Getting the Design Right

Yujin Cho, Vaisakh Menon, Leo Stewart, Madeline Wessels
CSE 440 AC, Spring

Design Decisions and Changes

The most significant change between our paper prototype and our digital prototype was the addition of voice control and a digital assistant. This included audio descriptions of affordances on each screen and a HELP button on each screen that allows the user to ask questions via voice control. Although this is not necessarily evident in our prototype, voice control and external controllers are enabled to maximize accessibility. Users will be able to control their navigation through the app and their movements in VR events and activities with the VR controller, external controllers, hands, or voice commands.

We also improved navigation in our application by giving each screen an explicit title; this will prevent users from getting lost in our app. Wording was also changed throughout the prototype to make the actions more explicit. Our digital prototype also allows us to add backgrounds that make our prototype similar to VR experiences. Moreover, the prototype allows us to add color to screens, which makes the design more appealing.

Digital Mockup

Overview of Mockup:
Our overview only contains a few of the most important screens out of the many that we have made for our digital mockup. We left out multiple screens since our mockup involves many screens, with many being repetitive. For example, we have multiple screens representing all the possible activities/games, but showing one screen can represents them all. The mockup was developed with Axure.
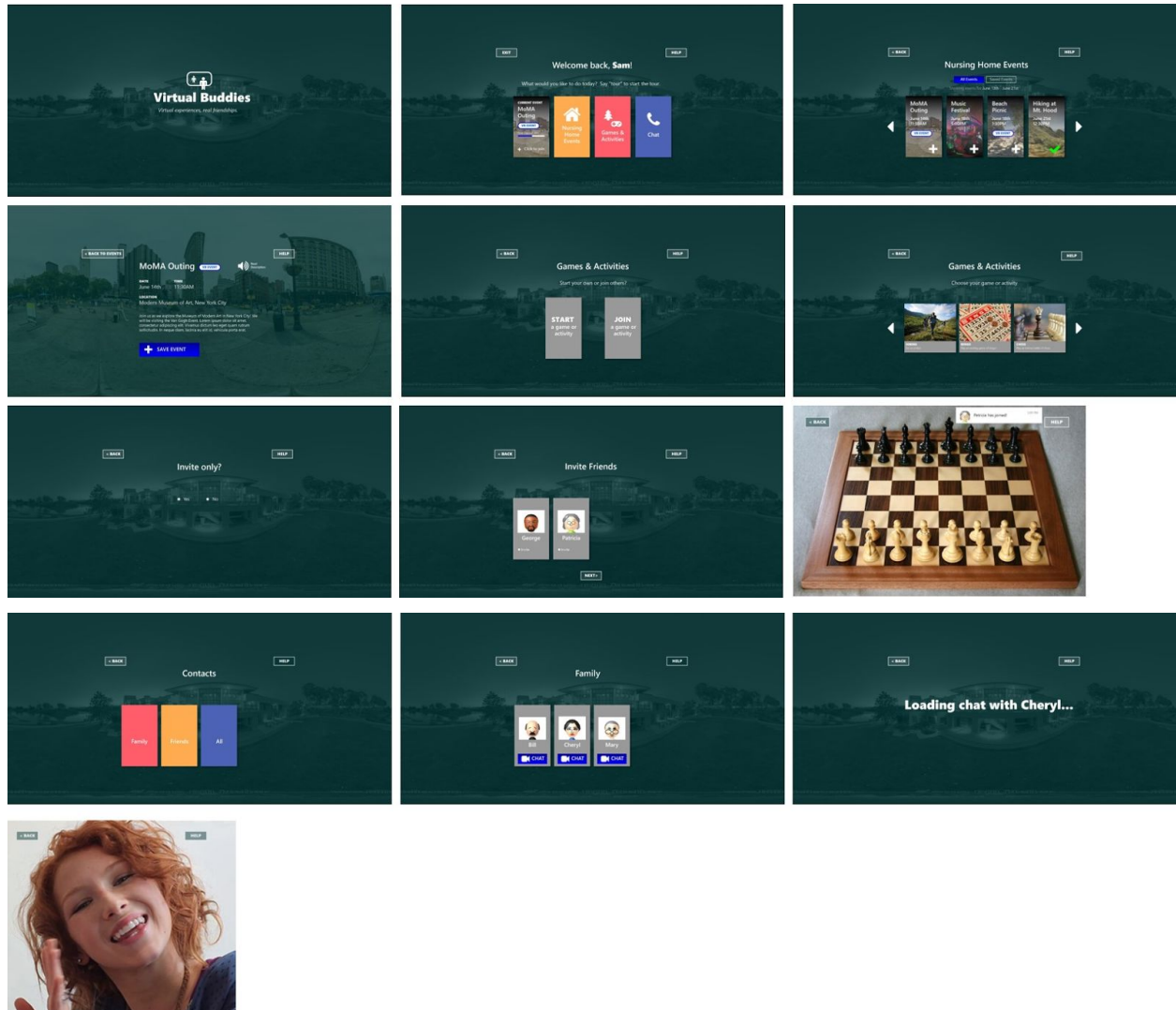
Figure 1: An overview of the current version of our digital prototype..

Task 1: Add MoMA Outing to My Events. Verify that the event has been added. Remove MoMA Outing from My Events. Verify that the event has been removed.

This task is related to our broad goal of learning about and attending nursing home events.
Users may view detailed events and add/remove them to/from a personalized list of events.

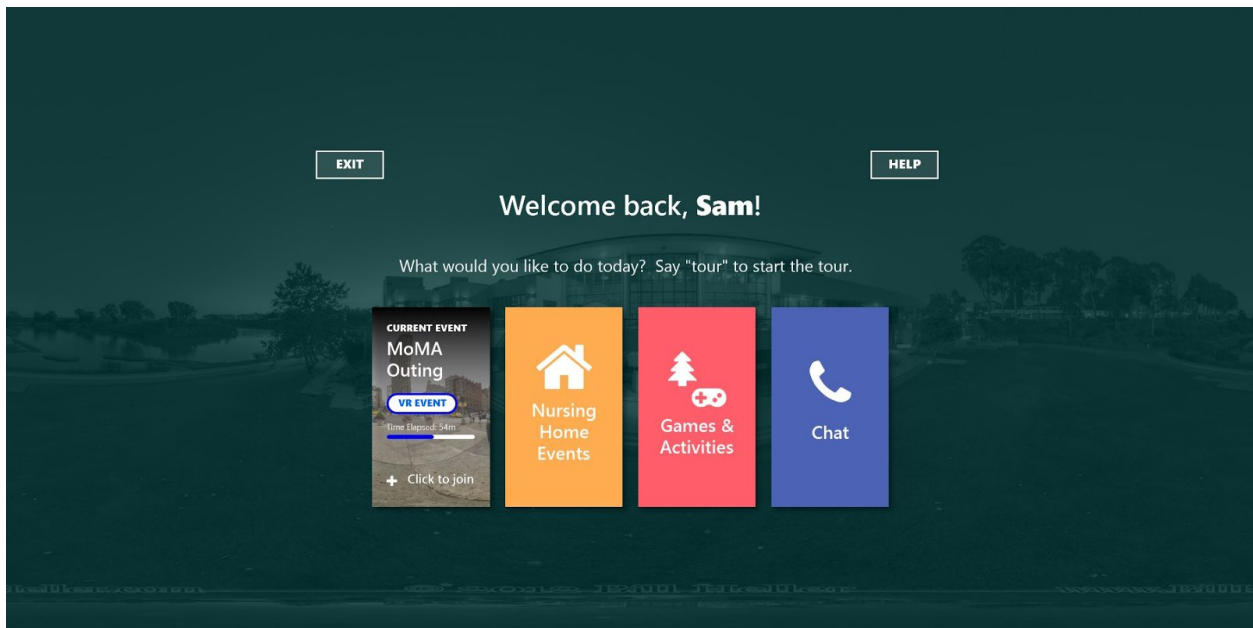Figure 2.1: The welcome screen that appears when Sam loads the application.

Figure 2.2: The first screen that appears when the application has loaded. Sam can look at and select whichever option appeals to him. In this scenario, Sam decides to look at and select "Nursing Home Events". This takes him to the next screen (Figure 2.3).
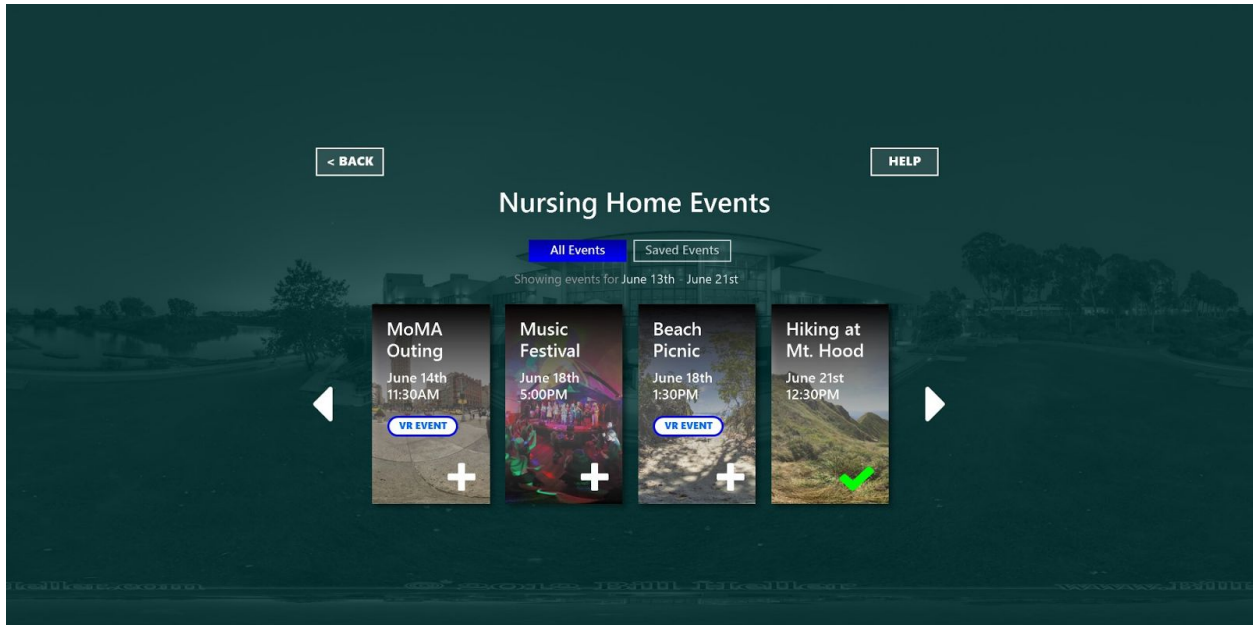
Figure 2.3: Sam is shown a list of nursing home events. The VR events are labeled to differentiate them from other events. Each event includes a title, the date and time, and a thumbnail image. Sam can scroll right and left to see more events. Sam selects the first event, "MoMA Outing," and is taken to the next screen (Figure 2.4).
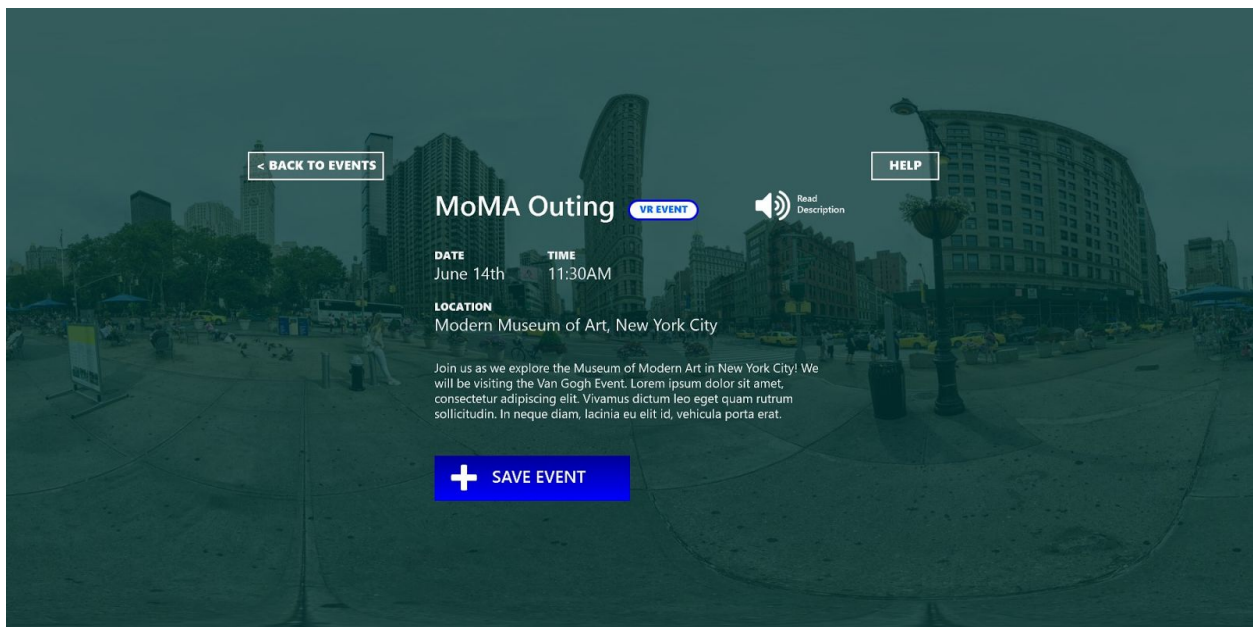

Figure 2.4: This screens shows Sam the details of the MoMA outing. He can read more about the event, add the event to "Saved Events," or select "Back To Events." Sam selects "Add to Saved Events."

Figure 2.5: On the specified date and at the specified time Sam can go on a virtual-reality tour of the Museum of Modern Art. He has and option to go "Back" whenever he is done.
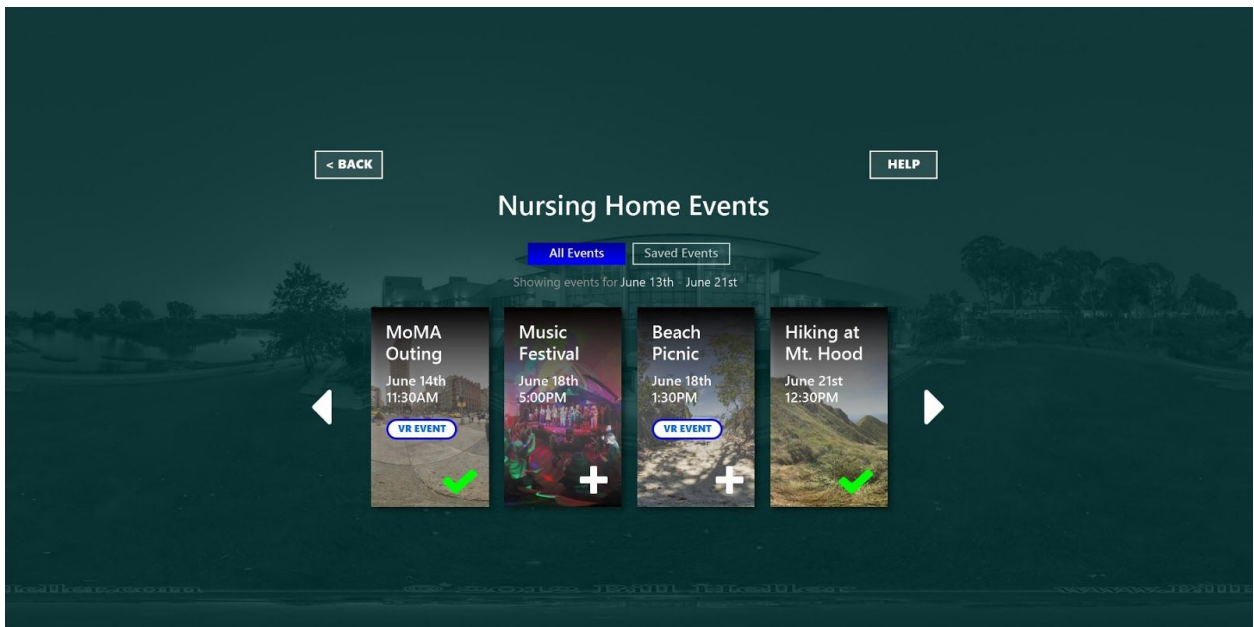

Figure 2.6: Sam is returned to the "All Events" screen and sees a green checkmark on the MoMA outing, meaning it has been added to "Saved Events." Next, he wants to see all of the events saved to "Saved Events," so he selects "Saved Events" from the filter above. This takes him to the screen shown in Figure 2.7.
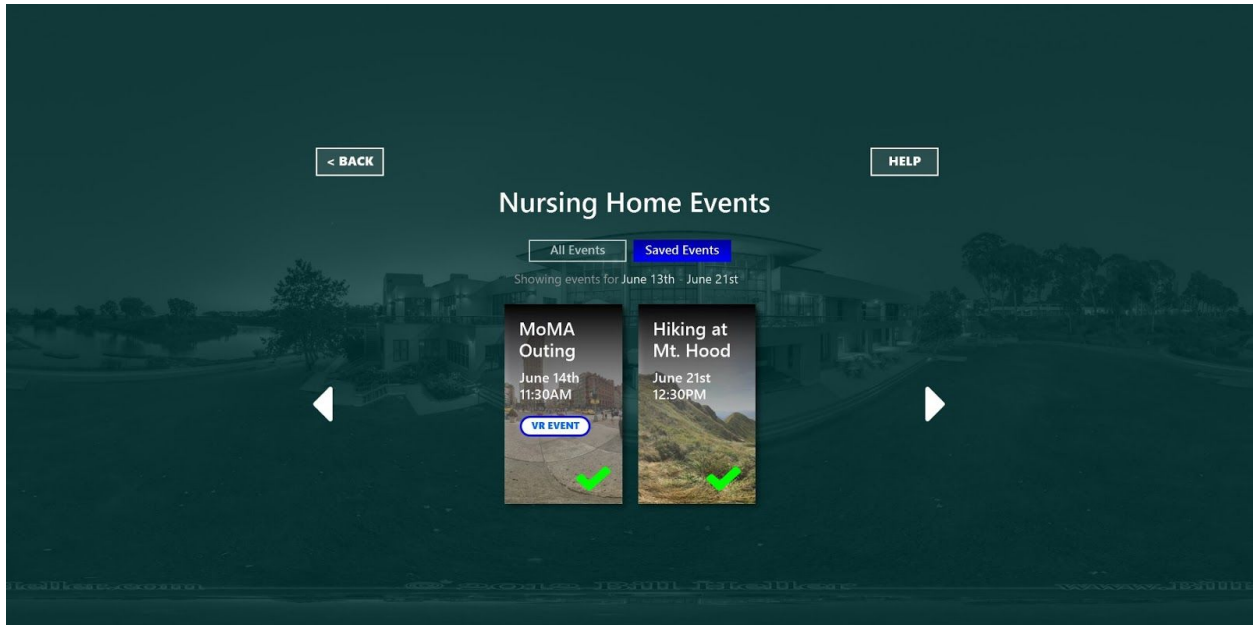
Figure 2.7: Sam remains at the same screen, but only the events saved to "Saved Events" are shown, including the MoMA outing. He now wishes to return to the "All Events" screen and selects "All Events".
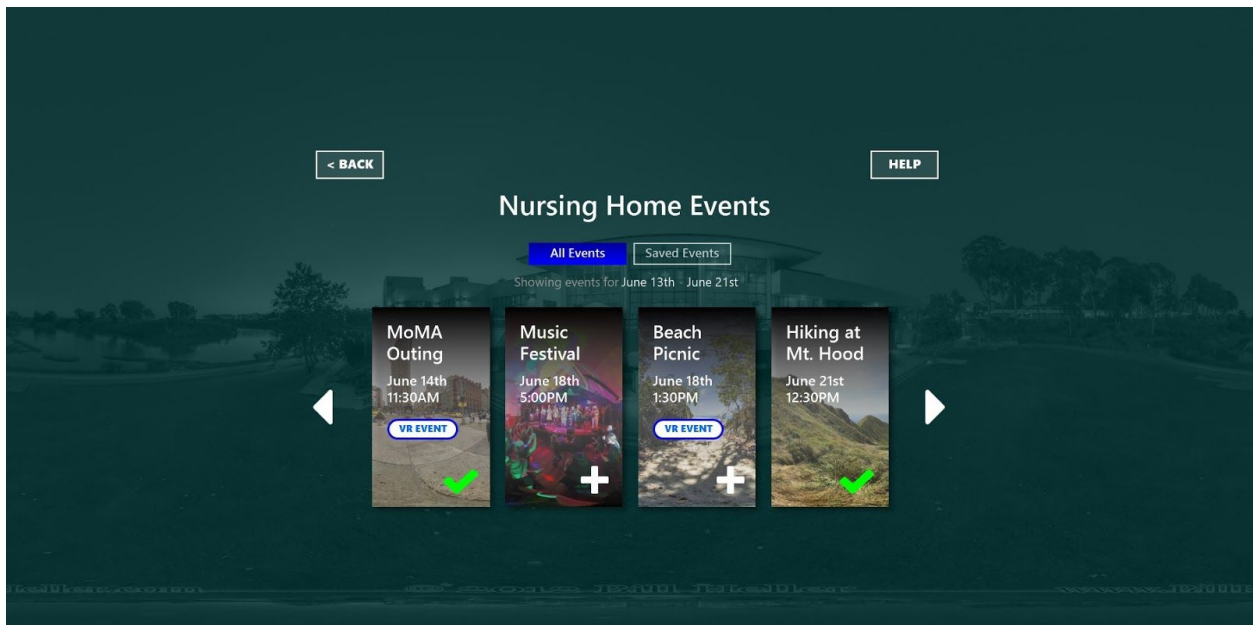

Figure 2.8: Once he's returned to the "All Events" screen, Sam decides he no longer wants to go MoMA, and decides to remove the MoMA outing from "Saved Events." He selects the MoMA outing from the list of events.
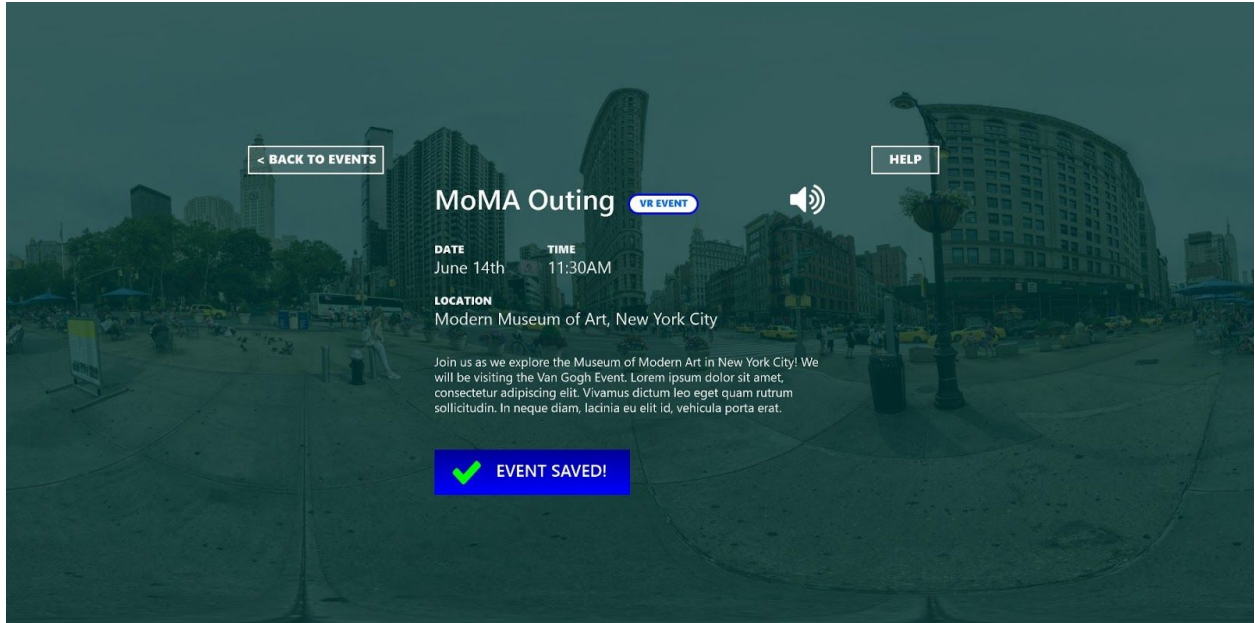
Figure 2.8: Sam is shown the detail screen of the MoMA outing. He selects "Event Saved" at the bottom of the screen and is taken to the next screen (Figure 2.9).
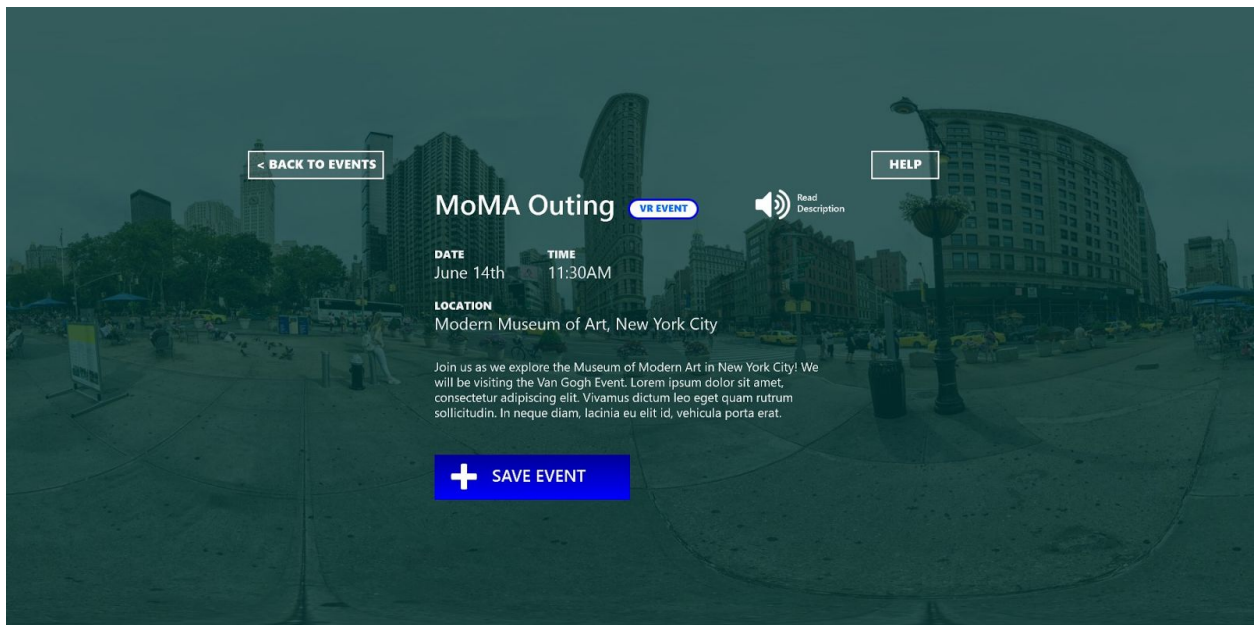

Figure 2.9: The "Event Saved" button has been changed to "Save Event", indicating that it is no longer saved to "Saved Events." Sam again returns to "Nursing Home Events" by selecting "Back To Events."
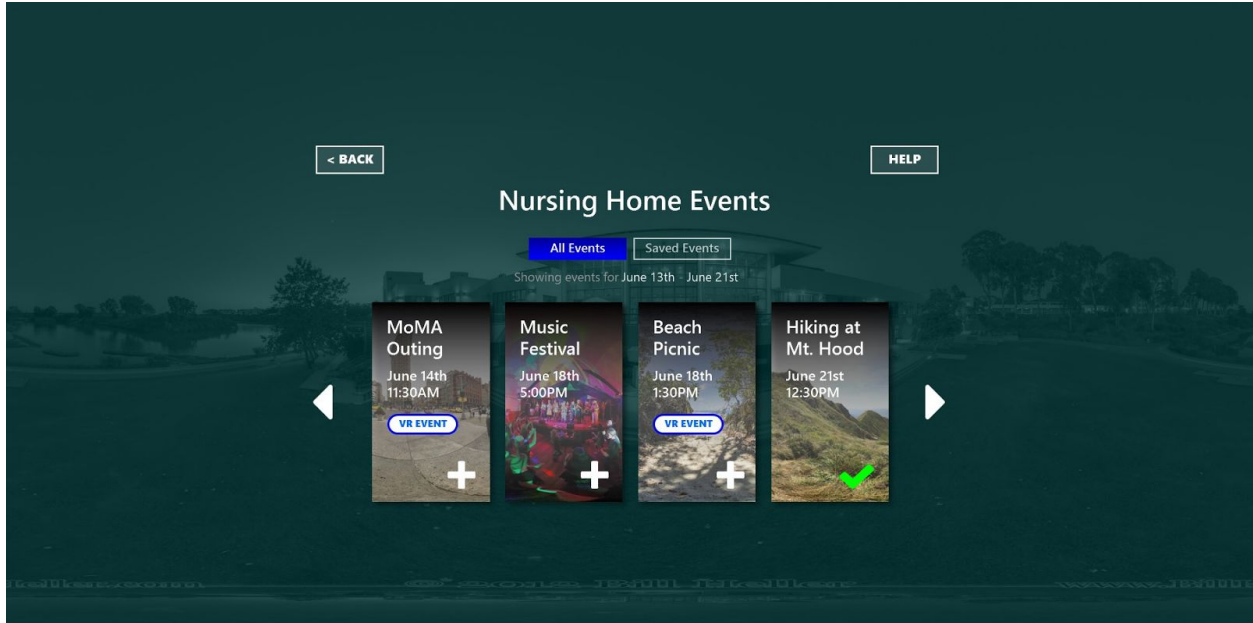
Figure 2.10: The MoMA outing is no longer listed as an event.

Task 2: Start a game of chess and invite Patricia to play

This task is related to our broad goal of finding opportunities to connect with other residents and family. Users may host and join activity sessions.
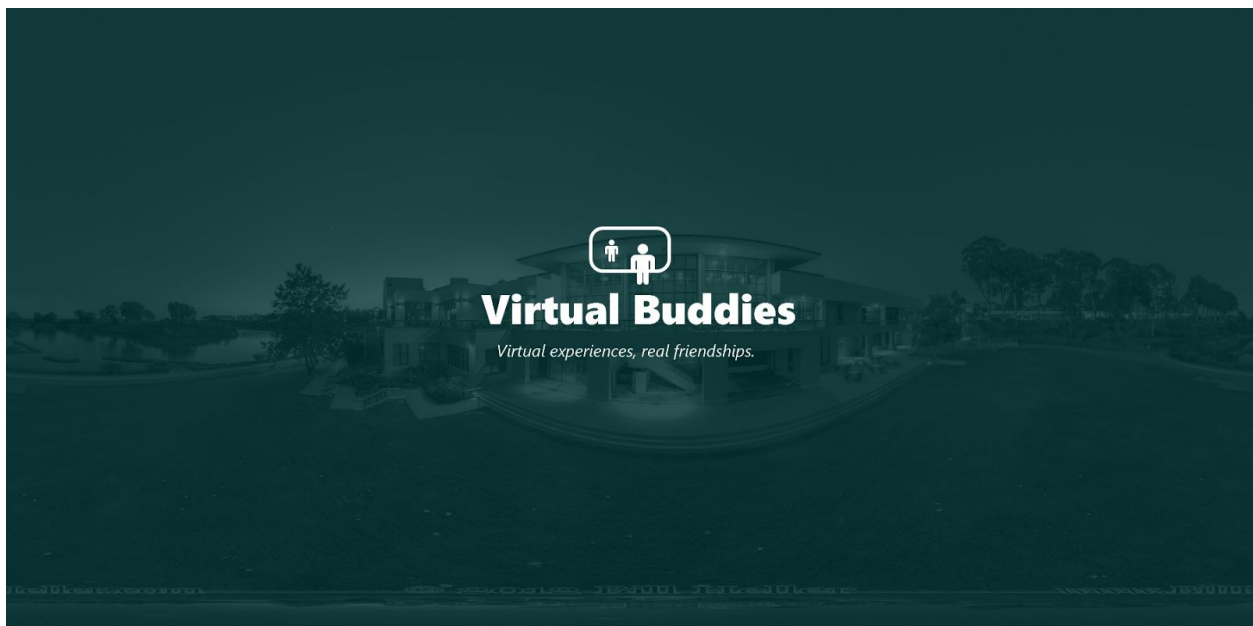

Figure 3.1: The welcome screen that appears when Sam loads the application.
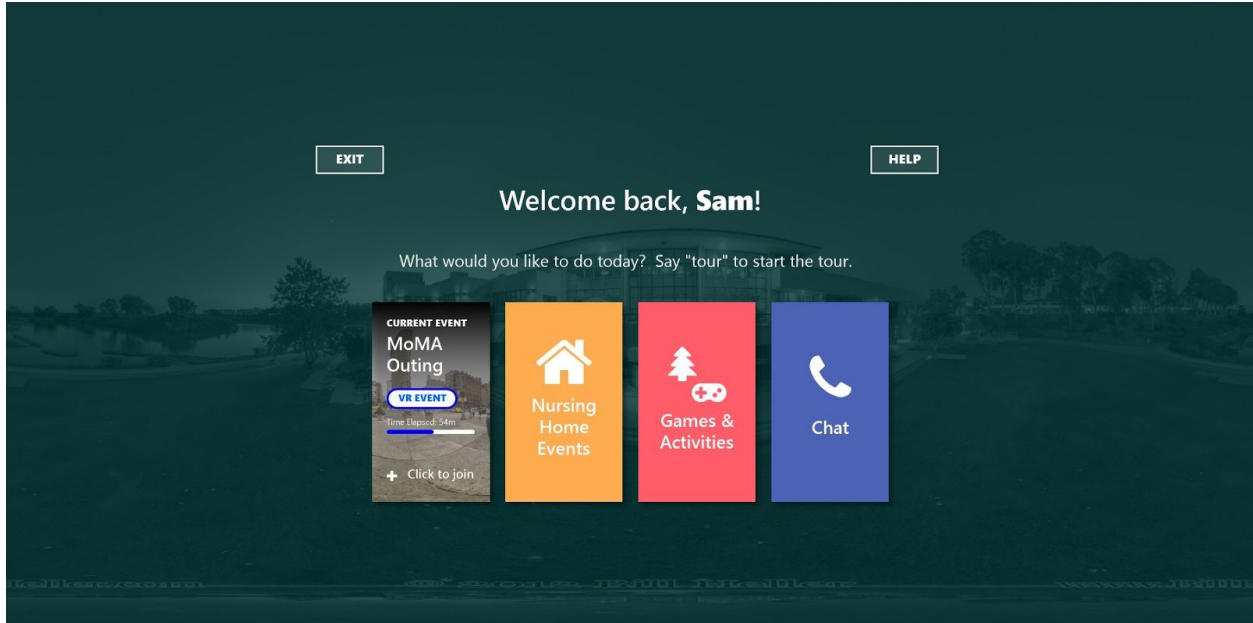
Figure 3.2: The first screen that appears when the application has loaded. Sam can look at and select whichever option appeals to him. He can also "Exit" if he wishes. In this scenario, Sam decides to look at and select "Games & Activities". This takes him to the next screen (Figure 3.3).
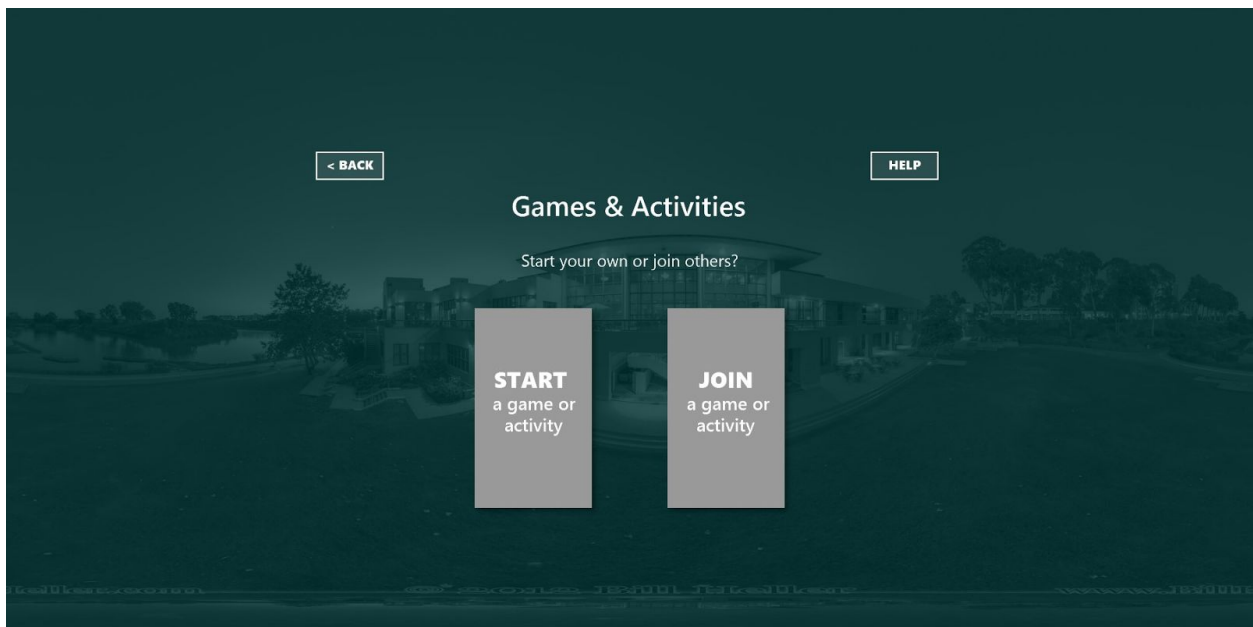

Figure 3.3: This screen contains a "Back" button if Sam wishes to return to the previous screen (Figure 3.2). The user is given a choice between starting an activity or joining an activity. Sam decides to look at and select the option to "Start a game or activity". This takes him to the next screen (Figure 3.4).
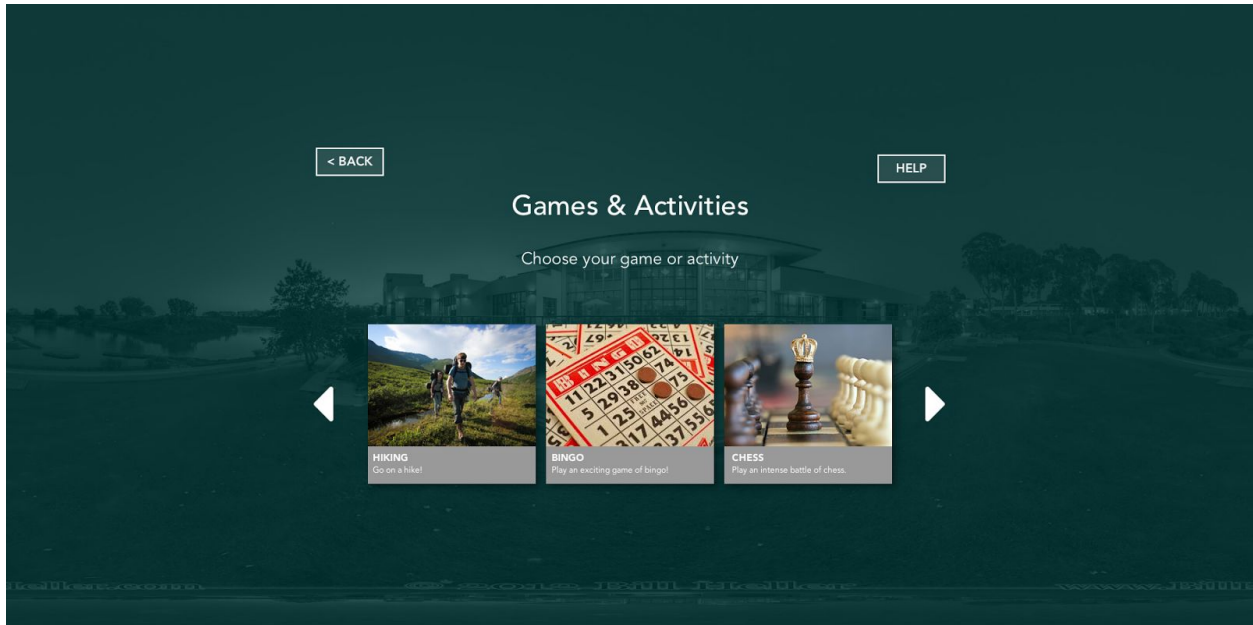
Figure 3.4: This screen has a "Back" button in case Sam wants to go back to the previous screen (Figure 3.3). It also has options for all games/activities he would like to host, with an image representing each activity. He can also scroll left or right to find different games/activities. Sam looks at and selects chess which takes him to the next screen (Figure 3.5).
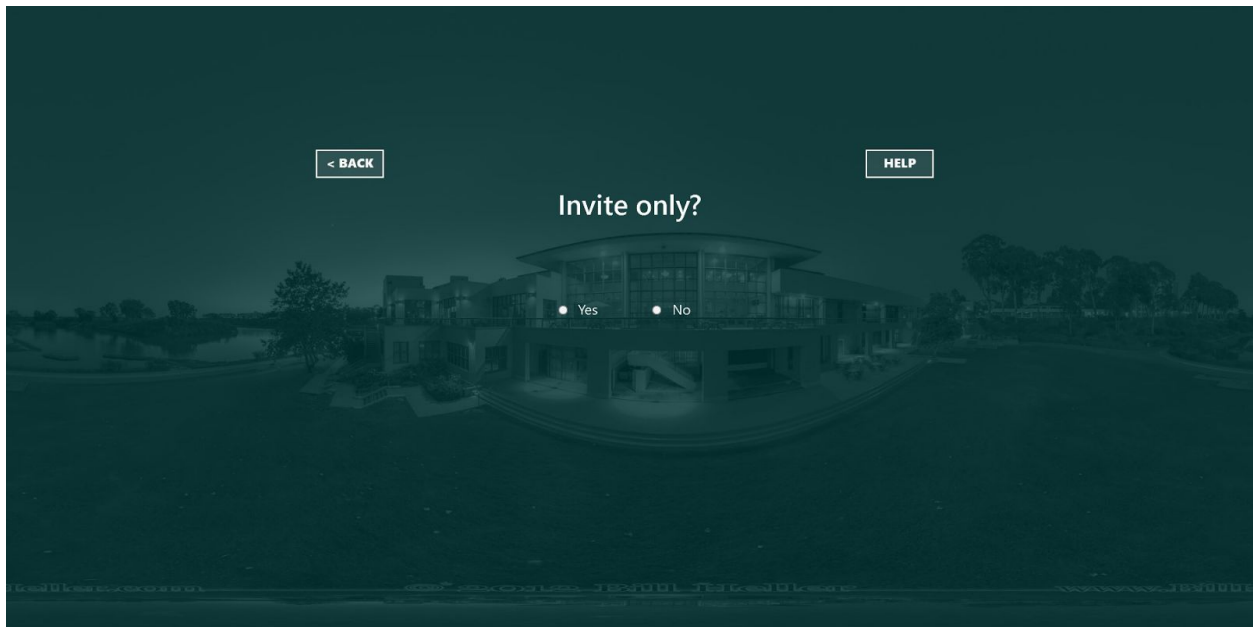

Figure 3.5: This screen also contains a "Back" button in case Sam wishes to return to the previous screen (Figure 3.4). The screen gives Sam the option to make his event invite only. Sam decides to make it invite only. He selects the "Yes" option which takes him to the next screen (Figure 3.6).
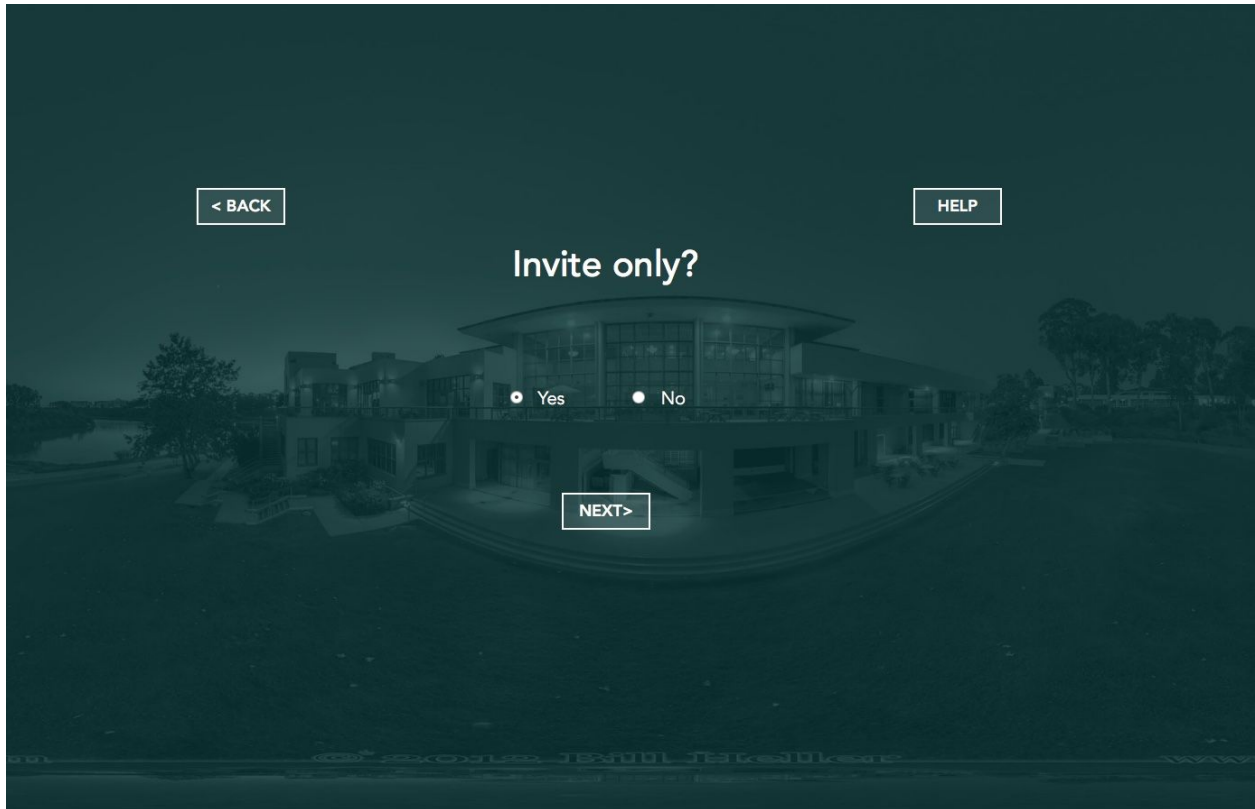
Figure 3.6: This screen contains a "Back" button in case Sam wants to return to the previous screen (Figure 3.5). The "Yes" option has now been selected and a "Next" button appears, allowing Sam to continue to the next screen(Figure 3.7).
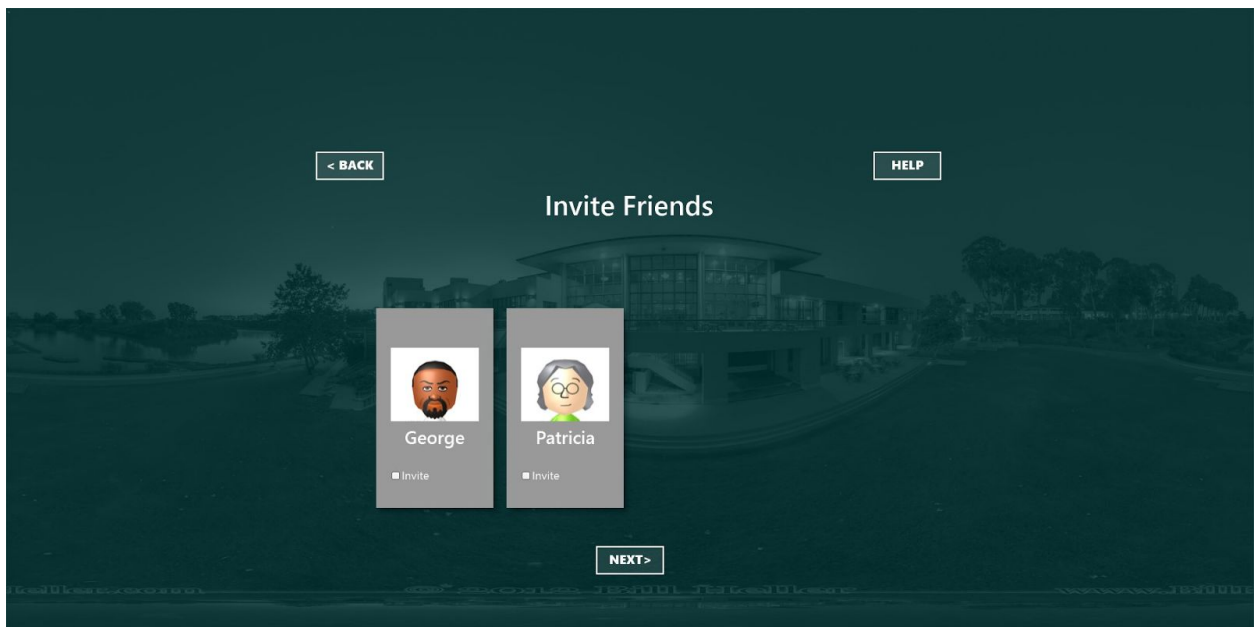

Figure 3.7: This screen contains a "Back" button in case Sam wants to return to the previous screen (Figure 3.6). Sam is taken to a screen containing a list of all the residents with a photo of them and checkboxes labeled "Invite". He scrolls through and finds Patricia before selecting her "Invite" box.
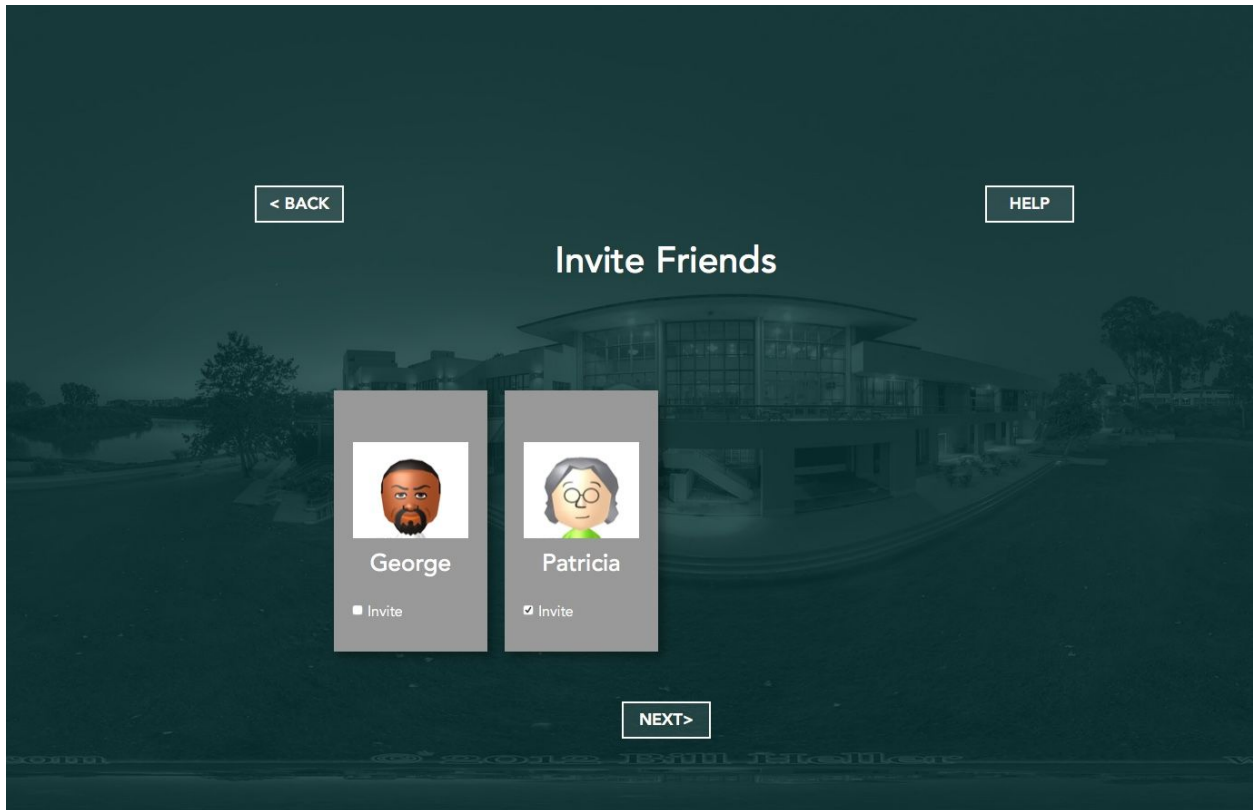
Figure 3.8: This screen contains a "Back"button in case Sam wants to return to the previous screen (Figure 3.7). A check mark appears on the Patricia's "Invite" checkbox. Sam sees that Patricia will be invited so he selects "Next" which takes him to the next screen.

Figure 3.9: This screen contains an "Back" button for when Sam is finished playing. He waits for Patricia to join.

Figure 3.10: Patricia joins the game and a message appears in the top right telling Sam so. Sam and Patricia enjoy a game of chess together!

Task 3: Video call Cheryl

This task is related to our broad goal of finding opportunities to connect with other residents and family. Users may self define conversation groups and video call the contacts within those groups.
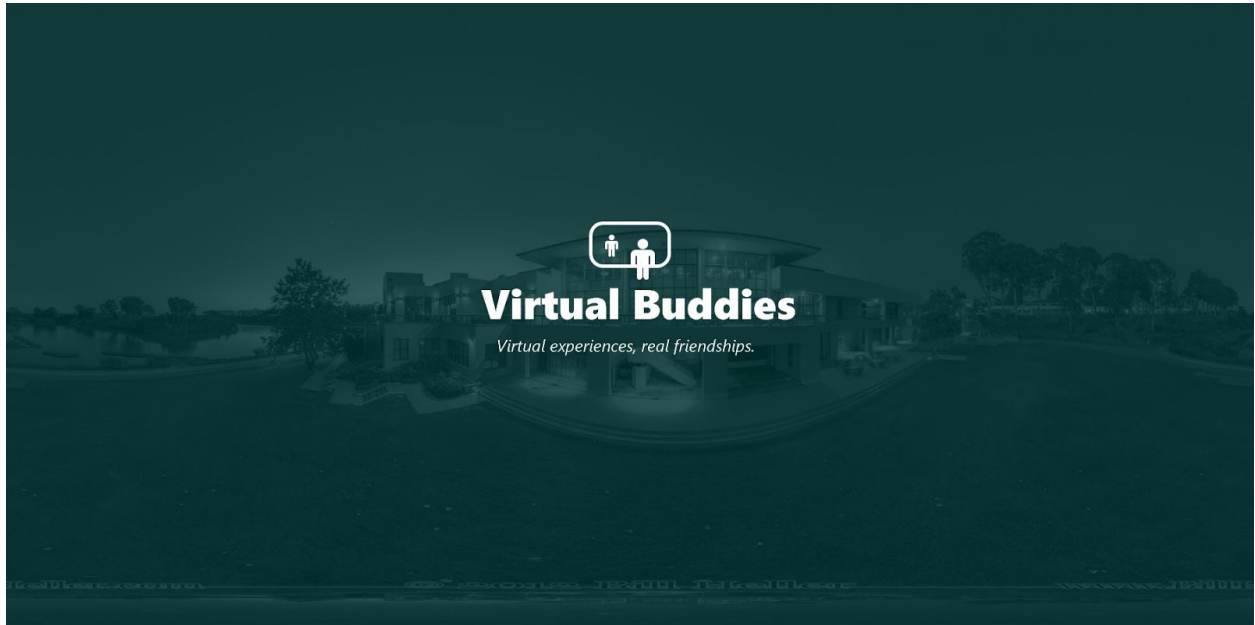

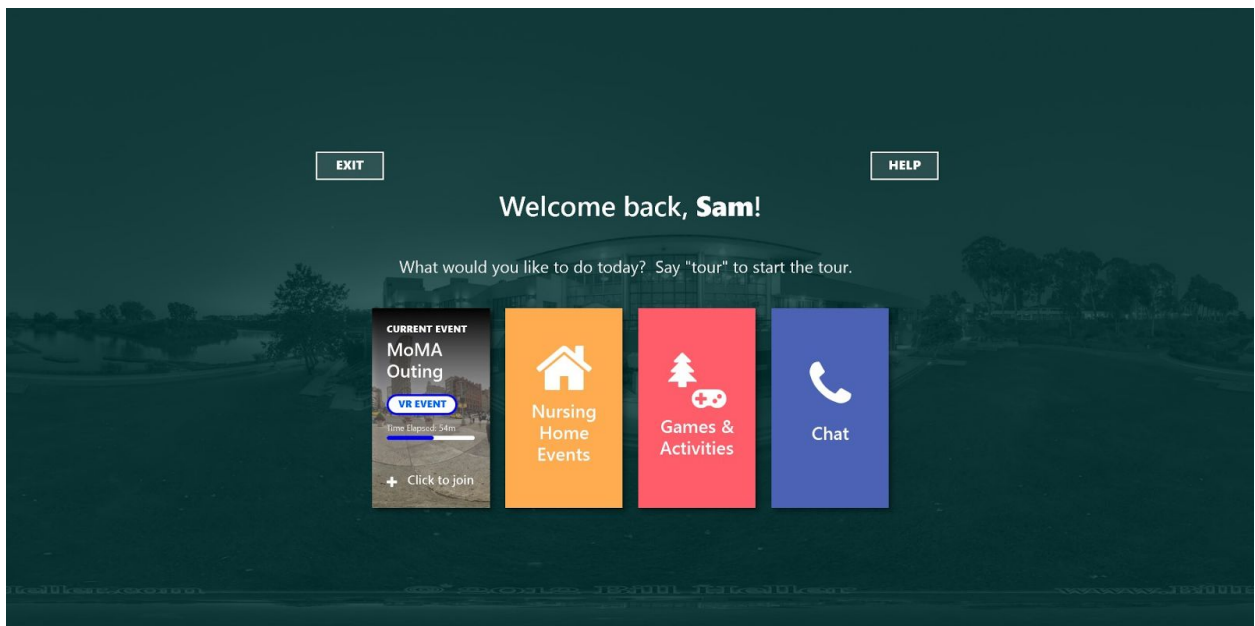Figure 4.1: The welcome screen that appears when Sam loads the application.

Figure 4.2: The first screen that appears when the application has loaded. Sam can look at and select whichever option appeals to him. In this scenario, Sam decides to select "Chat". This takes him to the next screen (Figure 4.3).
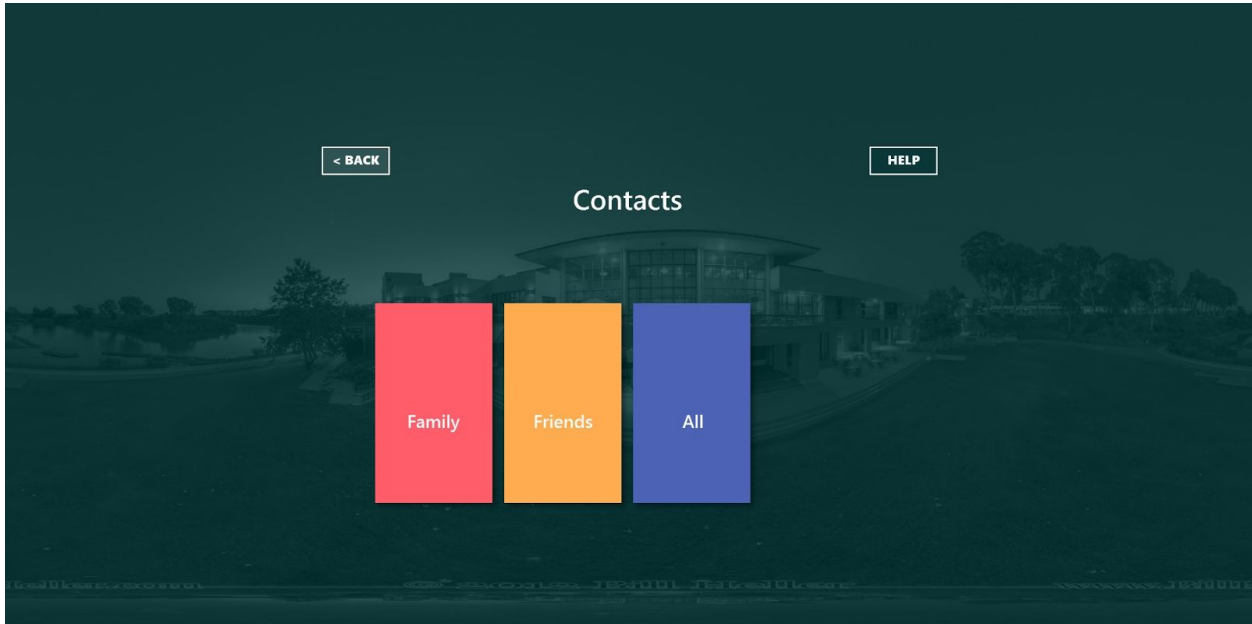

Figure 4.3: This screen shows Sam a list of his self-defined conversation groups. In this case, Sam has created *Family* and *Friends*. *All* shows up by default. Sam selects "Family" because Cheryl is his cousin.
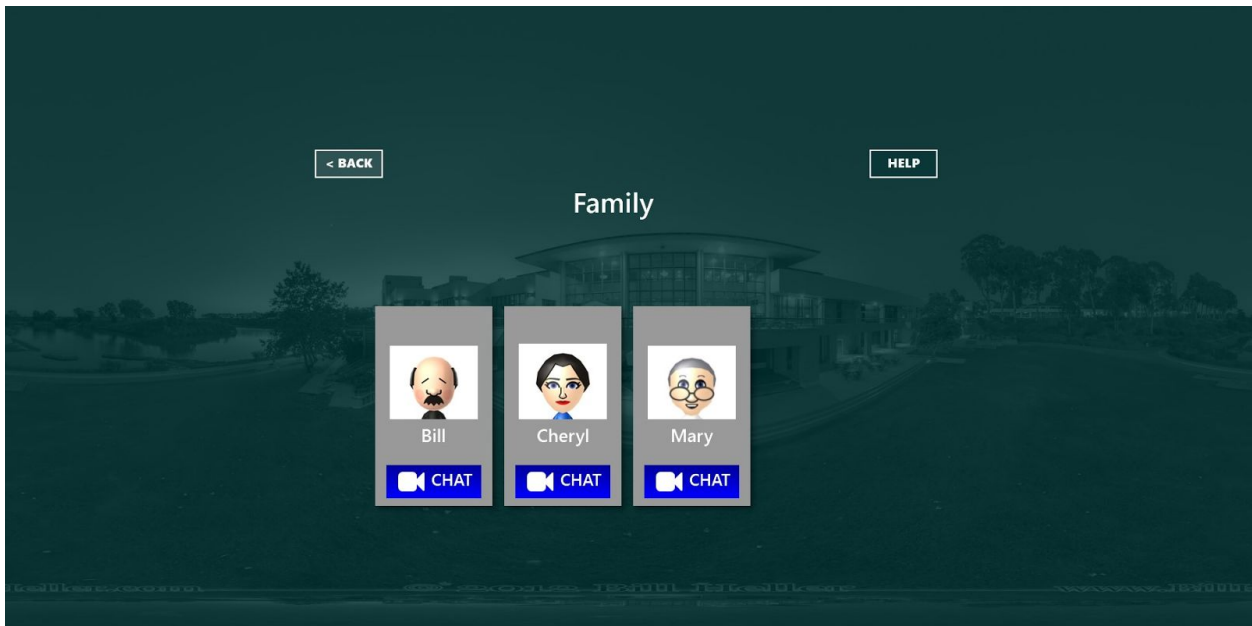

Figure 4.4: This screen shows Sam the contacts that he has added to his *Family* group. Each contact has a virtual avatar, the contact's name, and a "Chat" button that starts a video call. He finds Cheryl and selects the "Chat" option on her contact.
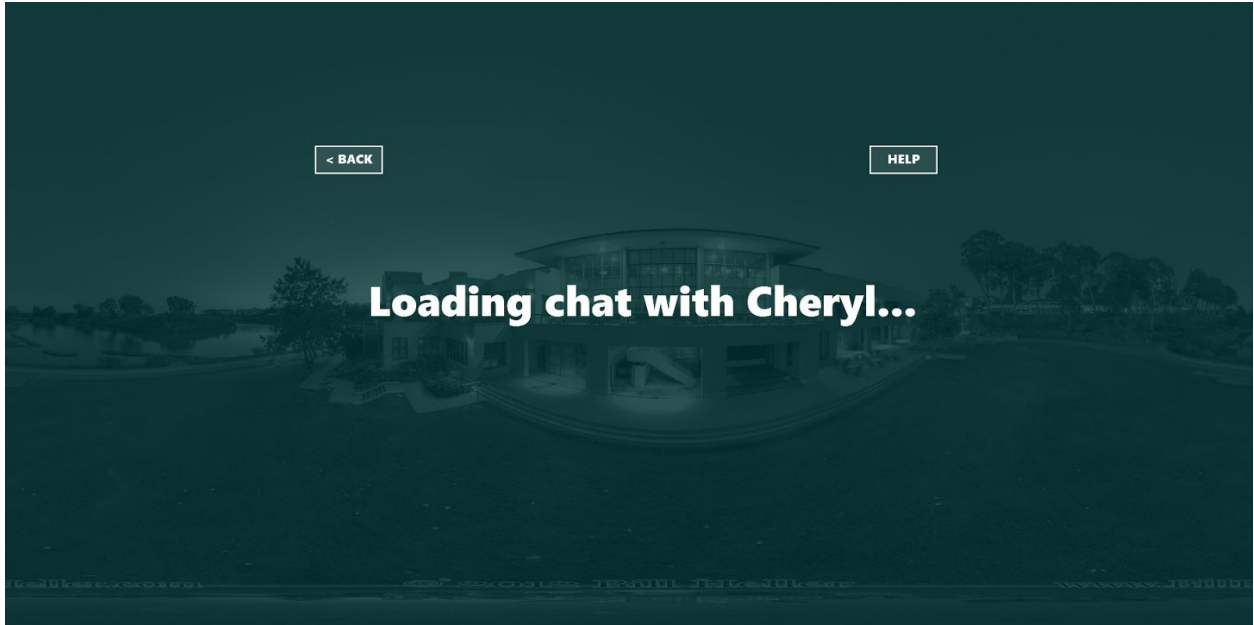In each box is a contact's picture, their name, and a *CHAT* button that starts a video call.

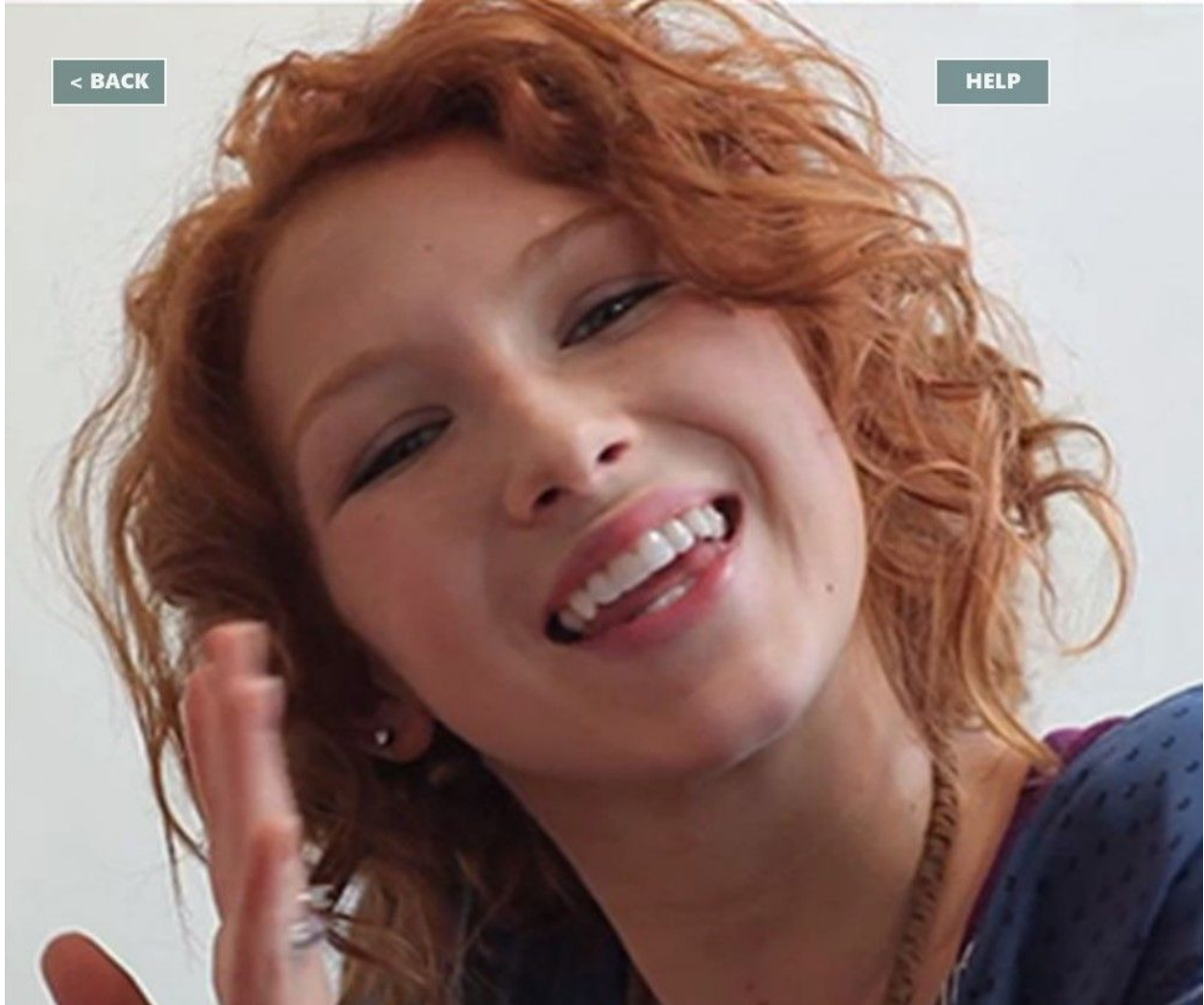Figure 4.5: The video call frame opens filled with a loading screen. Sam waits...

Figure 4.5: Once Cheryl has answered the call, Sam can now video chat with Cheryl.