CreationsAR
User Guide

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Starting Notes:

1. **CreationsAR must be run on a physical iPhone. Because not everyone has a mac to run the XCode project, you will download the app directly on your phone using the TestFlight app.**

Download Instruction:

This sections dictates how to download CreationsAR onto your iPhone

1. **Download the TestFlight app from the App Store. It is a free app by Apple, and is used for testing apps which are not yet released to the general app store.**

2. **Once TestFlight is downloaded, send this link to your phone (or open this document on your phone) and click on it. It will open Testflight to my app CreationAR's page: https://testflight.apple.com/join/7GtoWozz For more help, click this link on a computer and it will give TestFlight download and usage instructions.**

3. **Press "Install" and wait for the app to download**

4. **The app should now appear on your phone and you can click the icon to open:**
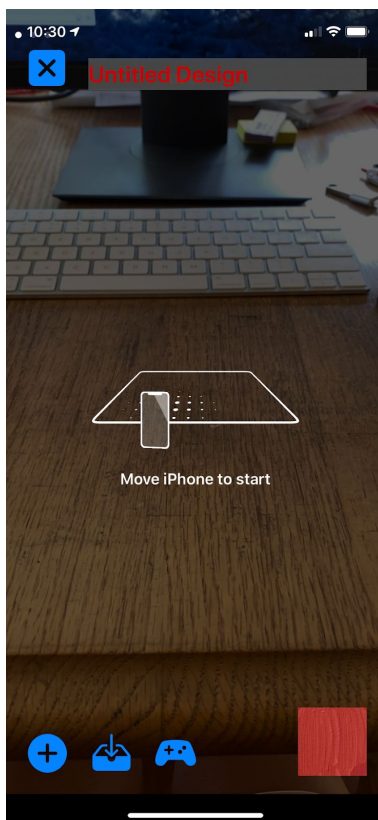

5. **Congrats, You are now running CreationsAR!**

App User Guide:

How to utilize all functionality of CreationsAR

1. When the app first opens, you will be asked to give permission to CreationsAR to use the camera. Grant this permission. If you do not, the app will not run and you need to go to the settings app to grant this permission.

2. You will be presented with this screen:

3. Follow the instructions in the middle of the screen while pointing the camera at a flat surface (Note: If there is significant glare or the surface is reflective, the app may not be able to find the surface). When the coaching overlay disappears, the app has found the surface you are pointing the camera at. You are now ready to begin building!
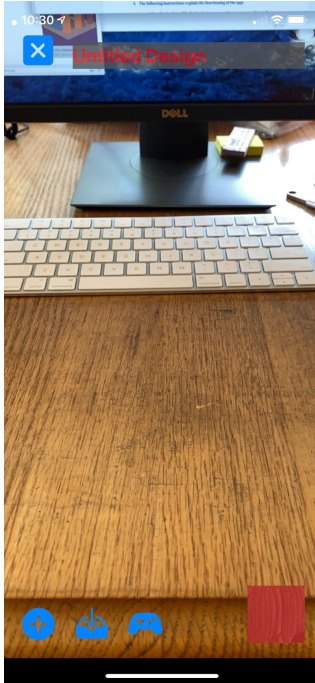
4. The following instructions explain the functioning of the app:

   a. In order to place a block, simply tap on your phone screen on the surface you are pointed at. To place more blocks, you can place elsewhere on the surface or on a face of another block to place adjacently.

   b. In order to delete a block, hold down on a block until it is deleted. Warning: If you do not then lift up your finger, more blocks will keep being deleted behind.

c. To change which block texture you are placing, tap on the texture box in the bottom right. This will open a new window where you can select from many materials. When you click on one, it will be selected and you will be taken back to the main screen. If you change your mind, swipe down from the top to leave.

d. To clear your workspace of all blocks, press the X in the top left corner. You will be asked whether you want to save the design. If you choose to save and the design is not yet named, provide a name to save the design under.

e. **To save a design without deleting, press the bucket icon near the bottom right. If you have not yet saved this design, this will prompt you for a name to save under. Otherwise, the name will turn green in the top bar and it is saved. This name will be red again when the model has been modified and you have unsaved changes.**
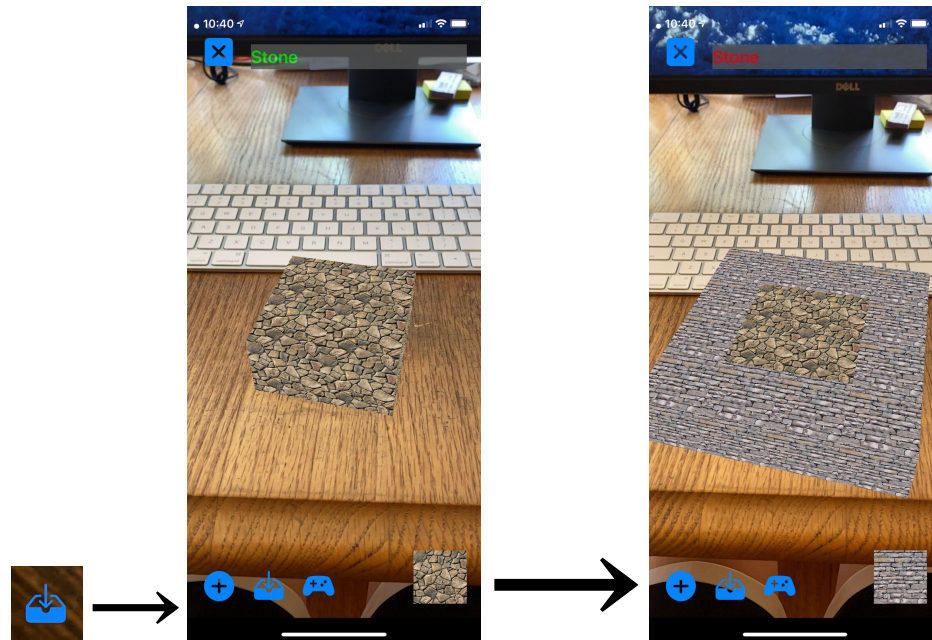
f. **To view and load your saved designs, press the plus icon in the bottom left. This will open up a menu.**

i. **Instructions for the Saved Designs Menu:**
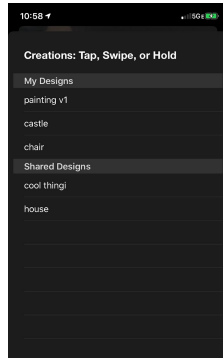
ii. **To leave this menu without performing an action, swipe down from the top of the screen.**

iii. **There are two categories of designs: "My Designs" and "Shared Designs"**

   1. **All of the designs you have created and saved will be in the "My Designs" category.**

   2. **All of the designs that were sent to you by friends will be in the "Shared Designs" category (More on sharing designs later: see subsection 'vi')**

iv. **To open a saved design, simply click on the name and you will be brought back to the home page. Your selected texture will now be a plus icon. Press on any surface in the same way as placing a block, and the design will be put into your workspace.**

v. **To delete a design, swipe to the left on the name and a delete option will appear. Press delete and the design will be gone. This action cannot be undone.**
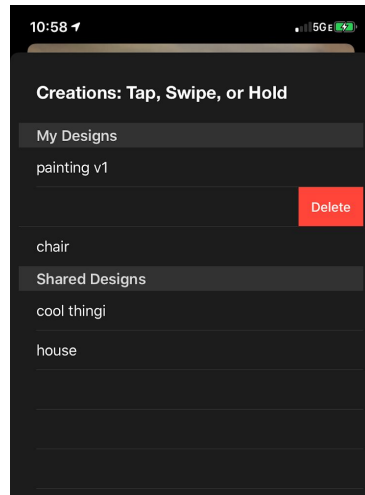
vi. **In order to share a design, long press on the name of the design you wish to share. The apple share sheet will appear.**
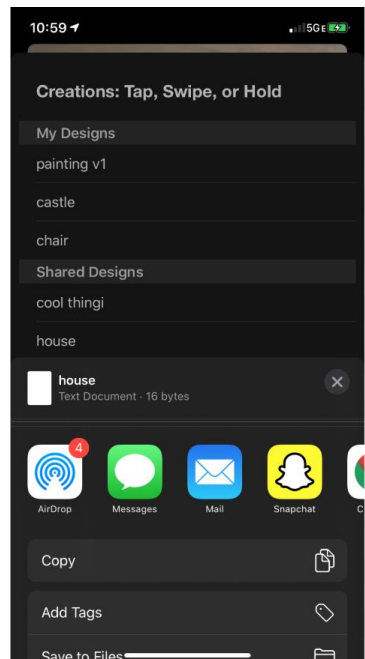
vii. **Airdrop, Text, Mail, etc your design to friends. See the last main section to find out how to receive designs.**

g. **Snake Game Instructions: To Start Snake, tap on the game controller icon at the bottom of your screen. See the next main section for game instructions.**

The Snake Game:

How to play SnakeAR!

1. **After you have pressed the Game Controller, if you still have blocks in your build space, you will see the warning message below. Click OK, then press the X button in the top left of the screen to save and clear your build space. After that, press the game controller again to start the game.**
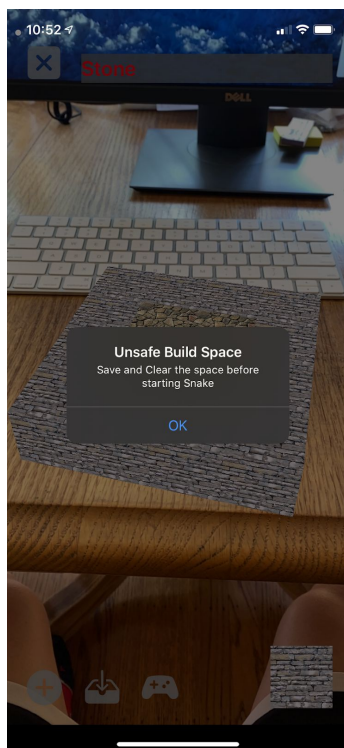
2. **Once you have started the game, take a step back and hold your phone up (facing directly forward). You will see a few things:**
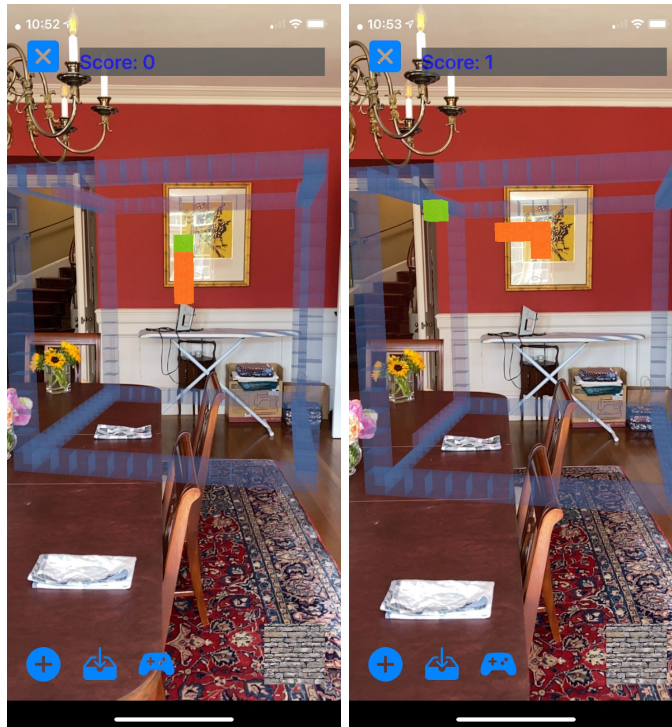

a. **First, there will be a blue semi-transparency cube outline. These are the borders for the play space.**

b. **Second, there will be a line of orange blocks moving upwards slowly. This is the snake that you control.**

c. **Third, there will be a green block which your snake is moving directly towards. This is the target block. You are trying to hit all green blocks. Once you hit it, it will move somewhere else in the play space. You will also grow in length by one block, and at certain lengths you will speed up.**

d. **Fourth, You will see a score in blue in the top bar. This tracks the number of green target cubes you have hit this round.**

3. **How to control the snake:**

   a. **The snake can go in six directions relative to the play space. Straight Up, Down, Left, Right, Forward, and Backwards. Each of these directions are aligned with the x, y, and z axis of the play space.**

   b. **All controls use the device orientation to make the controls as intuitive as possible. This will be explained more in subsection d.**

   c. **General Controls:**

      i. **Swiping: Swipe right, left, up, or down on your screen to make the snake go in that direction.**

      ii. **Taping: Tap quickly to make the snake come towards you.**

      iii. **Holding: Hold your finger down to make the snake turn away from you.**

      iv. **Note: The snake cannot turn immediately back into itself.**

   d. **Controls in 3D space:**

      i. **All swiping, tapping, and holding cause the snake to move in the direction you physically swiped within the room you are in.**

      ii. **Here are a few example to help explain this better:**

         1. **If you hold your phone in the portrait orientation, you see the snake on the screen, and you swipe to the left (towards the wall to your left), the snake will move left as it appears on the screen. If you then turn your phone to the landscape orientation and swipe up on your phone (towards the ceiling), the snake will move up towards the ceiling. Both of these swipes are the same direction relative to the phone, but they caused the snake to move in different directions. This is because you are controlling**

the snake relative to the room you are in, not relative to your phone.
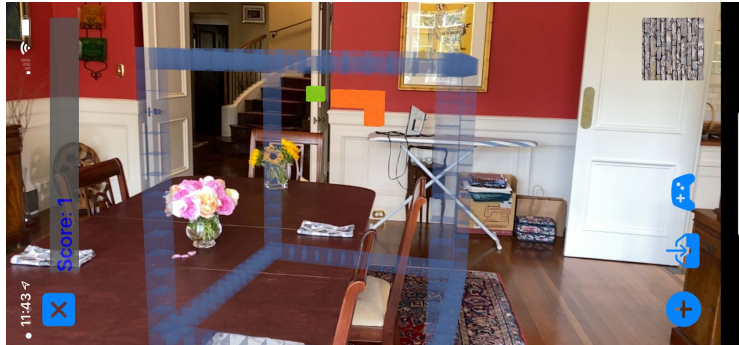
2. This logic holds even as you walk around your room. If you are looking at the play space from one side of your room and you swipe right, you make the snake go towards the wall to your right. If you then physically walk to the other side of the play space cube on the other side of the room you are in and turn around, you are now seeing the other side of the snake. If you then point your phone camera at the snake and swipe right, the snake will move in the direction you physically swiped: towards the wall that is now to your right after you moved. Once again, both of these were the same swipe relative to your phone (swiping right on the screen), but they caused the snake to turn in opposite directions.

e. The best way to learn how the game works is to play!

f.   You lose when you either hit the side of the play space cube or you run into yourself. These will become harder and harder to avoid as you get longer and move faster as you hit more target blocks.

g.   To help you know where the edge of the play space cube is located, a red wall will fade in on the cube face as you approach the wall. If you hit this red face, you lose.
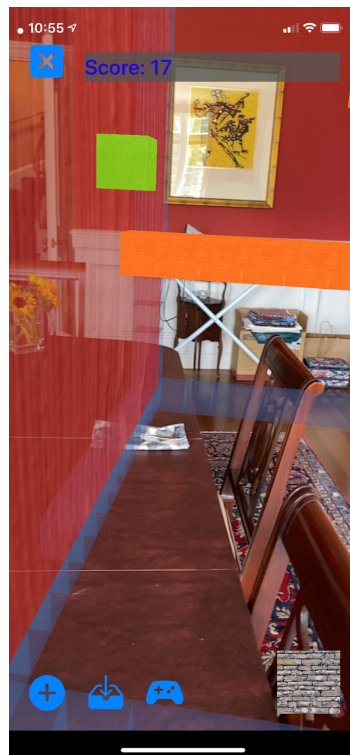
h.   When you lose, the whole game space, your snake, and the target all disappear. You are back in the normal build space. To play again, press the game controller icon again.

     i.   **As you get longer, you can bend yourself into some fun shapes. Remember, you have three dimensions of space to avoid hitting your tail. Try not to limit yourself to staying on 2D planes.**
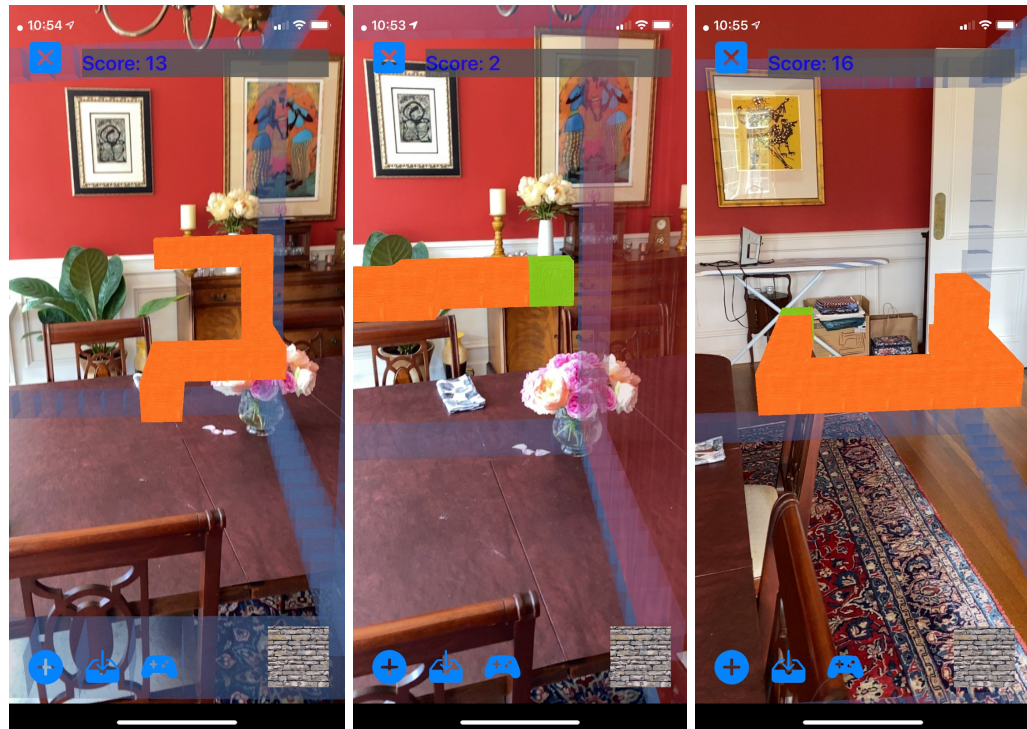
Open a Shared Design:

How to open a shared design file with CreationsAR

1. If the file was airdropped to you, click Accept then select CreationsAR from the menu

2. If the file was texted or emailed to you, click on the file then press the share arrow in your mail or messaging app and select "Copy to CreationsAR"

3. **Both options above, or any other method of opening files, will bring you into the CreationsAR app, automatically save the design, and ask you to place the item into your workspace.**

Thank You for Using

CreationsAR!!!