TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIỀN ĐHQG - TPHCM



Khoa công nghệ thông tin Môn: Đồ hoạ máy tính

BÁO CÁO LAB03

PAINT APPLICATION

Giáo viên hướng dẫn: Phạm Thanh Tùng

Nguyễn Mạnh Hùng

Lý Quốc Ngọc

Lóp: 20CLC01

Sinh viên thực hiện: Phùng Nghĩa Phúc – 20127284

TP.Hồ Chí Minh, ngày 25 tháng 11 năm 2022



MỤC LỤC

| LŲC | 1 |
|---------------|-------|
| THIÊU | 2 |
| Sinh viên | |
| Bảng đánh giá | 2 |
| | THIỆU |



GIỚI THIỆU

1. Sinh viên

Tên: Phùng Nghĩa Phúc MSV: 20127284

Lớp: 20CLC01 Môn: Đồ hoạ máy tính

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2. Bảng đánh giá

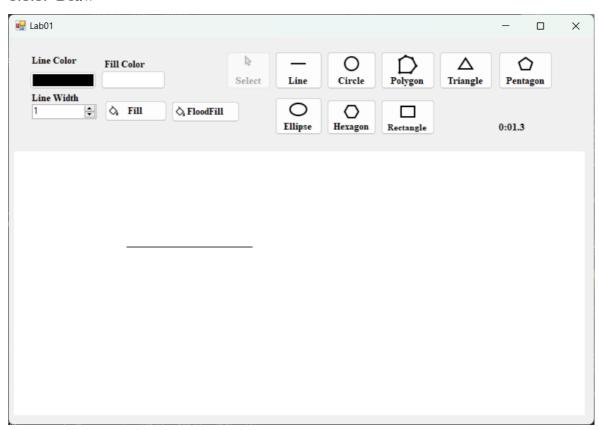
| No | Requirements | Completed |
|----|---|-----------|
| 1 | Implement an 2D affine transformation class on basis objects | 100% |
| a | Line segment, circle, ellipse, rectangle, polygon | 100% |
| b | Equilateral triangle, equilateral pentagon, equilateral hexagon | 100% |
| 2 | Manipulate on 2D objects | 100% |
| a | Move shapes by dragging mouse | 100% |
| b | Rotate shapes by dragging mouse on control points | 100% |
| c | Zoom shapes by dragging mouse on control points | 100% |
| 3 | Friendly interface, easy to use (refer to Paint or other popular graphic softwares) | 100% |
| 4 | Using OOP | 100% |



1. 2D affine transformation

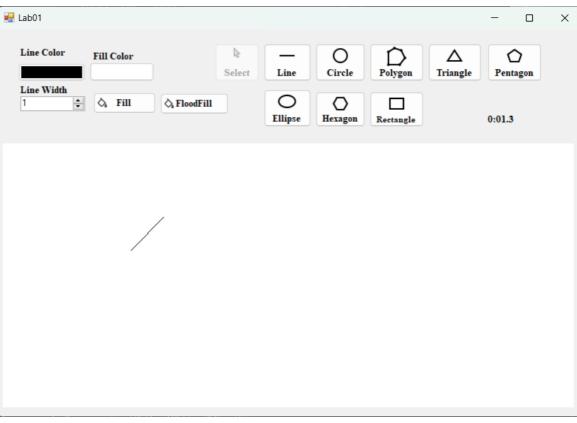
1.1. Line

1.1.1. Draw



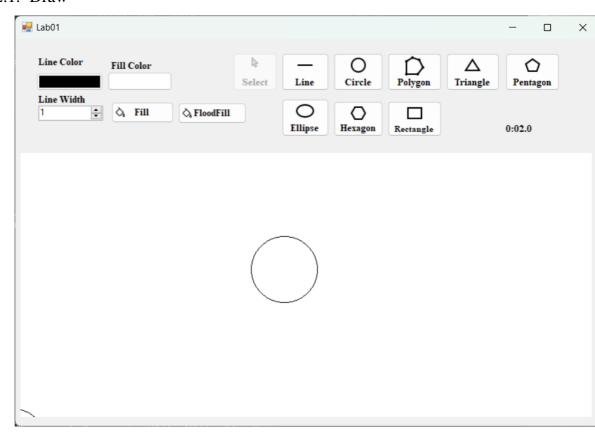
1.1.2. Transformation

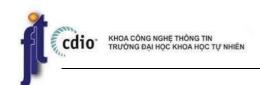




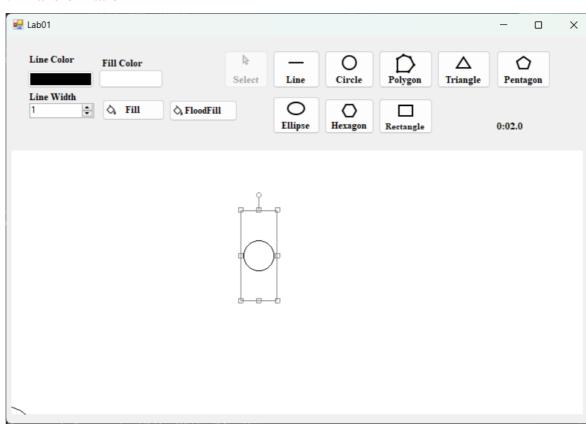
1.2. Circle

1.2.1. Draw



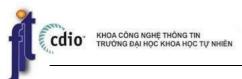


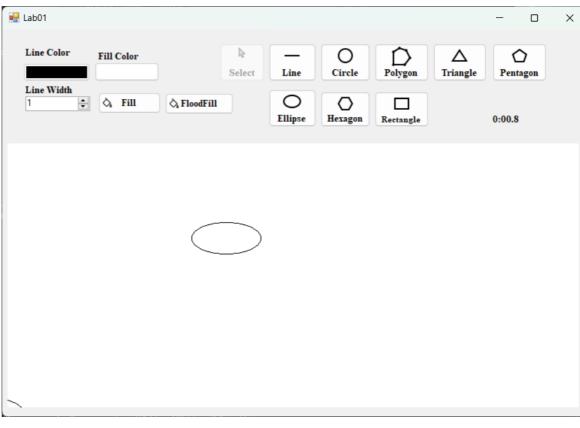
1.2.2. Transformation



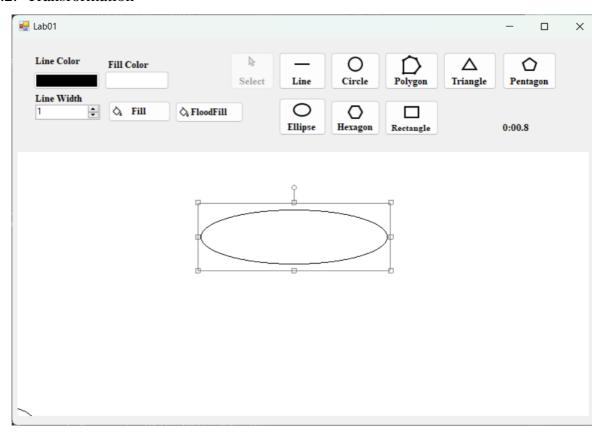
1.3. Ellipse

1.3.1. Draw





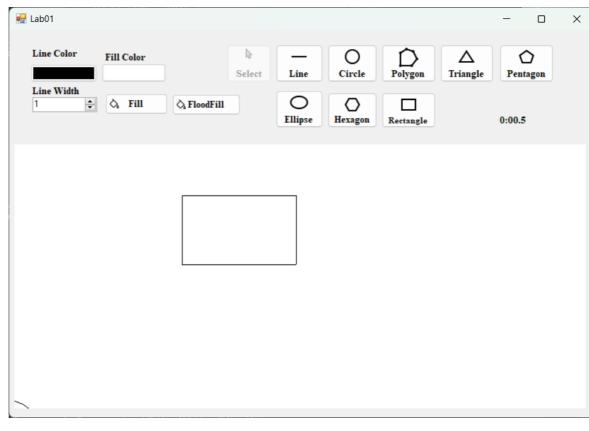
1.3.2. Transformation



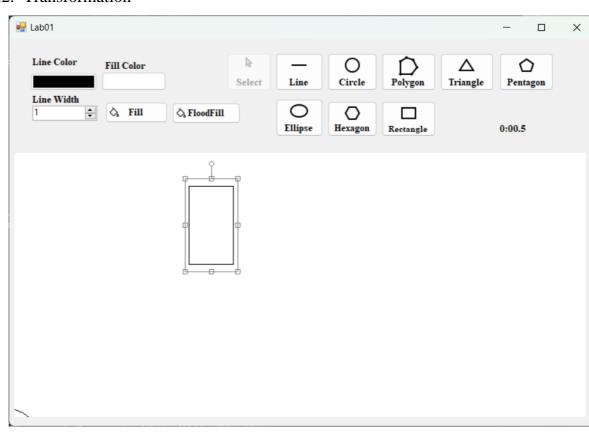
1.4. Rectangle



1.4.1. Draw



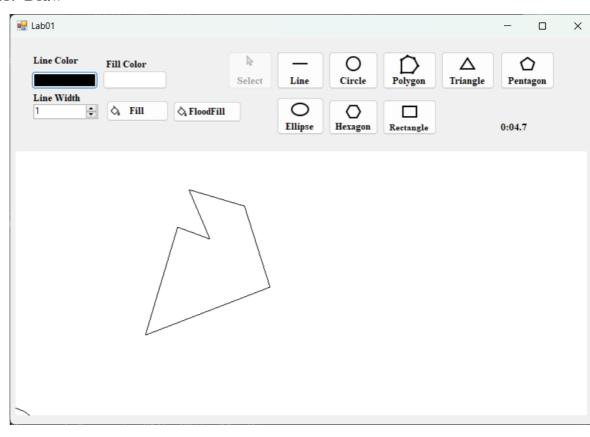
1.4.2. Transformation



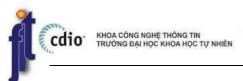


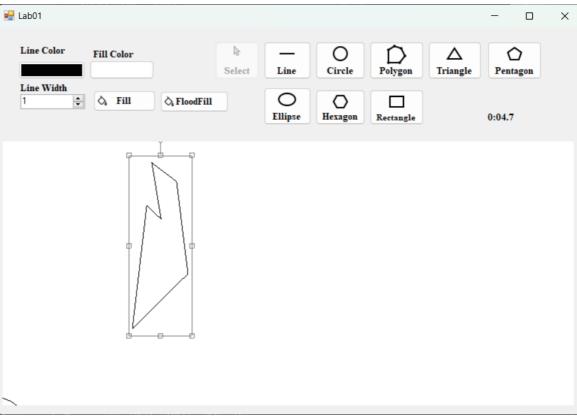
1.5. Polygon

1.5.1. Draw



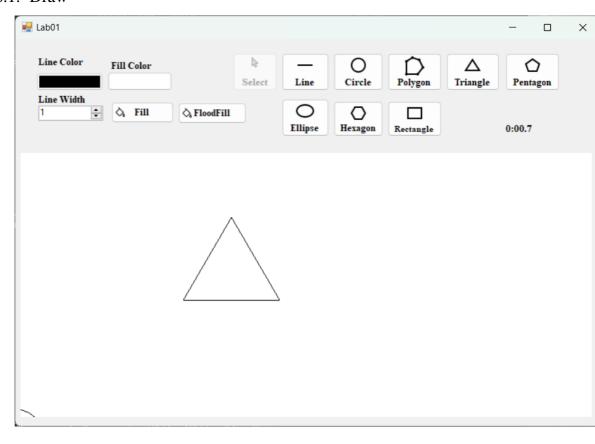
1.5.2. Transformation

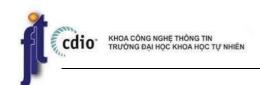




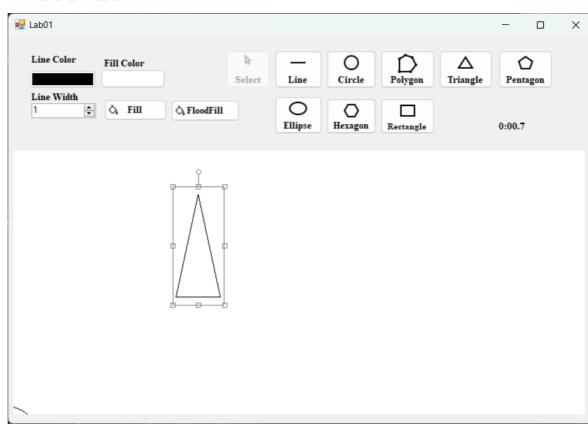
1.6. Equilateral triangle

1.6.1. Draw



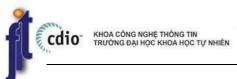


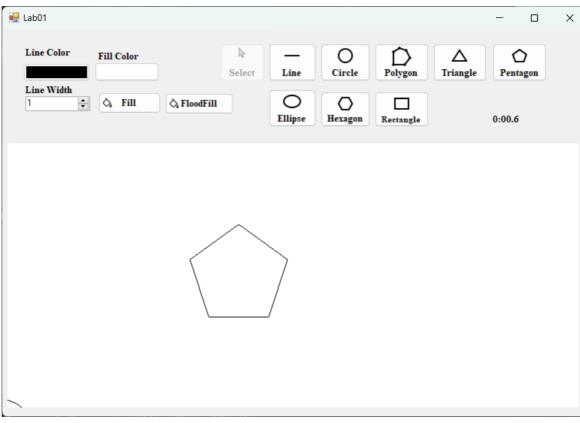
1.6.2. Transformation



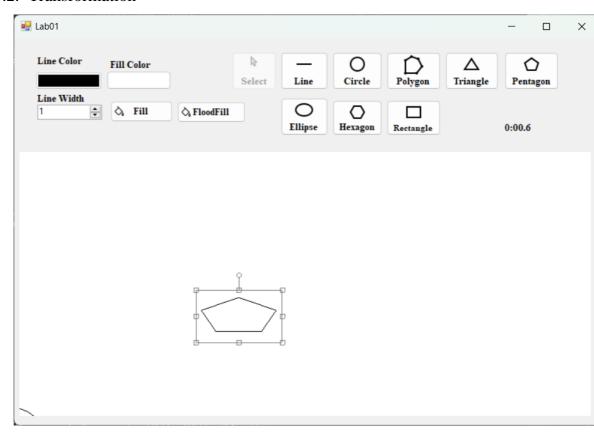
1.7. Equilateral pentagon

1.7.1. Draw





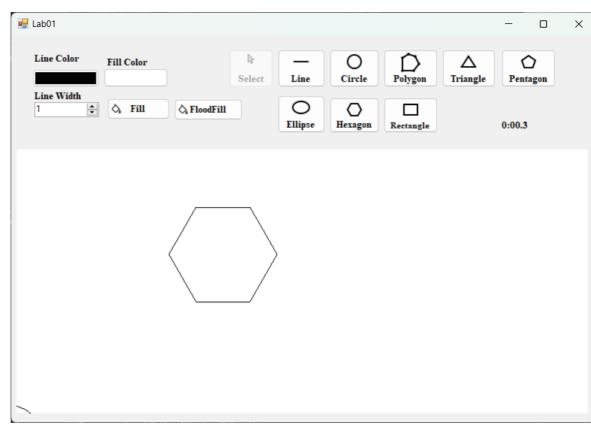
1.7.2. Transformation



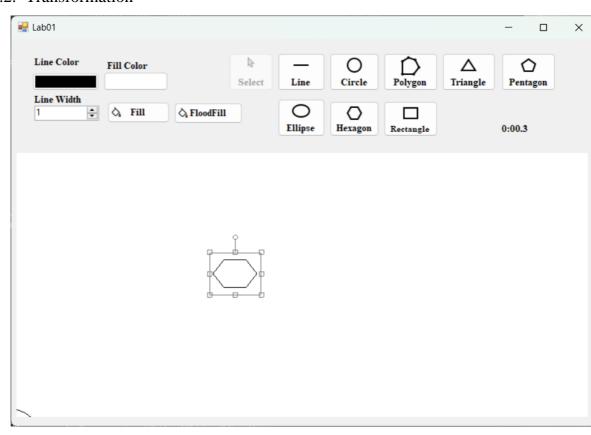
1.8. Equilateral hexagon



1.8.1. Draw



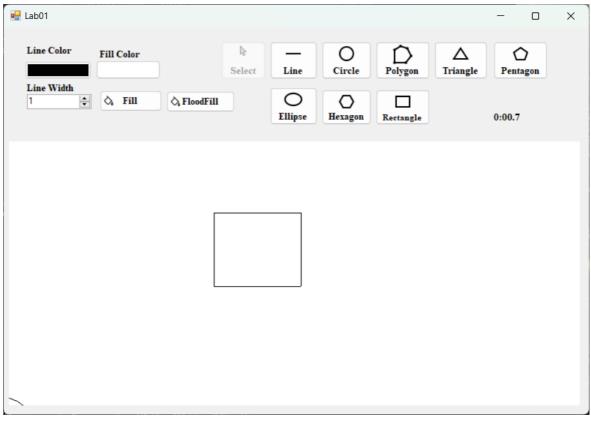
1.8.2. Transformation

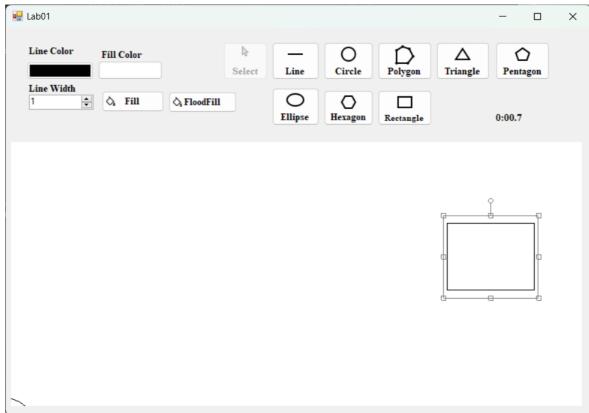




2. Manipulate on 2D objects

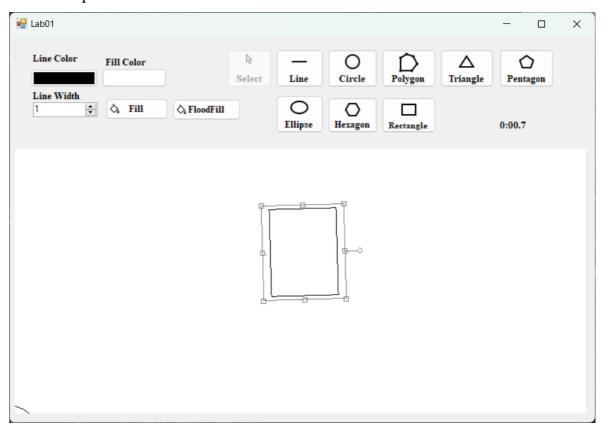
2.1. Move shapes







2.2. Rotate shapes



2.3. Zoom shapes

