

Lab 4

Task 4

- a. Get the code from <http://frend.skimtech.my/Lab/Lab4/Task4.html> , and evaluate and test the code.
- b. Getting the context of the canvas

- a. Add the following code:

```
var canvas = document.getElementById("myCanvas");  
var ctx = canvas.getContext('2d');
```

- i. What is the meaning of context in this case?

- c. Drawing a triangle to canvas

- a. Setup the fillStyle, strokeStyle and lineWidth.

```
ctx.fillStyle = '#f00';  
ctx.strokeStyle = '#000';  
ctx.lineWidth = 3;
```

- b. Describe the purpose of each method in (a)
- c. Put these codes into an appropriate function:

```
ctx.beginPath();  
ctx.moveTo(60, 240);  
ctx.lineTo(240, 240);  
ctx.lineTo(150, 60);  
ctx.closePath();  
ctx.fill();  
ctx.stroke();
```

- d. Test you code and evaluate the output
- e. Rearrange the position of coordinate and test your code.
- f. What is the use of moveTo methods above?

- d. a new rotate triangle function

- a. Set the new position of the new triangle at the middle of previous triangle

```
ctx.translate(canvas.width / 2, canvas.height / 2);  
ctx.rotate(Math.PI / 4);  
ctx.beginPath();
```

- b. Start drawing a new triangle using a new coordinate

```
ctx.moveTo(-90, 90);  
ctx.lineTo(90, 90);  
ctx.lineTo(0, -90);  
  
ctx.closePath();  
ctx.fill();  
ctx.stroke();
```

- c. Test and evaluate your result.
- d. You can press the rotate many times, and can have different triangle at different location, why it's happened?

e. Clear the canvas

a. Put this code to clear the canvas

```
ctx.clearRect(0, 0, canvas.width, canvas.height);
```

b. Can you write more better clear canvas , to clear all canvas