Lesson 12
Add-ons

Pre-Lesson Ideas:

Post-Lesson Ideas:

Reflection Questions

1)   What does mouseX and mouseY represent?

Possible Answers: mouseX represents the x coordinate of your mouse at any given point in time. mouseY represents the y coordinate of your mouse at any given time.

2)   How could we use this concept of mouseX and mouseY to make other interactive projects?

Possible Answers: You could have a character follow your mouse along a path.

Further Development

*   Have students make their canvas more detailed. Let them be creative and use the skills they have learned to make unique painting tools.

*   The color could change by time or the size if the paintbrush could shrink and grow. Here is a great place to let their imaginations run wild.

Lesson 12
Set Up

Virtual Canvas

* Learn how to use mouse interactions to create interactive applications.

Project Goal:

1) Generally, what should the project look like?

A canvas that paints on a color wherever your mouse goes in the screen.

2) What skill(s) are being learned/ practiced?

3) What concept are students gaining insight on?

Programming/ Math Vocabulary:

Interactions -

Lesson 12

Outline

Introduction to Topic:

"Today we are going to be using mouse interactions to create a simple painting application.

Project Breakdown:

1) Draw a shape

2) use mouseX and mouseY to define the x and y values of the shape

3) Problem solve and trouble shoot errors

Example Projects/ Basic Source Code:

```
draw = function( )  {
fill(200, 100, 50);
ellipse( mouseX, mouseY, 50, 50);
}
```

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Troubleshooting

Common Mistakes and Confusions:

1)   not capitalizing X and Y in the commands mouseX and mouseY

The computer will not know what you are referring to if you do no write the command correctly.

FAQ's:

1)   Why do we not need to declare variables for mouseX and mouse Y?

Those are commands that the computer already knows, defined by javaScript. It would make no sense to define them again.