Indian Institute of Information Technology Allahabad

Object Oriented Methodology

Cube with 3d Computer Animation

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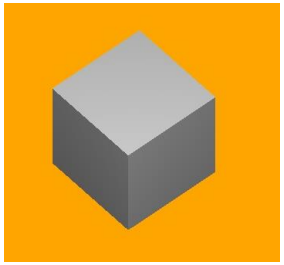
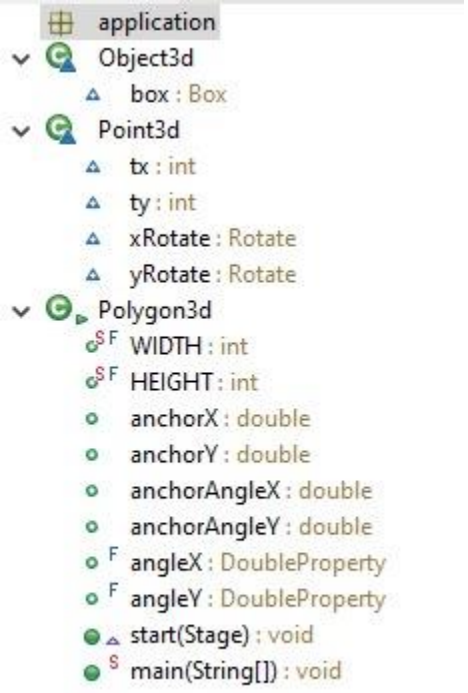




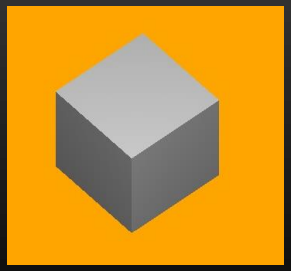
About The Application

- This project involves how a 3d cube can be rotated through the matrix operations and how the rotation properties can be used to design such a implementation in JavaFX.

- This generally involves how a cube is rotated when the program starts the 2d cube is appeared on the screen then as we drag along the axis we get the rotation along the direction it is been dragged.
  What we have used:-

- We have used the JavaFX SDK for developing this project which mainly involves a cube and the rotation properties we have made cube with the inbuilt JavaFX class and used anchor properties and event listeners for rotating the cube the object can be anything but the main thing is to rotate

ABOUT UTILISED RESOURCES



- *Primarily, the IDE (Integrated Development Environment) used here is eclipse.*

- *The whole interface of the application is designed using JavaFX.*
  We have used Components & Properties of JavaFx

- *The inside sight of application, the operational part of the application is created using JAVA programming language in object oriented manner.*

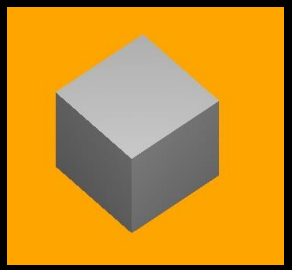
UML
(UNIFIED MODELLING DIAGRAM)

- UML Diagram is basically the model of whole project from in and out.

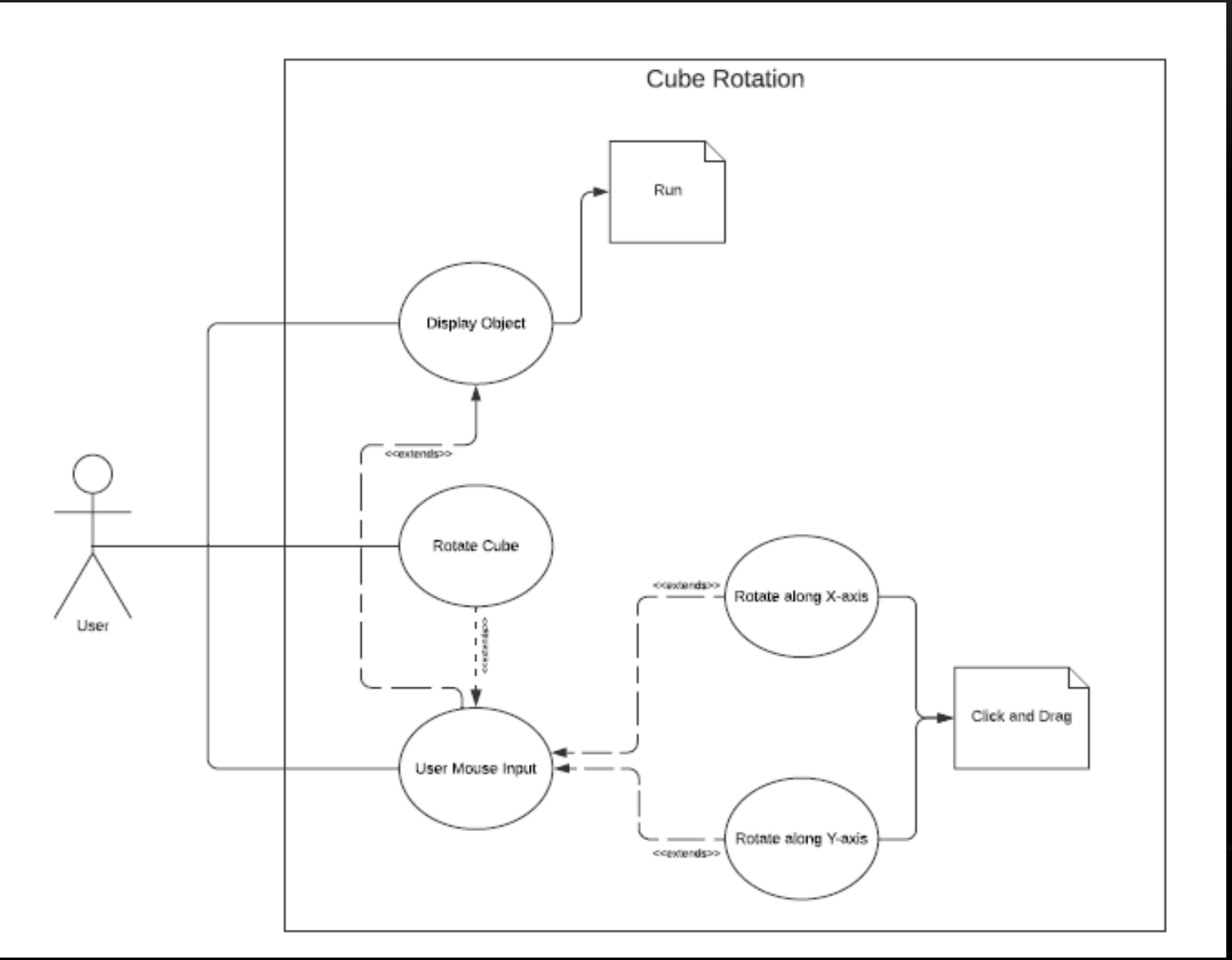
- It makes the person to understand the system in much easier way .

- UML diagram is categorised into many different types of diagrams. Some of them are listed below :

1. Use Case Diagram
2. CRC Diagram
3. Class Diagram
4. Deployment Diagram



USE CASE DIAGRAM



CRC DIAGRAM

Class Responsitbility Collaborator Model

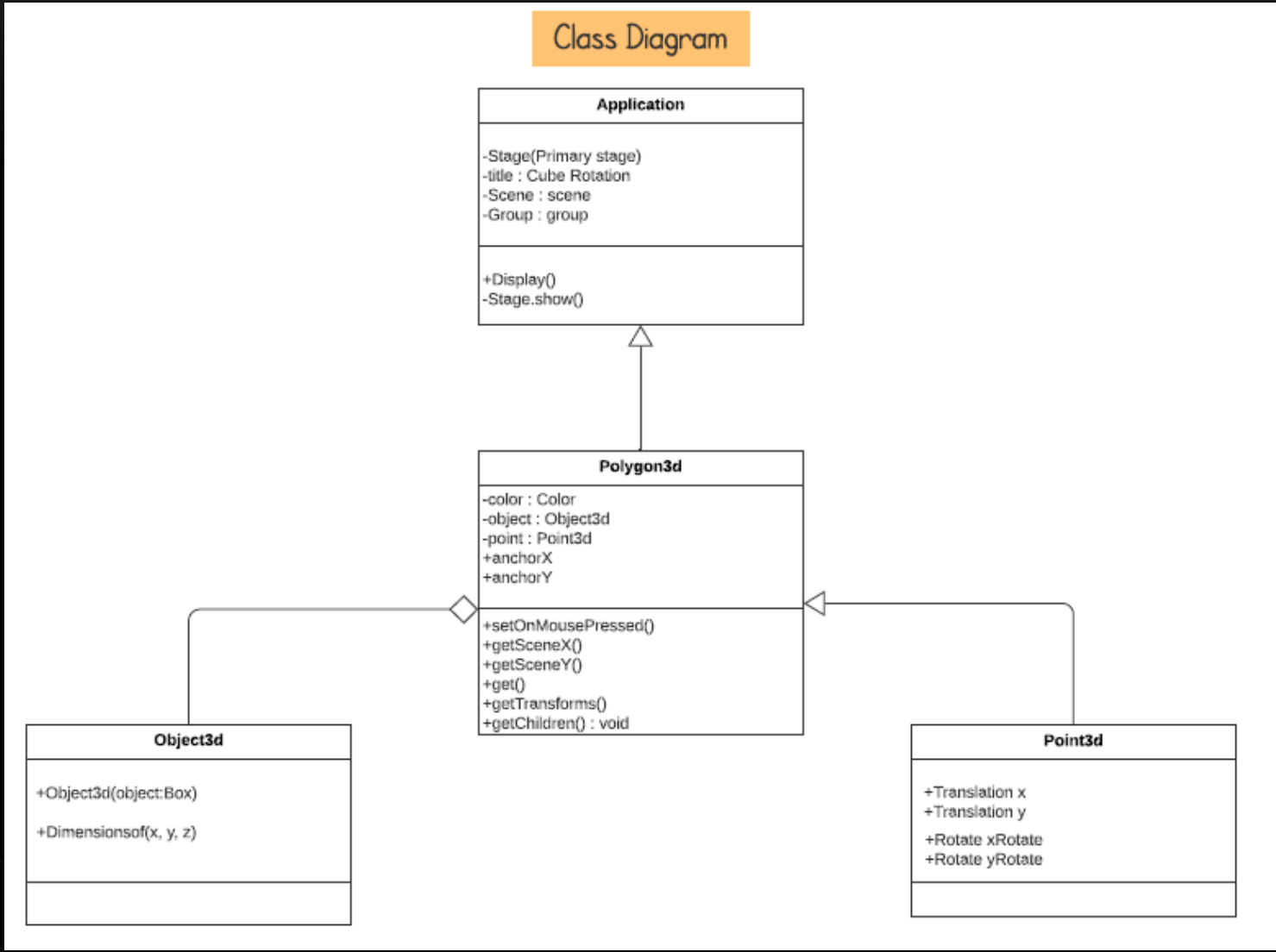
Class : Application	
-Shows the main stage -Shows the scene and group -Responsible for showing the shape -Responsible for screen length	-Stage(primary stage) -Scene -Jframe

Class : Polygon3d	
-intitate the object3d -initiate the Point3d -sets the color -intitate the rotation angle	-Display -Color

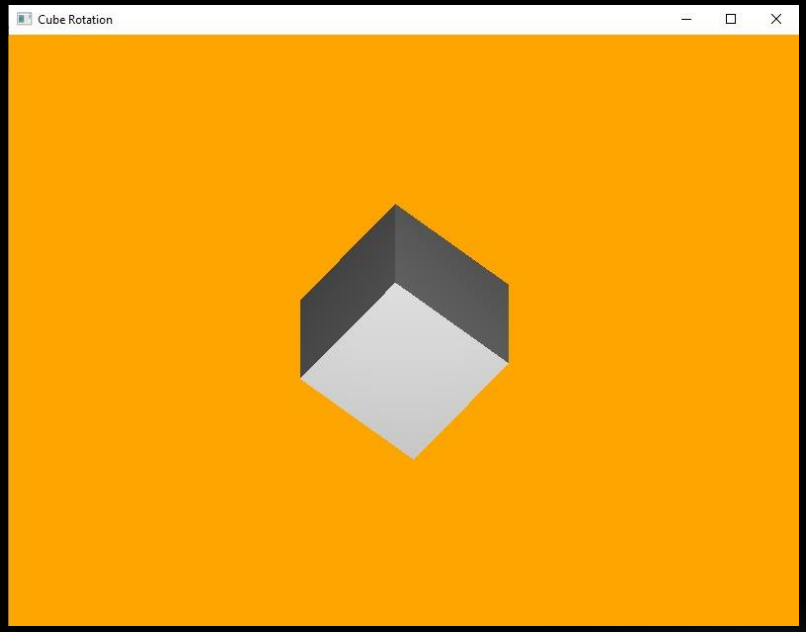
Class : Object3d	
-initiate an box. -set the size of box	-Display -Object

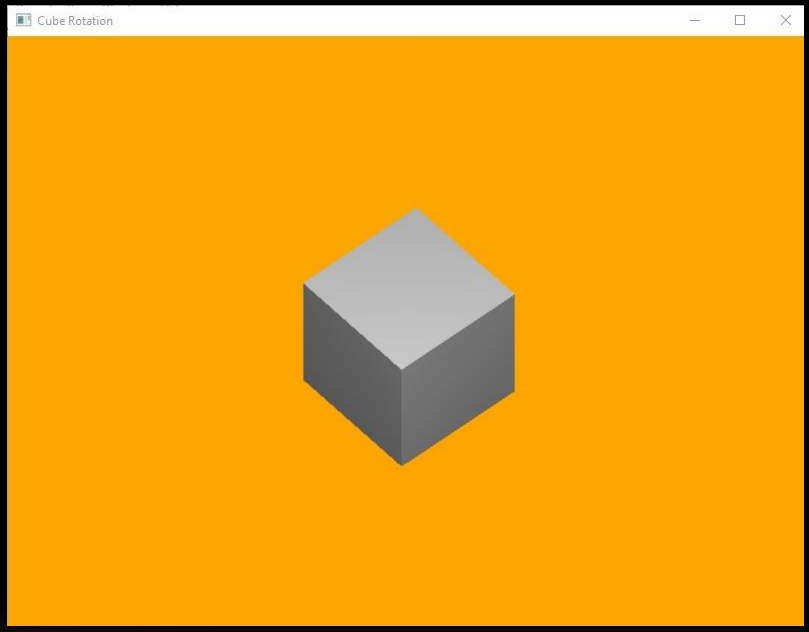
Class : Point3d	
-initiate the points for translation -initiate the points for rotation.	-Points

CLASS DIAGRAM



GLIMPSES OF APPLICATION





Thank You.....!!!