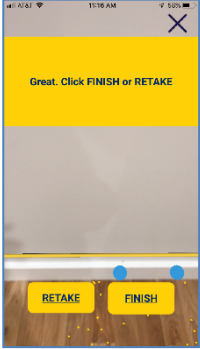
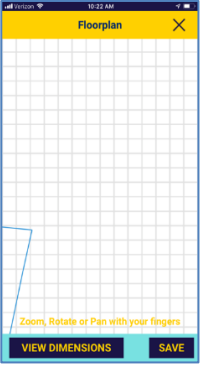
### Task Questions

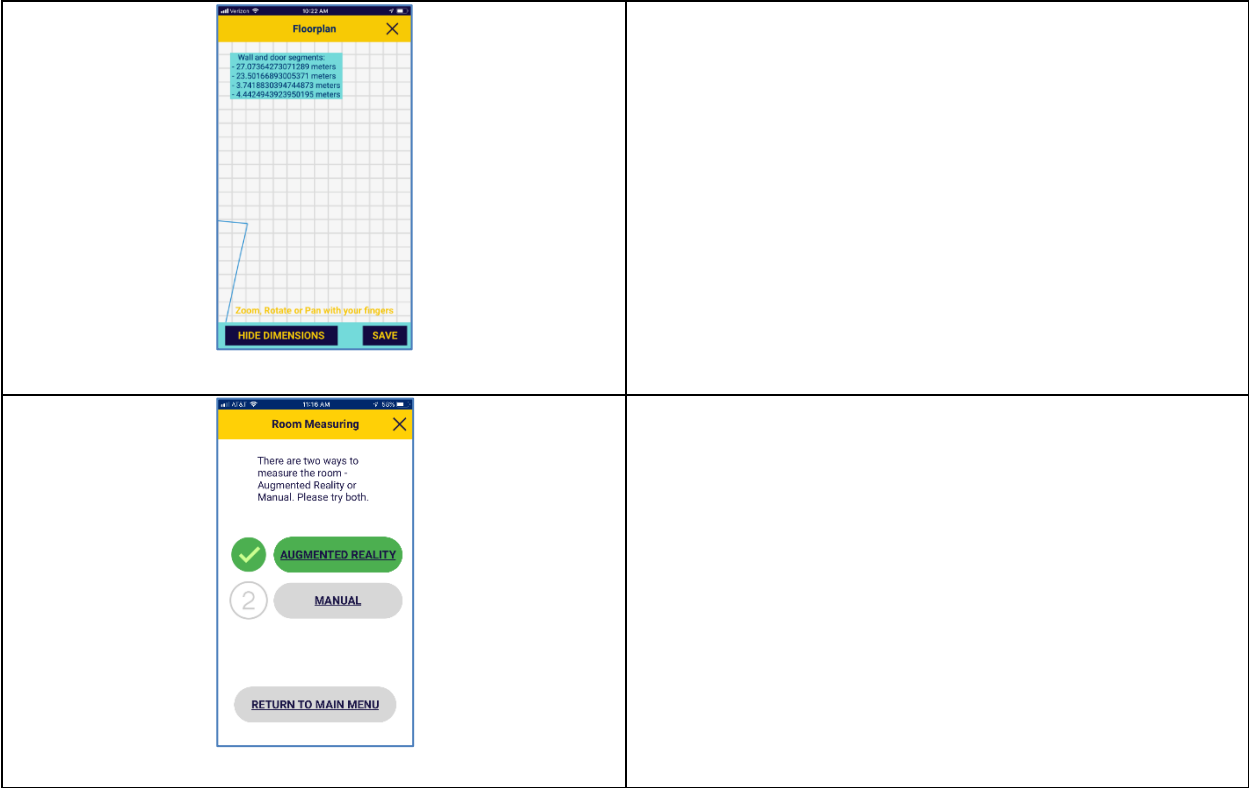
Note down the following:

- Are they able to follow the instructions without prompting?
- Which method of floor measuring do they choose?
  - a. Are they able to understand the directions for the AR measuring?
- What causes confusion?

	
	<p>Notice whether they choose manual or AR measurement method.</p> <p>If necessary: Choose the option you think you would select if we weren't here.</p>

	<h2 style="background-color: yellow; padding: 5px;">AUGMENTED REALITY METHOD</h2>
	<h3>AR Floorplan Start</h3>
	

 <p>Wall added. X      Now walk to the next wall beside this one and repeat.      You only need to mark each wall once.</p> <p>ADD WALL Done</p>	<p>Do Multiple Times</p>
 <p>Great. Click FINISH or RETAKE</p> <p>RETAKE FINISH</p>	<p>AR Floorplan Confirmation Screens</p>
 <p>Floorplan X</p> <p>Zoom, Rotate or Pan with your fingers.</p> <p>VIEW DIMENSIONS SAVE</p>	



Room Measuring

There are two ways to measure the room - Augmented Reality or Manual. Please try both.

1 AUGMENTED REALITY

2 MANUAL

RETURN TO MAIN MENU

# Manual Floor Plan Start

Manual Room Measuring

First, please select the shape below that most matches your room. Don't worry if the size and ratios of the wall is don't look perfect. In the next stage you can enter your actual measurements.

Grid of 16 room shape icons.

# Manual Floor Plan Start

DONE

Please enter the measurements for each numbered wall segment, in inches. Then hit Done.

Diagram of a room with wall segments numbered 1 through 6.

1

2

3

4

5

6

Before adding measurements

DONE

Please enter the measurements for each numbered wall segment, in inches. Then hit Done.

Diagram of a room with wall segments numbered 1 through 6.

2 | 90 |

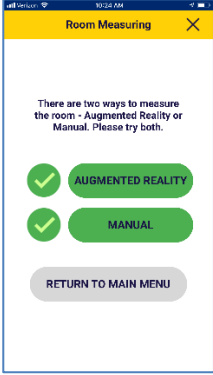
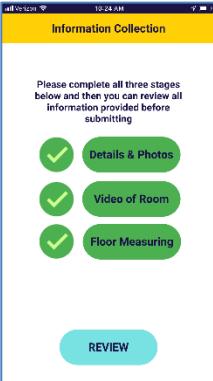
3 | 90 |

4 | 85 |

5 | 120 |

6 | 21 |

3k. Manual Floor Plan Confirmation

 <p>The screenshot shows a mobile application interface titled "Room Measuring". At the top, there is a yellow header with the text "Room Measuring" and a close icon. Below the header, the text reads: "There are two ways to measure the room - Augmented Reality or Manual. Please try both." There are two green buttons with checkmarks: "AUGMENTED REALITY" and "MANUAL". At the bottom, there is a grey button labeled "RETURN TO MAIN MENU".</p>	<p>Screen display after completing Manual method</p>
 <p>The screenshot shows a mobile application interface titled "Information Collection". At the top, there is a yellow header with the text "Information Collection". Below the header, the text reads: "Please complete all three stages below and then you can review all information provided before submitting". There are three green buttons with checkmarks: "Details &amp; Photos", "Video of Room", and "Floor Measuring". At the bottom, there is a light blue button labeled "REVIEW".</p>	

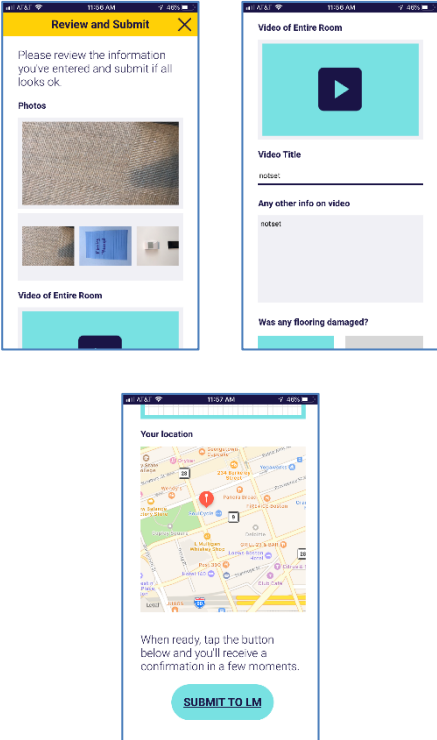
## Task 3C: Enter Information – Review & Submit

Please walk me through what you would do next.

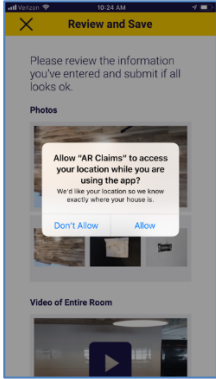
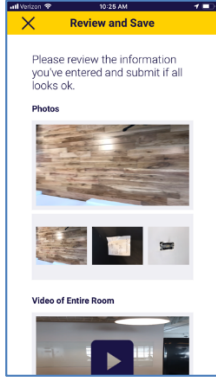
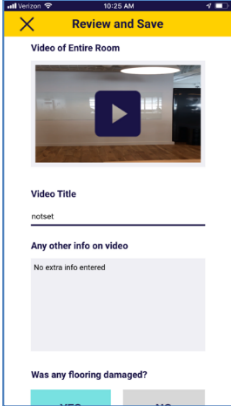
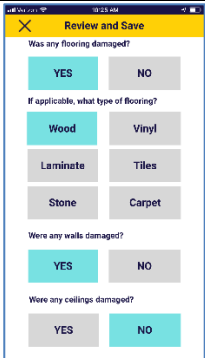
### Task Questions

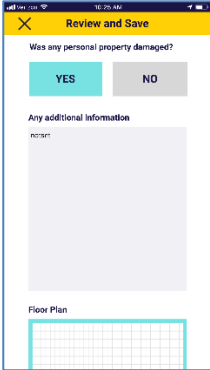
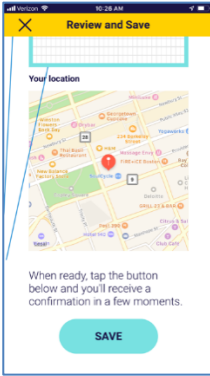
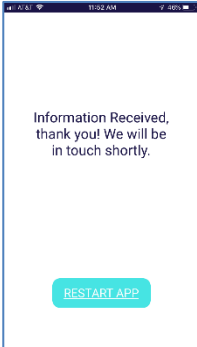
Note down the following:

- Are they able to follow the instructions without prompting?
- Which method of floor measuring do they choose?
  - a. Are they able to understand the directions for the AR measuring?
- What causes confusion?

	<p>SNAPSHOT OF SCREENS ON THIS PAGE. ALL SCREENS CONTINUE ON NEXT PAGE.</p> <p>Note: Depending on options selected, P may need to do some scrolling before they see the submit button: Photos, video, open response comments, summary of damage responses, floor plan, and map showing home location.</p>
--	---



 <p>The screenshot shows the 'Review and Save' screen with a location permission dialog box. The dialog asks: 'Allow "AR Claims" to access your location while you are using the app? We'd like your location so we know exactly where your house is.' There are 'Don't Allow' and 'Allow' buttons.</p>	
 <p>The screenshot shows the 'Review and Save' screen with a 'Photos' section containing three thumbnails of interior photos. Below the photos is a 'Video of Entire Room' section with a video player thumbnail.</p>	
 <p>The screenshot shows the 'Review and Save' screen with a 'Video of Entire Room' section. Below the video player is a 'Video Title' field with the text 'notset'. There is also a section for 'Any other info on video' with a text area containing 'No extra info entered'. At the bottom, there is a question 'Was any flooring damaged?' with 'YES' and 'NO' buttons.</p>	
 <p>The screenshot shows the 'Review and Save' screen with a grid of options for 'Was any flooring damaged?' (YES, NO), 'If applicable, what type of flooring?' (Wood, Vinyl, Laminate, Tiles, Stone, Carpet), 'Were any walls damaged?' (YES, NO), and 'Were any ceilings damaged?' (YES, NO).</p>	



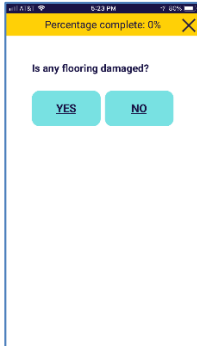
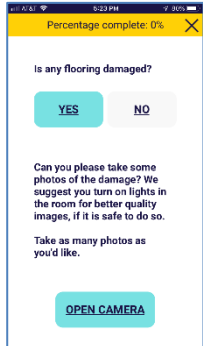
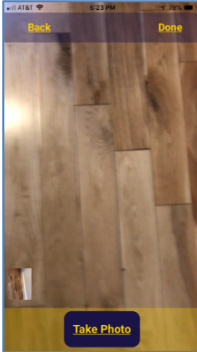
## Task 5: Application Retrospective: Entering Information (10 Minutes)

---

Now, thinking about the process of entering information for a property claim for a home or condo and your experience using the application, is this what you expected to do?

- Was it clear to you where you were in this process?

## Photo Capture

		3b.
		

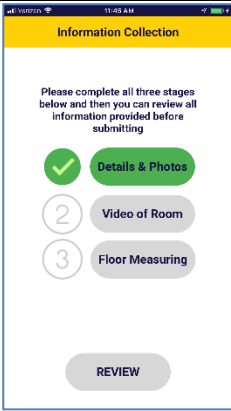
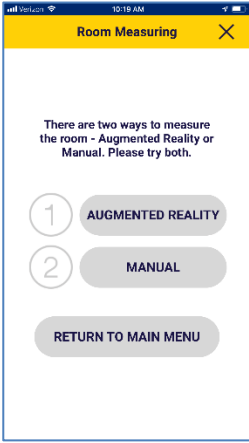
1. Did you expect to need to take a photo of the property damage? Comment on your preferred approach.
  - a. Do you feel you must take a photo to continue?
2. How many photos would you take of the damage? How many would you expect the application allows?
3. Did you receive the feedback you need to know that you have taken the picture?
4. [if necessary] How would you expect this screen to work?
5. [if necessary] What would make this screen easier to understand?

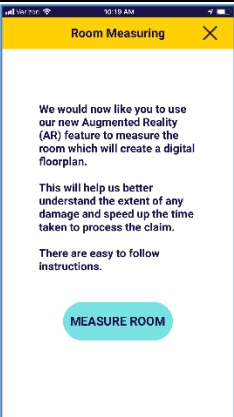
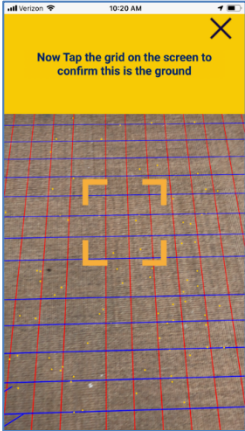
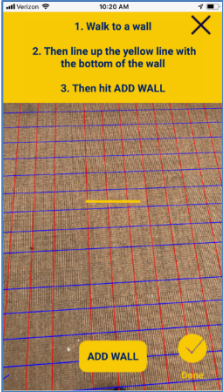
## Task 6: Room Measurement: (15 Minutes)

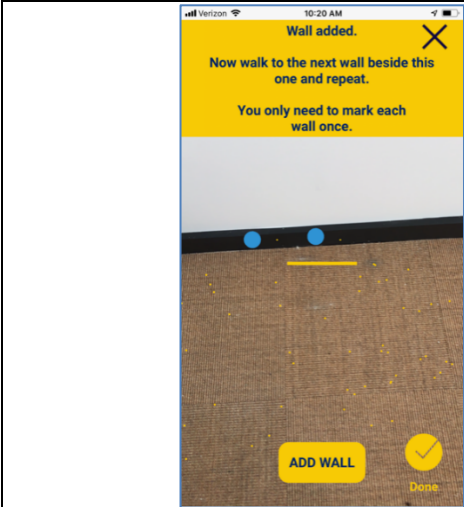
I noticed that you selected the (manual/automatic) option for measuring the floor. Can you tell me why you selected that option?

- What did you like best about using it?
- What did you like least about using it?
- Is there anything you would change?

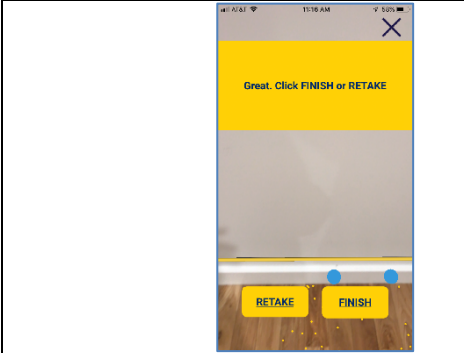
Now I'd like you to repeat the process using the (manual/automatic) option you did not select.

	
	<p>Notice whether they choose manual or AR measurement method.</p> <p>If necessary: Choose the option you think you would select if we weren't here.</p>

	<h2 style="background-color: yellow; padding: 5px;">AUGMENTED REALITY METHOD</h2>
	<h3>AR Floorplan Start</h3>
	



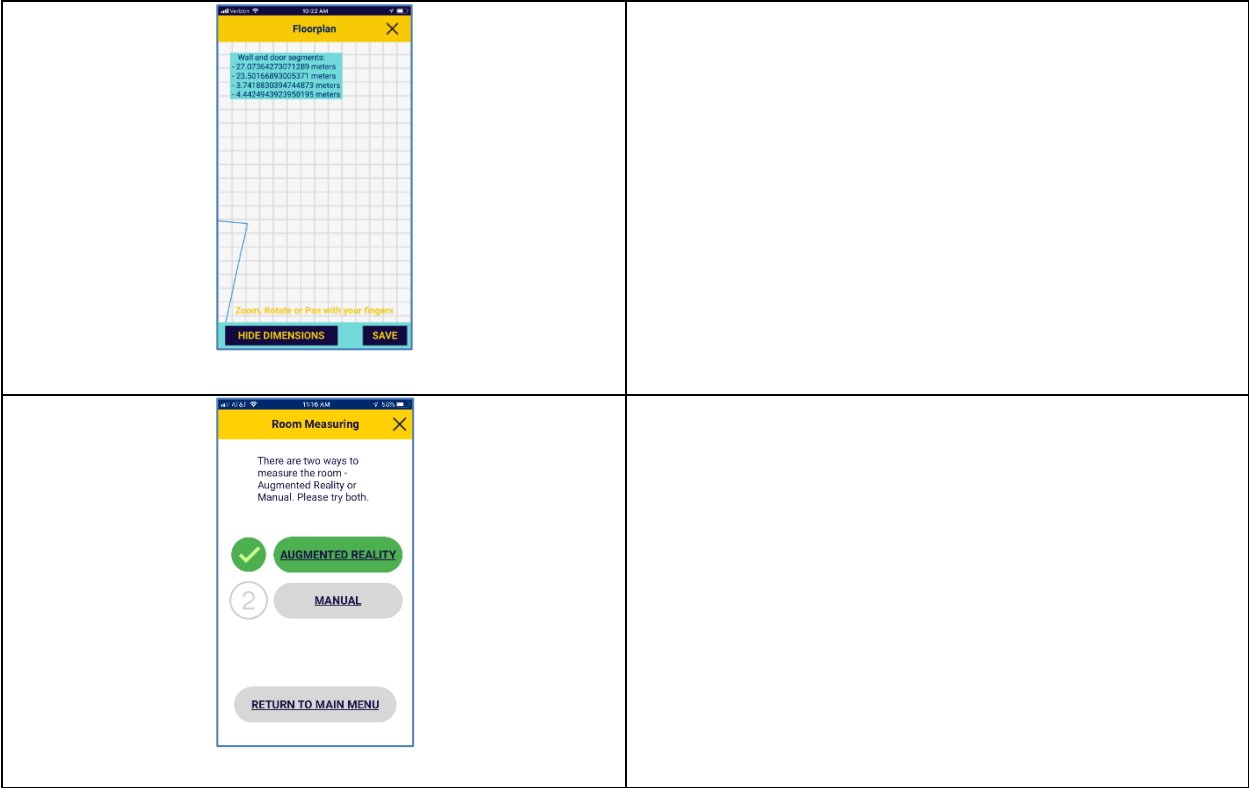
Do Multiple Times

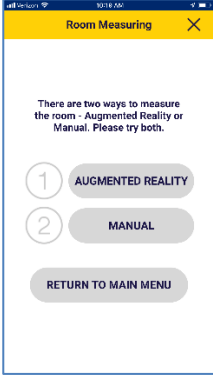
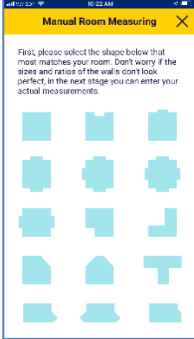
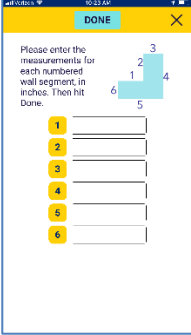
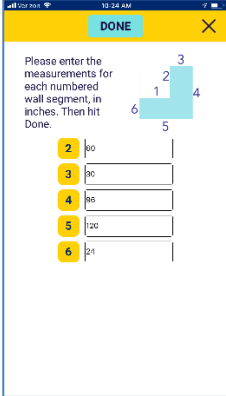


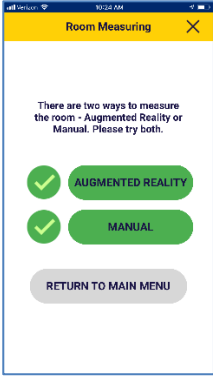
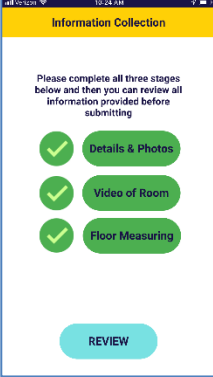
AR Floorplan Confirmation Screens







	<h1>Manual Floor Plan Start</h1>
	<h1>3j. Manual Floor Plan Start</h1>
	<p>Before adding measurements</p>
	<h1>3k. Manual Floor Plan Confirmation</h1>

	<p>Screen display after completing Manual method</p>
	

- Did you find that easier or harder than the method you used the first time?
- If you had to use the app in the future, which method would you choose?
- Why do you feel that way?
- Do you think you need to do both methods? Would you?

## Post-Task Questions (10 Minutes)

---

### LINK TO USERZOOM SURVEY (Grades, Likerts, Emotional Reaction Words only)

1. What is your overall impression of the app? Please give the app an overall grade from “A” to “F.”

Grade: \_\_\_\_\_

Why did you give this grade?

2. Where 1 is Very Difficult and 7 is Very Easy, how easy or difficult was it for you to use this app?

Why?

Very Easy							Very Difficult
1	2	3	4	5	6	7	

3. If you had questions or needed help, how would you obtain it? [Note how help would be obtained. Would they call? Email? Chat? Use the app?]

4. If you could make changes to the app, what would they be and why? Is there any key functionality missing that you feel would help you file a claim?

[As appropriate, allow participant to go back to the app.]

5. What did you like **best** about the app?

6. What did you like **least** about the app?

7. As a result of using this application, how likely are you to consider Liberty Mutual when next shopping for insurance?

8. Does this application affect the way you view Liberty Mutual as a company?

9. Where 1 is Not At All Likely and 7 is Very Likely, how likely or unlikely would you use an app like this if you had to enter claim information in the future? Why?

<b>Not At All Likely</b>							<b>Very Likely</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	

10. Where 1 is Not At All Likely and 7 is Very Likely, how likely or unlikely would you download an app like this from the App store?

Why? [Probe on whether or not they would want to access this functionality from a browser/website]

<b>Not At All Likely</b>							<b>Very Likely</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	

11. Have you ever used other applications similar to this one?

12. If you had a property claim in the future and filing it via this app was an option, would you use it?

13. If you had had this app when you last filed a claim, would you have used it?

## Emotional Response (5 Minutes)

---

Here is a list of words that may describe how you feel about this application. Please select the top three words that describe your reaction to using this app to file a claim.

- |                                       |  |  |
|---------------------------------------|--|--|
| <input type="checkbox"/> Appealing    | <input type="checkbox"/> Fun           | <input type="checkbox"/> Organized       |
| <input type="checkbox"/> Busy         | <input type="checkbox"/> Hard to Use   | <input type="checkbox"/> Overwhelming    |
| <input type="checkbox"/> Clean        | <input type="checkbox"/> Helpful       | <input type="checkbox"/> Practical       |
| <input type="checkbox"/> Confusing    | <input type="checkbox"/> Impractical   | <input type="checkbox"/> Professional    |
| <input type="checkbox"/> Credible     | <input type="checkbox"/> Inconsistent  | <input type="checkbox"/> Relevant        |
| <input type="checkbox"/> Cutting edge | <input type="checkbox"/> Innovative    | <input type="checkbox"/> Responsible     |
| <input type="checkbox"/> Easy to use  | <input type="checkbox"/> Intimidating  | <input type="checkbox"/> Straightforward |
| <input type="checkbox"/> Effortless   | <input type="checkbox"/> Intuitive     | <input type="checkbox"/> Trustworthy     |
| <input type="checkbox"/> Engaging     | <input type="checkbox"/> Irrelevant    | <input type="checkbox"/> Unhelpful       |
| <input type="checkbox"/> Frustrating  | <input type="checkbox"/> Irresponsible | <input type="checkbox"/> Unreliable      |