#### REPORT

## **Assignment-5**

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#### **Issues Faced:**

When creating the HTML canvas drawing application, I encountered several issues: Canvas: At first, I had difficulty getting the canvas to display on the webpage, but I was able to resolve this issue by following the HTML5 canvas tag documentation.

Code Bugs: I also encountered several bugs while writing the code for drawing different shapes, such as lines, circles, ellipses, and curves. For example, the midpoint line algorithm was not producing accurate results in certain cases.

User Input: Another issue was getting user input from the text boxes and passing them as arguments to the various drawing functions.

#### Lessons Learned:

Throughout the process of creating the application, I learned several valuable lessons: Research: Whenever I encountered a problem, I found that searching for solutions online was a great help in solving the issue.

Testing: I learned that testing my code thoroughly was critical to identifying and resolving bugs. Debugging: Debugging was a valuable skill I learned, and I improved at it over time by identifying patterns in the errors I encountered.

### For Extra Credit:

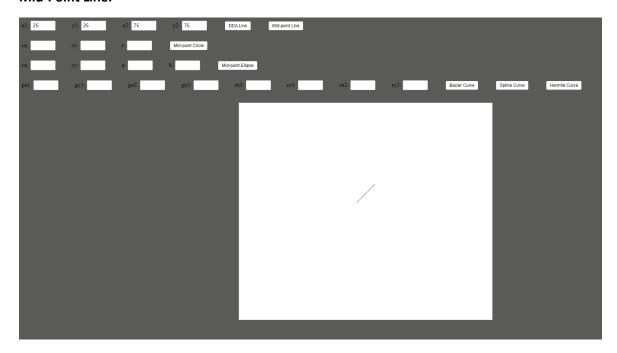
I have created an extra button 'Reset Values', which makes it little easier to reset all the values instead of heading to the refresh button on the top.

#### **Conclusion:**

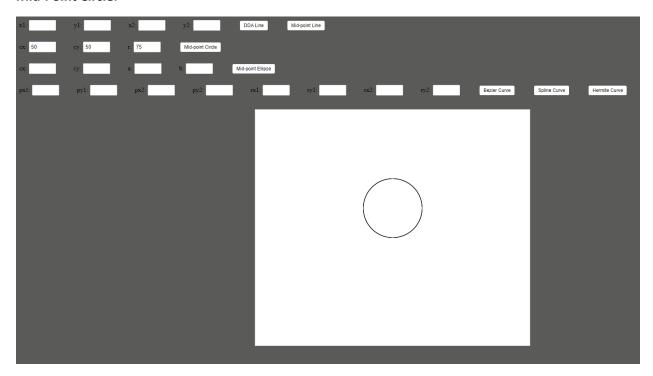
Creating this HTML canvas drawing application was a challenging but rewarding experience that taught me a lot about web development, problem-solving, and testing. I am proud of what I have accomplished and look forward to further improving the application in the future. Primitives are consistent in size and thickness when using canvas. Nevertheless, point generation techniques might result in heavier or bigger curves, depending on how many steps are involved.

## **Results:**

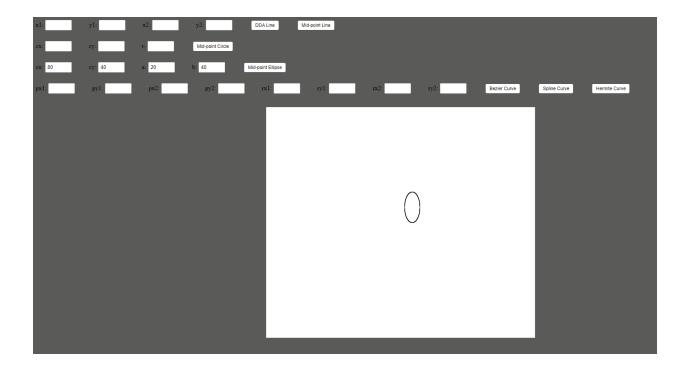
### **Mid-Point Line:**



### **Mid-Point Circle:**



# **Mid-Point Ellipsce:**



## **Bezier, Hermite, B-Spline Curves**:

