

# WEB-BASED PAINT APPLICATION

## USING **ANGULAR** & **SPRING BOOT**

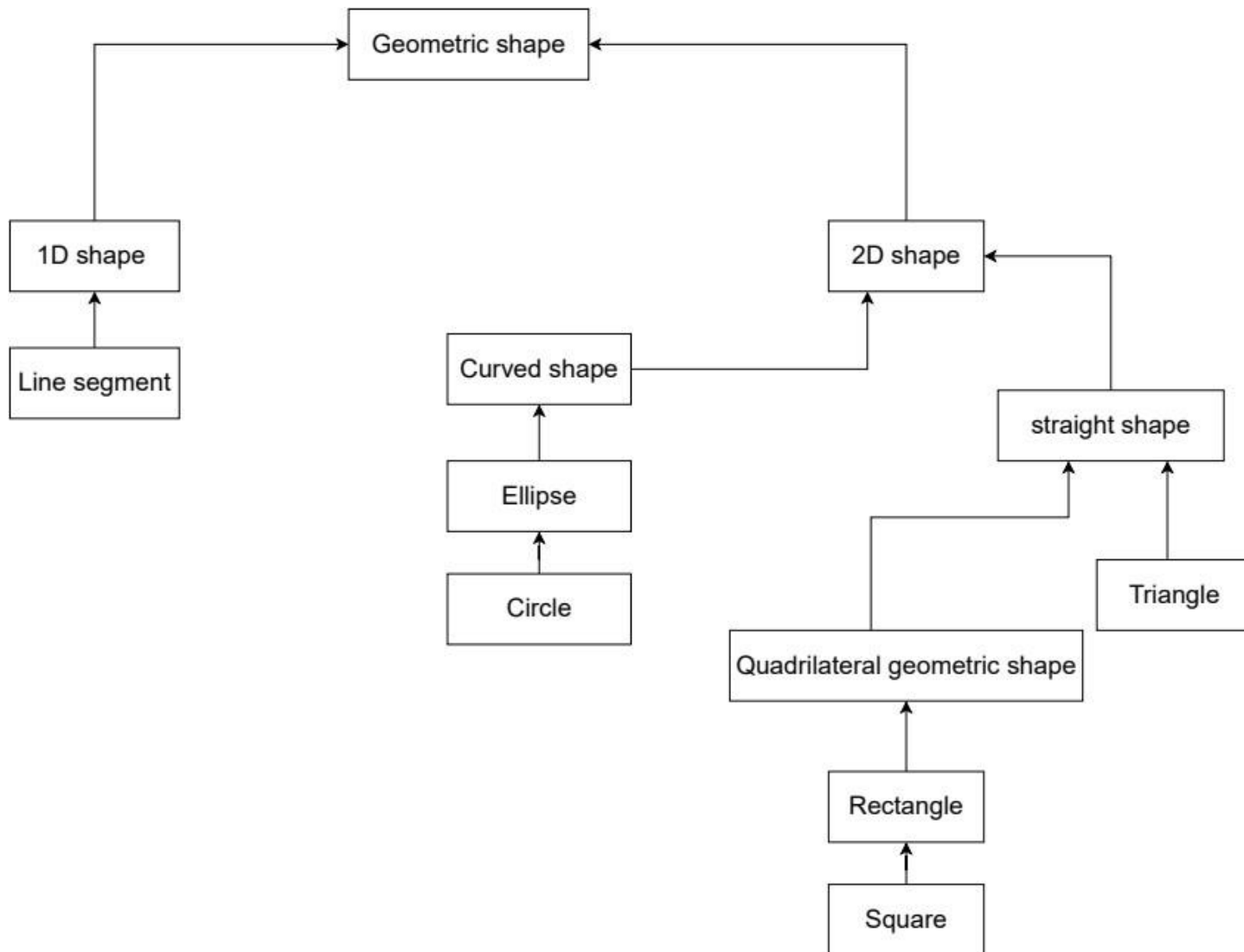
Name	ID
Ziad Reda Saad	19015717
Hassan Ahmed Hassan	20010486
Mohamed Adel Mahmoud	20011629
Youssef Emad Mohamed	20012281

### How to Run:

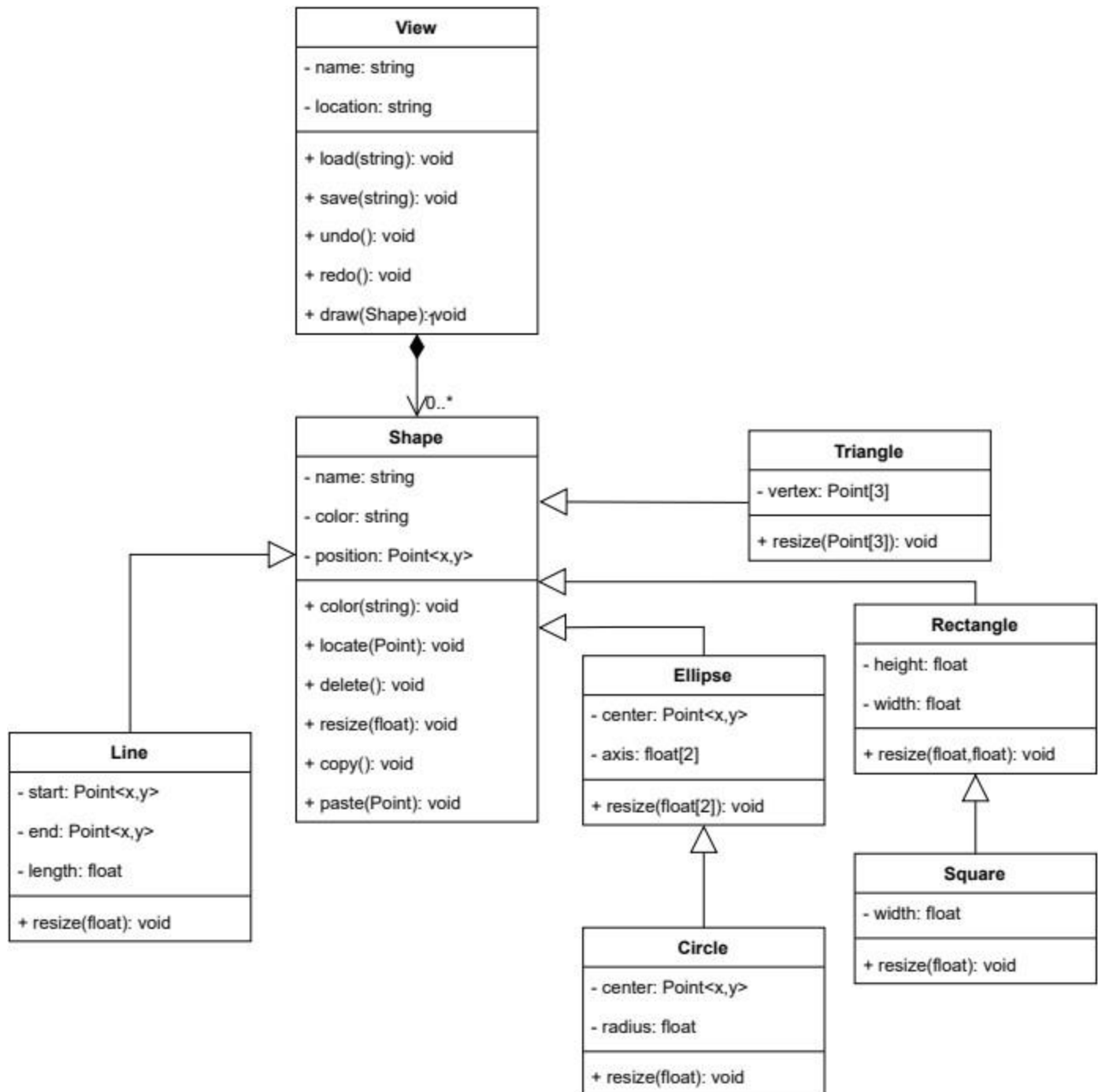
- Open Angular Folder and run command “npm install”
- Run the command “ng serve”.
- Run Spring Boot Application using IntelliJ or any other IDE.
- Go to “localhost:4200” in your browser.

# Class Diagram and Design pattern:

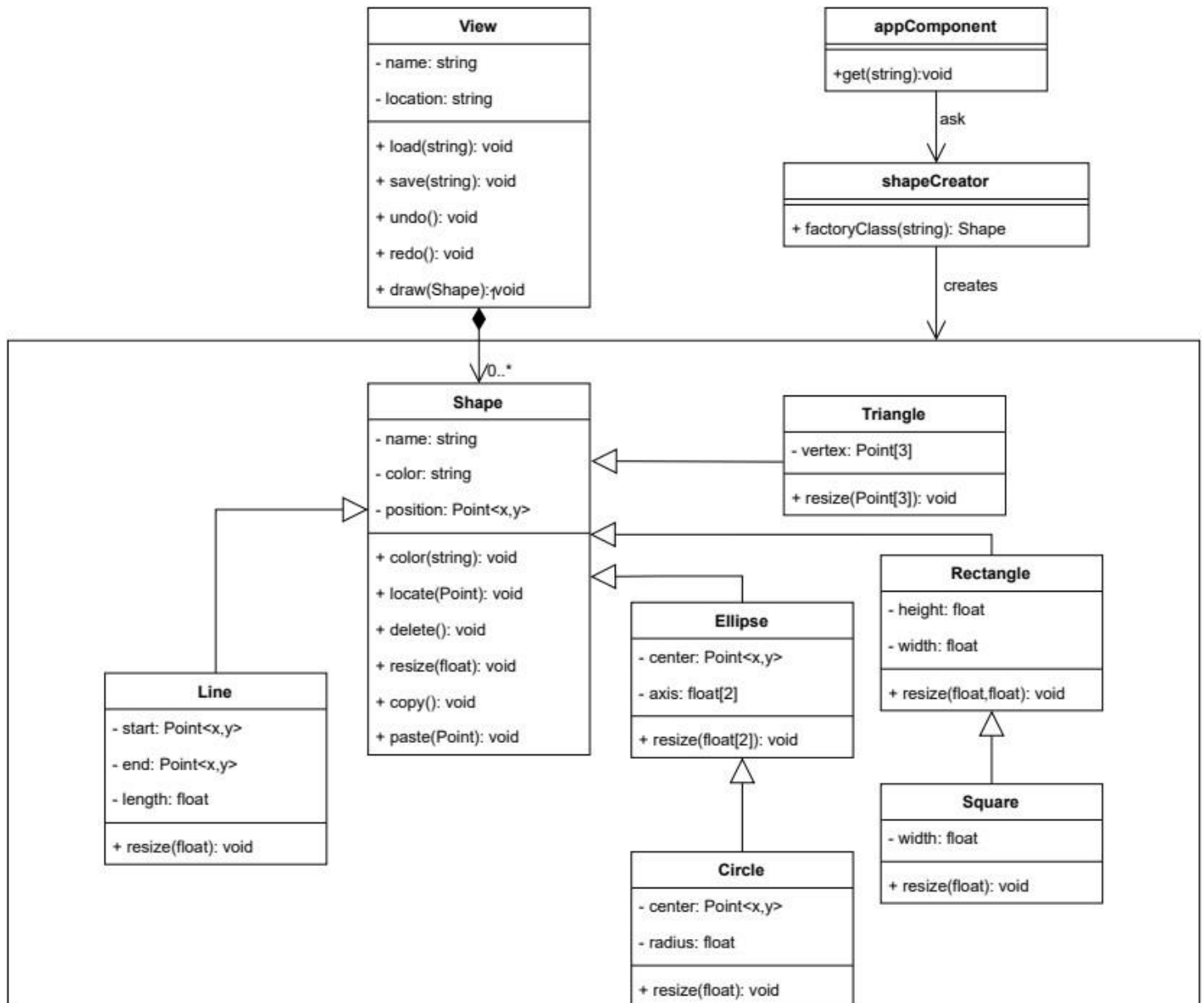
## Data model:



## Class diagram:



## Factory DP:



## Design patterns:

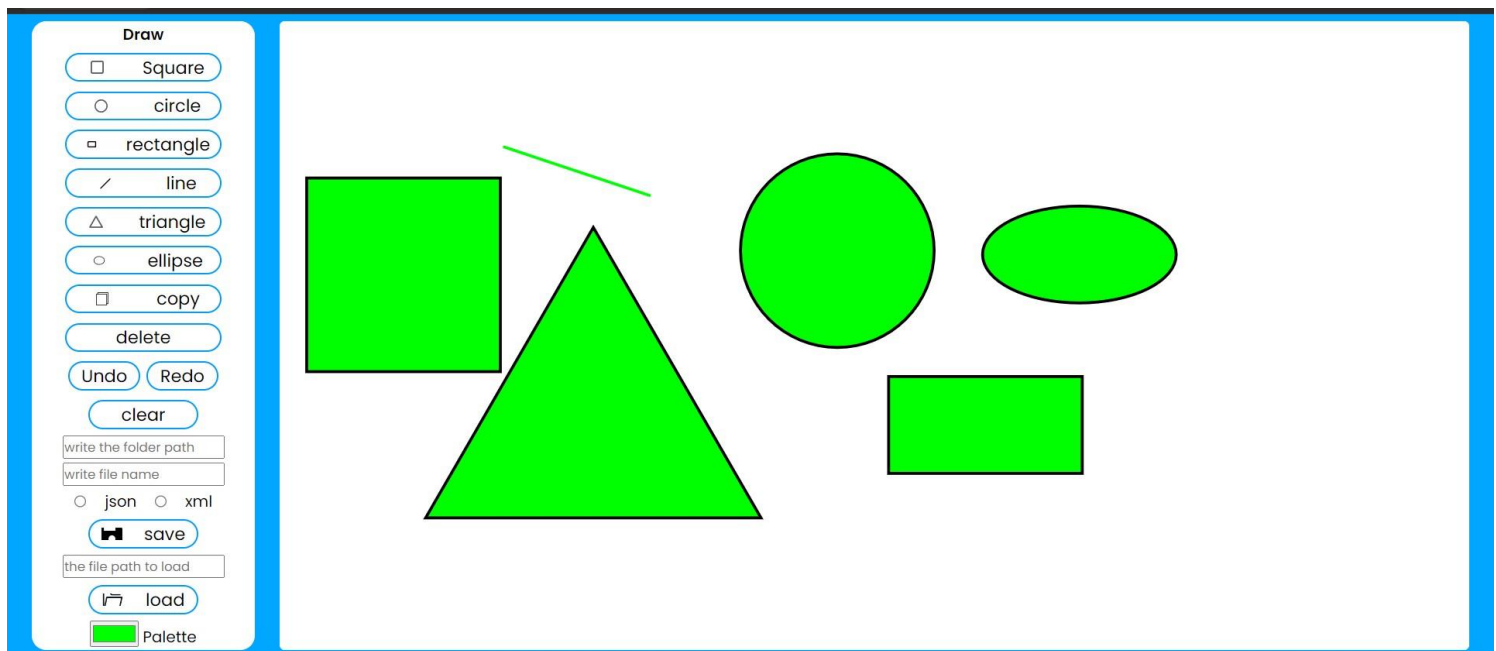
- Factory

- memento

## Sample Runs:



## Add new shapes:



Drag and color:

Draw

☐ Square

☐ circle

☐ rectangle

/ line

triangle

☐ ellipse

☐ copy

delete

Undo


Redo

clear


write the folder path


write file name

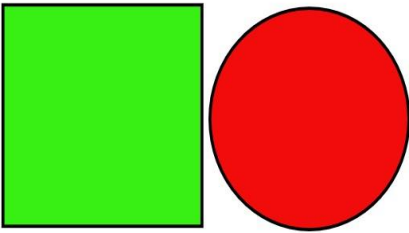
☐ json ☐ xml

 save

the file path to load

 load

 Palette



Copy:

Draw

☐ Square

☐ circle

☐ rectangle

/ line

triangle

☐ ellipse

☐ copy

delete

Undo


Redo

clear


write the folder path


write file name

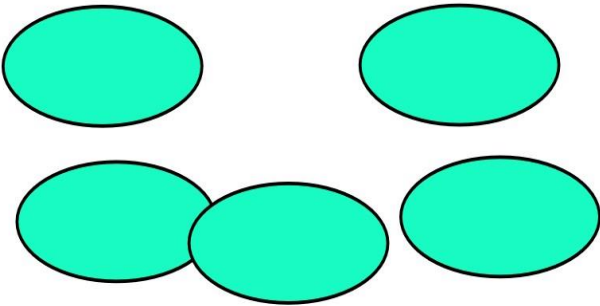
☐ json ☐ xml

 save

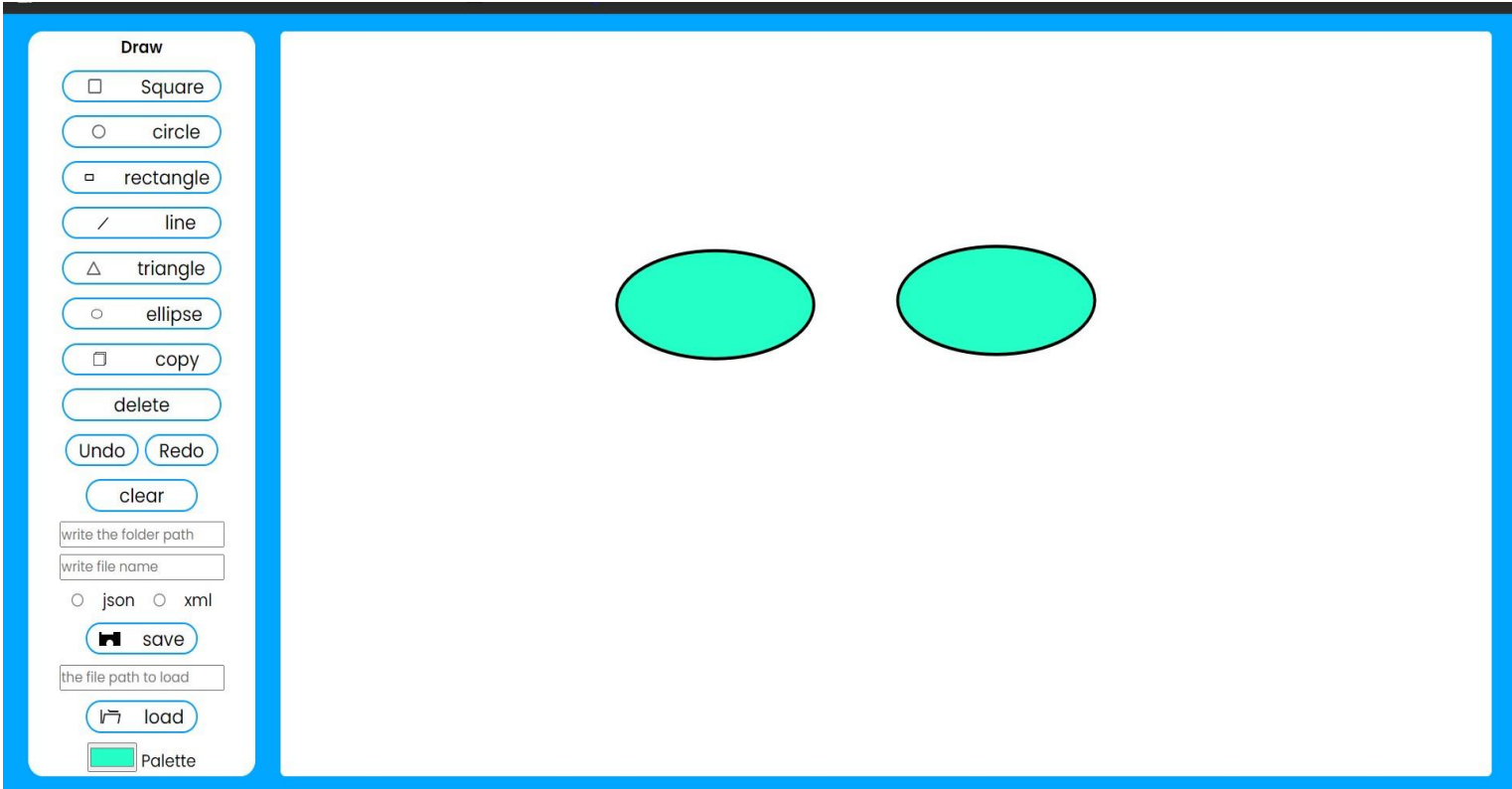
the file path to load

 load

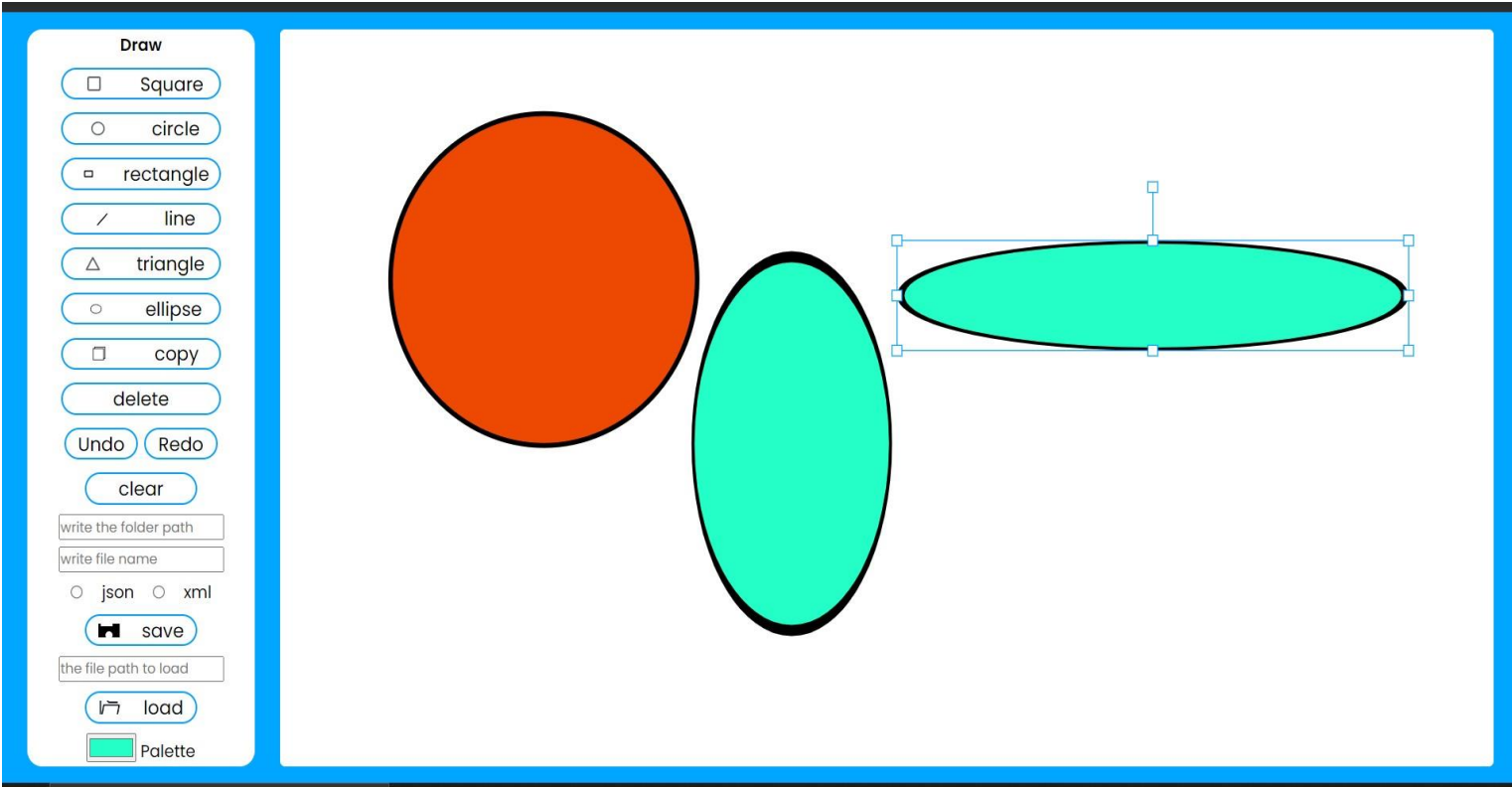
 Palette



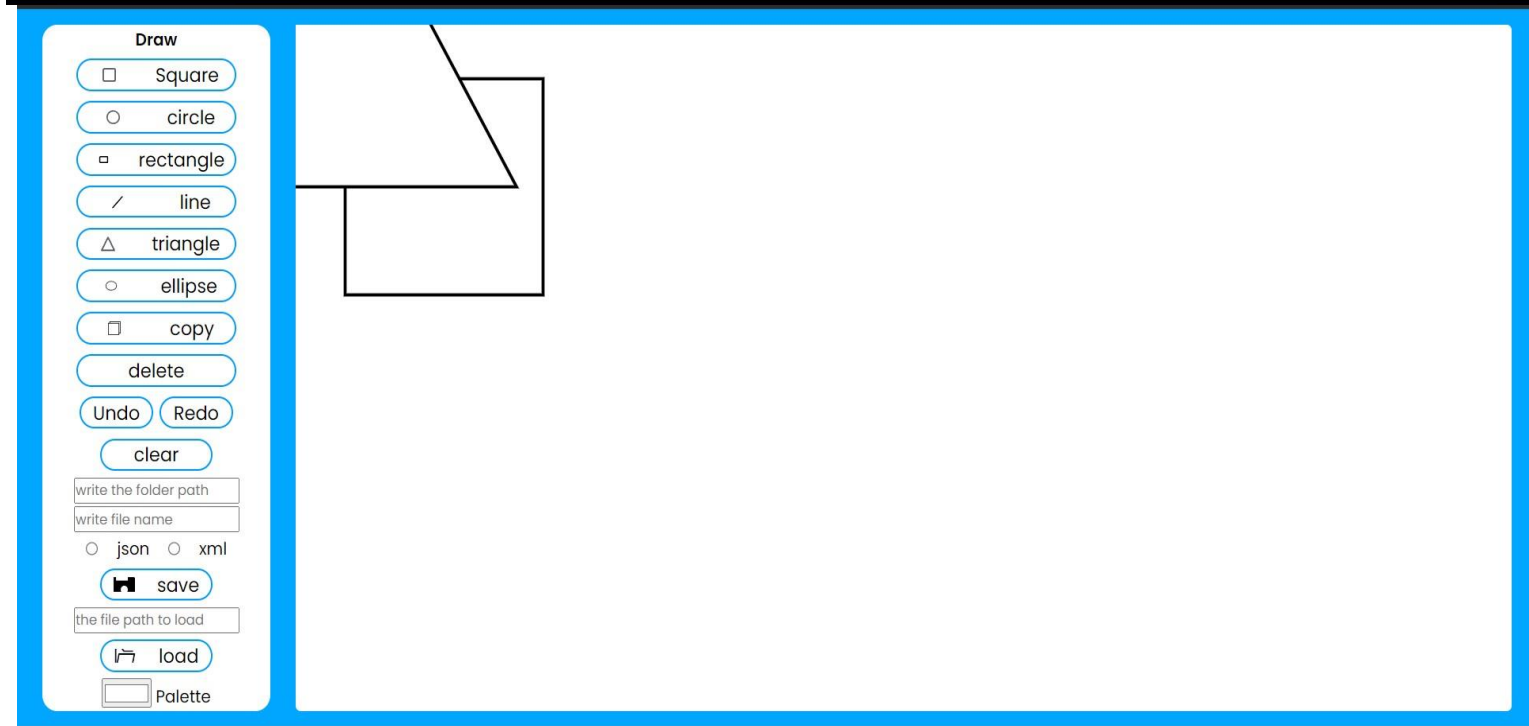
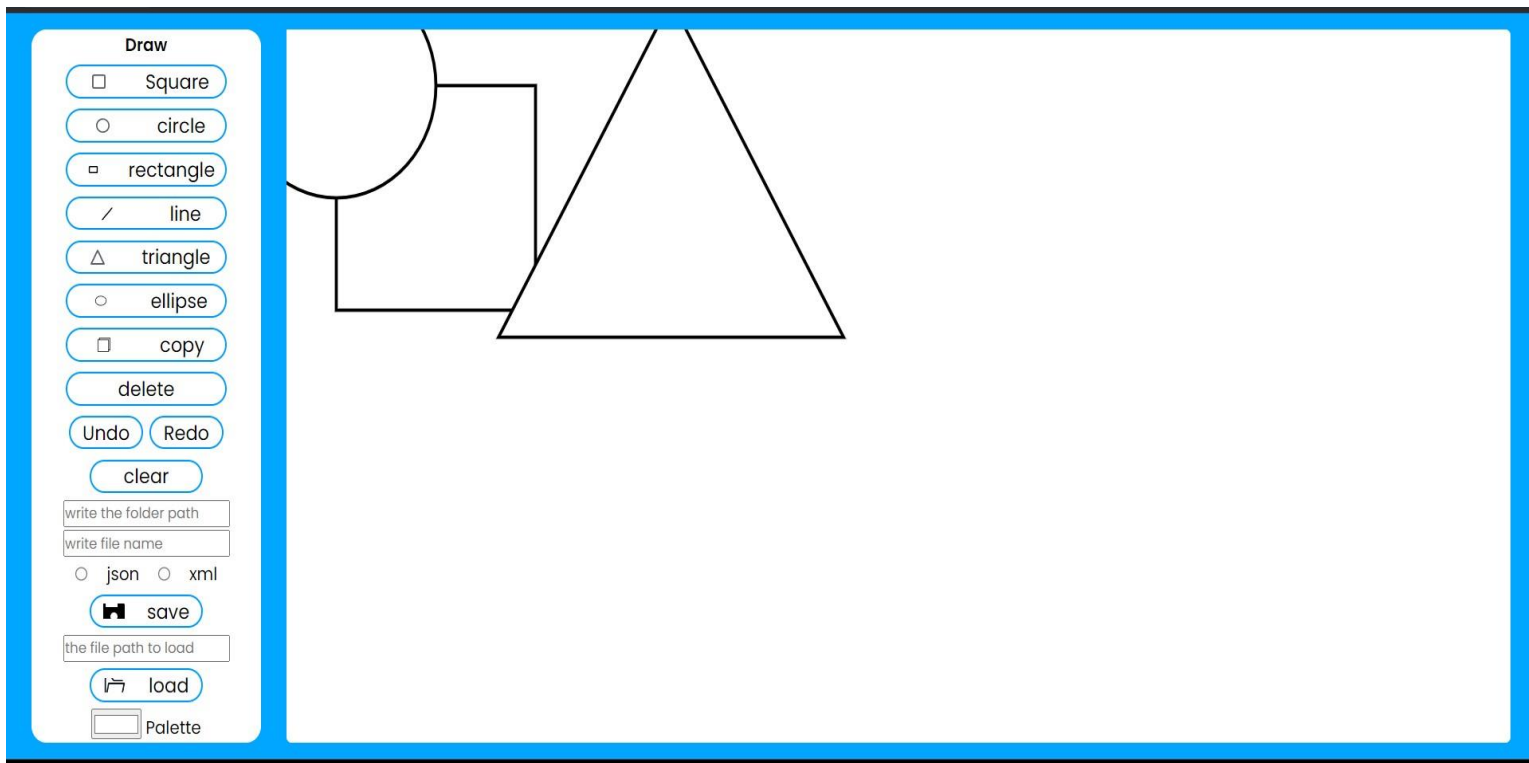
Delete:



Resize:

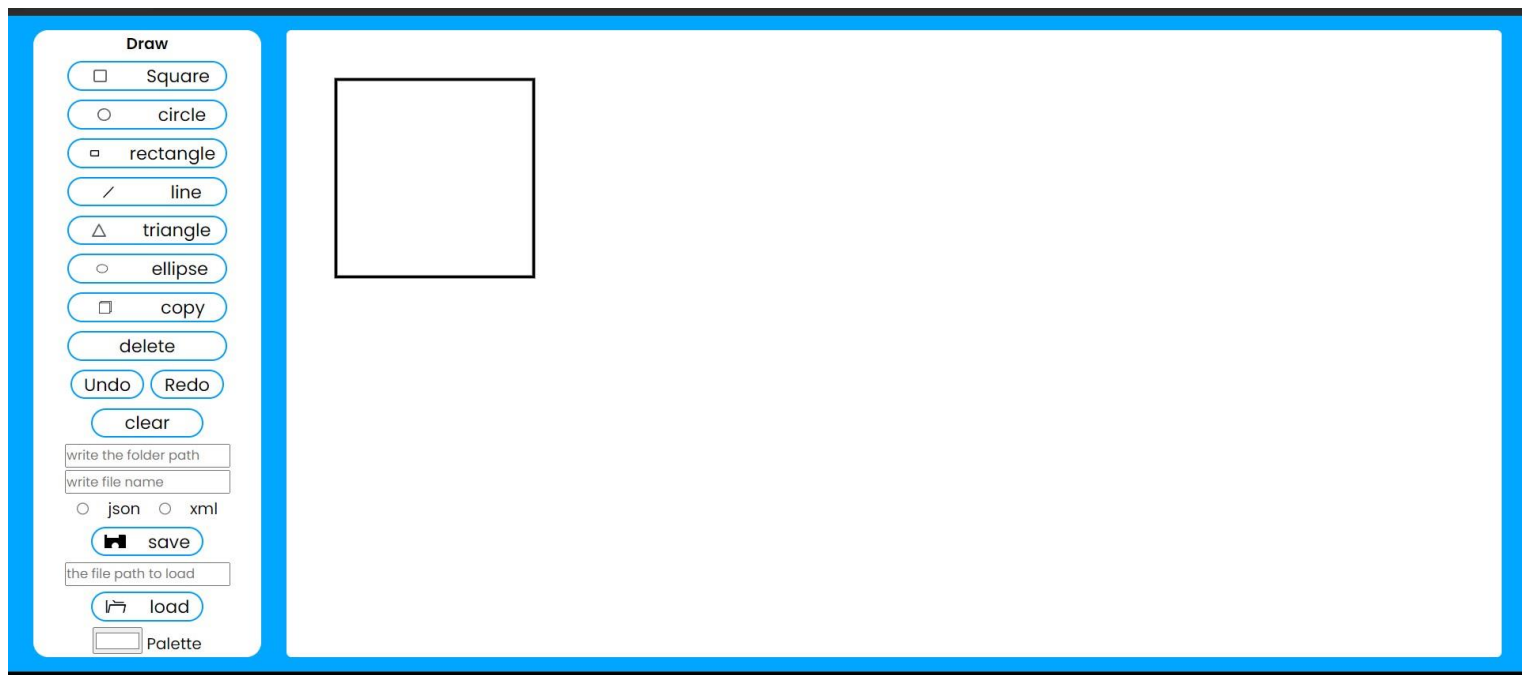


after undo 1:

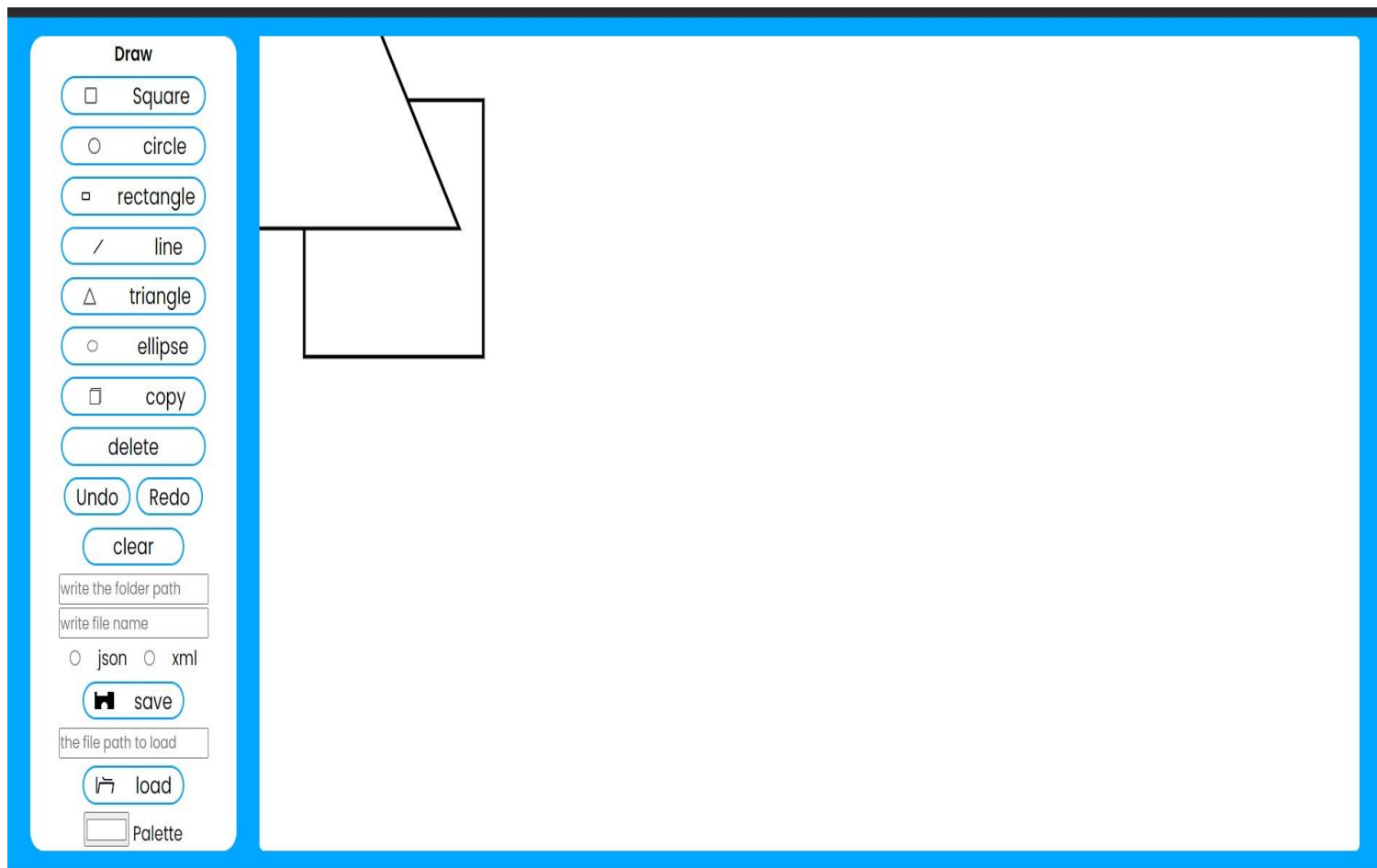


Undo again:

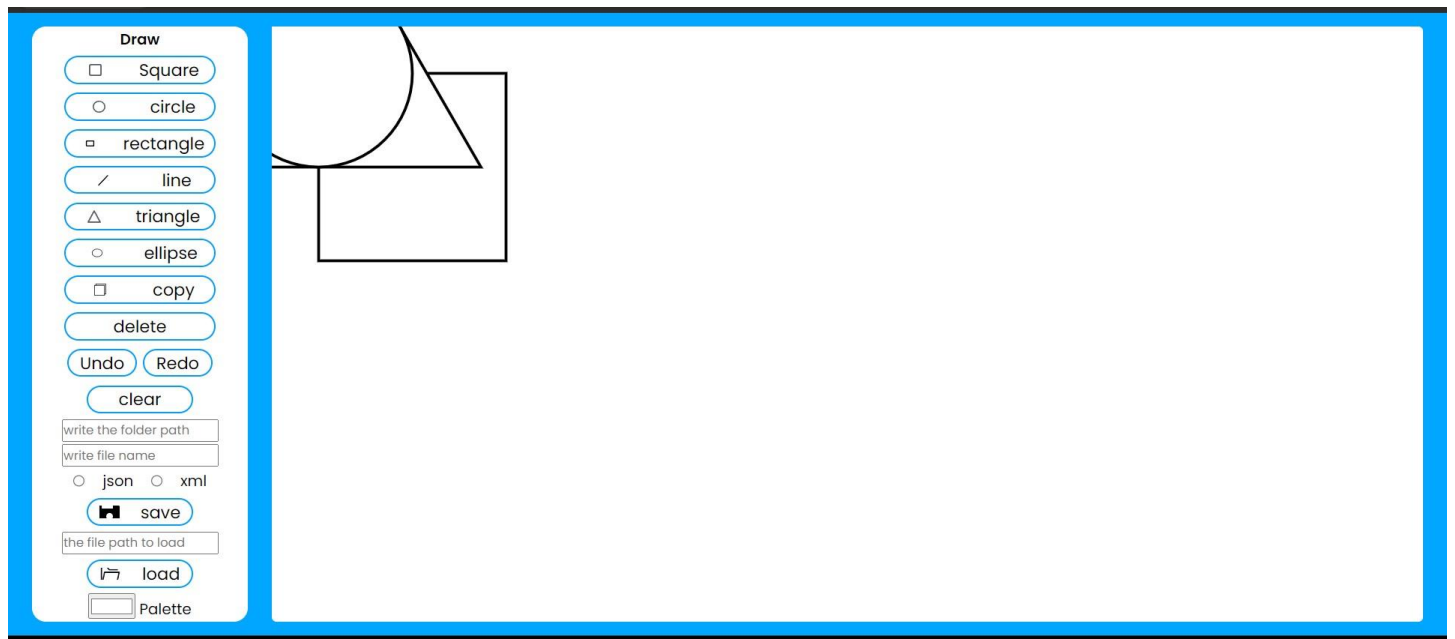




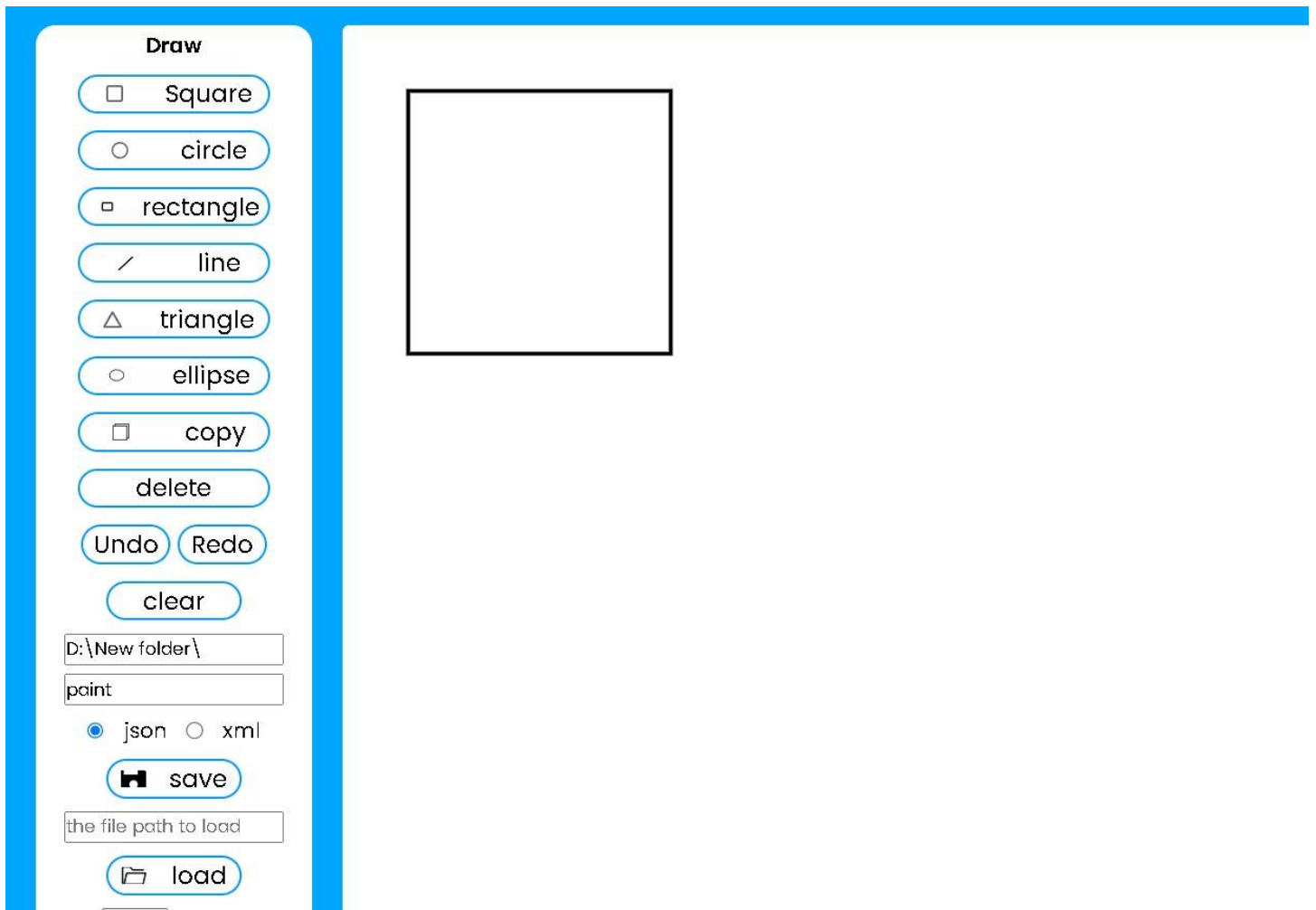
**Redo:**



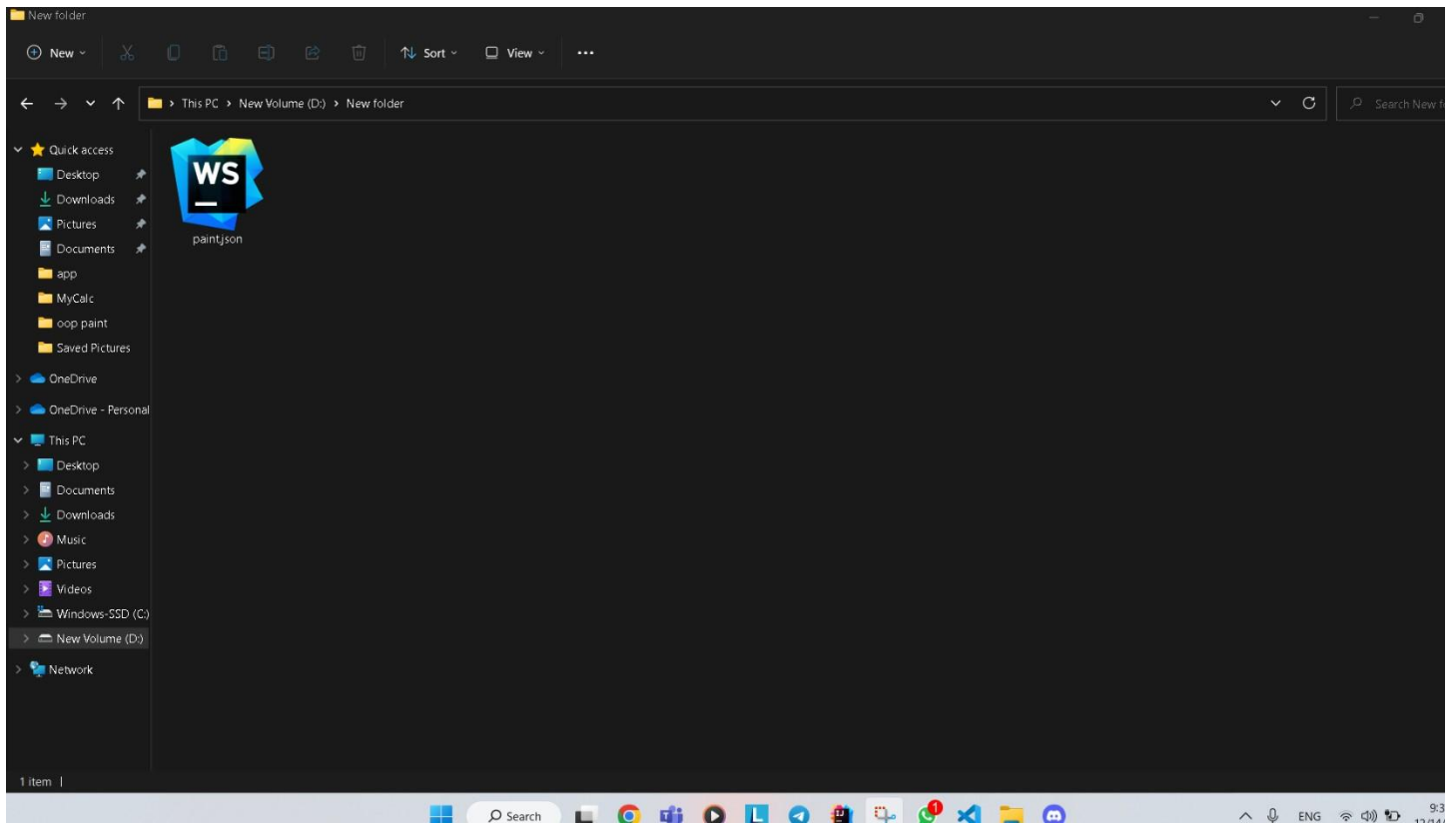
**Redo again:**



**Save:**



**After saving:**



Load:

Draw

☐ Square

☐ circle

☐ rectangle

☐ line

☐ triangle

☐ ellipse

☐ copy

delete

Undo

Redo

clear

write the folder path

write file name

☒ json ☐ xml

 save

D:\New folder\paint.json

 load

After load:

Draw

☐ Square

☐ circle

☒ rectangle

☐ line

☐ triangle

☐ ellipse

☐ copy

delete

Undo

Redo

clear

write the folder path

write file name

☒ json ☐ xml

save

D:\New folder\paint.json

load

Palette

