Indian Institute of Information Technology, Allahabad
Object Oriented Methodology

Course Instructors: Prof. O.P. Vyas, Dr. Sonali Agarwal, Dr. Rahul Kala

SOFTWARE DRAWING 2D SHAPES & 3D GRAPHICS

GROUP MEMBERS –

- *ISHAAN OBEROI (IIT2021155)*
- *JAI MORYANI (IIT2021122)*
- *ROHAN KUMAR BEHERA (IIT2021145)*

Class Responsibilities and Collaborators (CRC) Diagram

Main
Description –   Acts as the starting point of the software and creates all the other classes and objects.

Responsibilities –	**Collaborators –**
Creation of dialogue box. Creation of frame. Creation of panels. Initiating respective panel. Adding panels to frame.	Dialogue Shape2D Shape3D ShapeList2D ShapeList3D threeDPanel twoDpanel

Dialogue
Description –   Prompts the user to enter their name, choice of dimension and choice of shape.

Responsibilities –	**Collaborators –**
Takes user name. Validates user name. Prompts user to select dimension. Prompts user to select shapes.	Main Dimension ShapeList2D ShapeList3D

Dimension

Description –
Provides choices of dimension for user to select from.

Responsibilities –	**Collaborators –**
Lets user see available dimensions to choose from.	Dialogue

Shape2D

Description –
Represents all the two-dimensional shapes.

Responsibilities –	**Collaborators –**
Initialisation of different 2D shapes. Painting shapes on the panel.	ShapeList2D twoDpanel

Shape3D

Description –
Represents all the three-dimensional shapes.

Responsibilities –	**Collaborators –**
Initialisation of different 3D shapes. Painting shapes on the panel.	ShapeList3D threeDPanel

ShapeList2D

Description –
Represents the list of two-dimensional shapes.

Responsibilities –	**Collaborators –**
Shows the list of 2D shapes for selection.	Dialogue Main Shape2D

ShapeList3D

Description –
Represents the list of three-dimensional shapes.

Responsibilities –	**Collaborators –**
Shows the list of 3D shapes for selection.	Dialogue Main Shape3D

twoDPanel	
Description – Acts as the canvas for 2D shapes, consisting of buttons for rotations.	
Responsibilities – Shows the 2D shape on the pane. Shows the rotation of 2D shapes on the screen. Consists of buttons for rotations. Consists of button for colour change.	**Collaborators –** Main Shape2D

threeDPanel	
Description – Acts as the canvas for 3D shapes, consisting of buttons for rotations.	
Responsibilities – Shows the 3D shape on the pane. Shows the rotation of 3D shapes on the screen. Consists of buttons for rotations. Consists of button for colour change.	**Collaborators –** Main Shape3D