

CS435/535 Computer Graphics
Spring 2019
Project #2

Interaction

Due: Feb. 8 by 11:59 pm

Problem: Use WebGL to implement an online program called *BuildingBlocks* that allows a user to build something meaningful from the following six building blocks.

1. Red disk
2. Green disk
3. Blue disk
4. Magenta square
5. Cyan square
6. Yellow square

The program starts with a canvas with no building blocks. A user can *add*, *move* and *delete* building blocks on the canvas.

- To add a building block, a user needs to first hold down the corresponding number key. Then click the left mouse button at the target location. For example, to add a magenta square, click the left mouse button while the '4' key is held down. The new building block will be centered at the cursor position at the time of clicking.
- To move a building block, use the left mouse button to drag it.
- To delete a building block, hold down the SHIFT key and then click the left mouse button at the building block.

Create a directory called *project2* under your cs435 home directory. Move into that directory and create two files: *buildingblocks.html* and *buildingblocks.js* to complete this project.

Submission Requirements:

- Make sure the *project2* directory contain the two files: *buildingblocks.html* and *buildingblocks.js*. (Here we assume the *Common* directory is located in the same directory as the *project2* directory, and you do not need to submit the *Common* directory.)
- The title of *buildingblocks.html* should contain your name, CS435 or CS535, Project #2.
- The *buildingblocks.js* file should contain the following information at the beginning: CS435 or CS535, Project #2, your name, a description of the program. Add other necessary comments whenever a part of the code is not obvious.
- Compress the *project2* directory into *project2.zip* and submit the compressed file as an attachment on Blackboard.