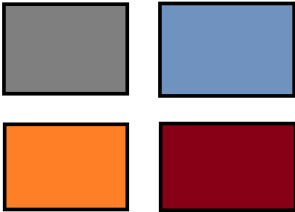
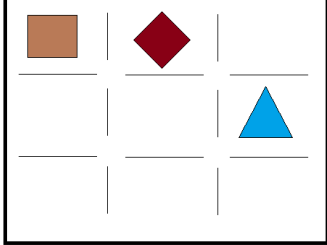


# Final Project

The idea for my final project was to build a tool to personalize and customized 3D spaces in VR, but using a 2D tool. Something that I've been reading a lot about in the VR space has been that because VR is such an alien technology for some people, it is finding difficulty integration into the market. Additionally, the limitations of mobile VR mean it does not give the user as much control as high-end VR – but high-end VR is too expensive and difficult to operate for the average computer user.

As a result, I wanted a tool that would be simple and intuitive for an everyday computer consumer, and one which does not require any high-end tech, but can still be viewed through a mobile VR headset.

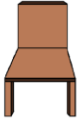
Below is my initial storyboard prototype for how I wanted it to look like.

1. Select your environment	2. Add objects /elements	3. Map your space									
	<table border="1"><tr><td><input checked="" type="checkbox"/> [name]</td><td><input type="checkbox"/> [name]</td><td><input checked="" type="checkbox"/> [name]</td></tr><tr><td><input type="checkbox"/> [name]</td><td><input type="checkbox"/> [name]</td><td><input type="checkbox"/> [name]</td></tr><tr><td><input type="checkbox"/> [name]</td><td><input type="checkbox"/> [name]</td><td><input checked="" type="checkbox"/> [name]</td></tr></table>	<input checked="" type="checkbox"/> [name]	<input type="checkbox"/> [name]	<input checked="" type="checkbox"/> [name]	<input type="checkbox"/> [name]	<input type="checkbox"/> [name]	<input type="checkbox"/> [name]	<input type="checkbox"/> [name]	<input type="checkbox"/> [name]	<input checked="" type="checkbox"/> [name]	
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user would choose the general theme of the space, e.g. bedroom, lounge, etc.	choose which objects to add to the space (e.g. closet, chair, couch)	drag and drop objects into location "zones" on a map of the space									

One of the tasks I was not sure how to figure out was how to link between the 2D and the 3D world. I spent a lot of time attempting it, yet it would keep placing my instance of the 2D world inside the VR world, and not on top of it. After some experimenting, I finally made it to work, and put both interfaces in one script, where the 3D world is only run after the user has made the selections, and takes the variables from the inputs the user has given the 2D interface. Below are some screenshots form the process and end result.

**Choose a furniture item:**

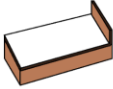
1. Chair



2. Desk



3. Bed



4. Couch



Place your furniture in the desired part of your room



**Add another item to  
your room**

**Finalize your space  
and go to VR**