
Requirements:

Deadline from Wednesday 4/6 till Friday 6/6 [online with your TA]

Implement 2D drawing program which contains drop down list (menus) for the following requirements:

1. Change the background of window to be white
2. Try to change the shape of your window mouse
3. User must interact with window using mouse only
4. Try to make combination between your console and window
5. Give users the option to choose shape color before drawing from menu
6. Implement item to clear screen from shapes
7. Implement save function for all data in screen
8. Implement load function to load data from files
9. Implement line algorithms [DDA, Midpoint and parametric]
10. Implement Circle algorithms [Direct, Polar, iterative Polar, midpoint and modified Midpoint]
11. Filling Circle with lines after taking filling quarter from user
12. Filling Circle with other circles after taking filling quarter from user
13. Filling Square with Hermit Curve [Vertical]
14. Filling Rectangle with Bezier Curve [horizontal]
15. Convex and Non-Convex Filling Algorithm
16. Recursive and Non-Recursive Flood Fill
17. Cardinal Spline Curve
18. Ellipse Algorithms [Direct, polar and midpoint]
19. Clipping algorithms using Rectangle as Clipping Window to clip [Point, Line, Polygon]
20. Clipping algorithms using Square as Clipping Window to clip [Point, Line]

For students only who missed delivering any task in lab [2 marks]

- Clipping algorithms using circle as a Clipping Window to clip [Point, Line]

Rules:

- Submission will be online in the break before Eid vacation (Wednesday 4th of June - Friday 6th of June)
- No late submission.
- **-10 for copies**
- Groups from 3 to 5 students
- Be ready to be asked about each function.
- For any question, please contact directly to TA in your lab time