

## MainApp

- Create and manage the main application window
- Launch 2D generator
- Handle sign in and sign up actions
- Launch the 2D or 3D drawing generators based on user input

- JFrame
- JPanel
- JButton
- TwoGenerator
- ThreedGenerator

## TwoGenerator

- Create and manage the 2D drawing generator window
- Handle drawing options(line,rectangle,circle)
- Allow clearing the drawing

- JFrame
- JButton
- JComboBox
- JColorChooser
- DrawingPanel

## DrawingPanel

- Draw 2D shapes(line, rectangle, circle) based on user input
- Allow choosing shape type and color
- Clear the drawing

- List<Shape>
- JPanel
- Grphics
- MouseAdapter

## ThreeDGenerator

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| <ul style="list-style-type: none"><li>• Create and manage the 3D drawing panel with a rotating shape</li><li>• Allow users to view different 3D shapes(cube, cuboid, sphere, cylinder)</li></ul> | <ul style="list-style-type: none"><li>• JPanel</li><li>• SimpleUniverse</li><li>• Canvas3D</li><li>• BranchGroup</li><li>• TransformGroup</li><li>• Transform3D</li><li>• RotationInterpolator</li><li>• Alpha</li><li>• BoundingSphere</li><li>• ColorCube</li><li>• Box</li><li>• Sphere</li><li>• Cylinder</li></ul> |
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