INTERACTIVE POLYGON AREA CALCULATOR

Submitted To:

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HELLO!

GOOD MORNING Sir,

We are Group no. 10 and today we are going to present our project on Interactive Polygon Area Calculator which will be based on Graphical User Interface

Content

- About Interactive Polygon Area
- UML Diagrams:

1) Use Case Diagram
2) Class Diagram
3) CRC Diagram

- Our Ideas about UML Project
- Team Presentation

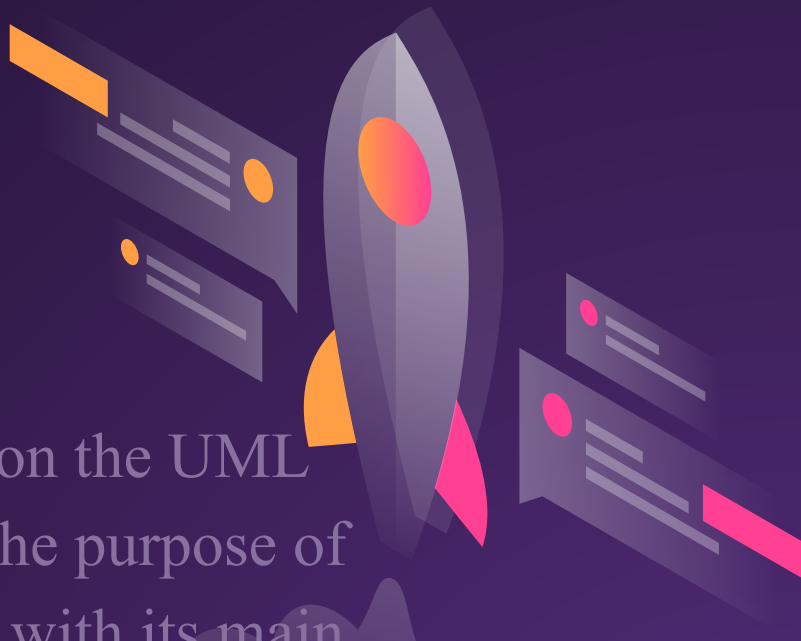
WHAT'S INTERACTIVE POLYGON AREA CALCULATOR ?

Online calculator calculates polygon area by dragging and dropping the vertices, given lengths of polygon sides and angle between them which split polygon to non-overlapping triangles.

SWING APPLET

"Swing-based applets are similar to AWT-based applets, but with an important difference: A Swing applet extends JApplet rather than Applet. JApplet is derived from Applet. Thus, JApplet includes all of the functionality found in Applet and adds support for Swing."

Big Concept UML Diagram



A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system

OUR IDEAS ABOUT UML

A written description of how users will perform tasks on your website

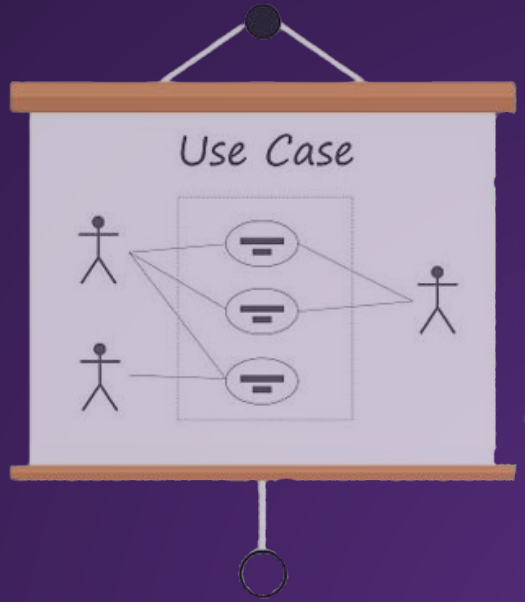
Direct relation with object oriented analysis and design

UML is a pictorial language used to make software blueprints

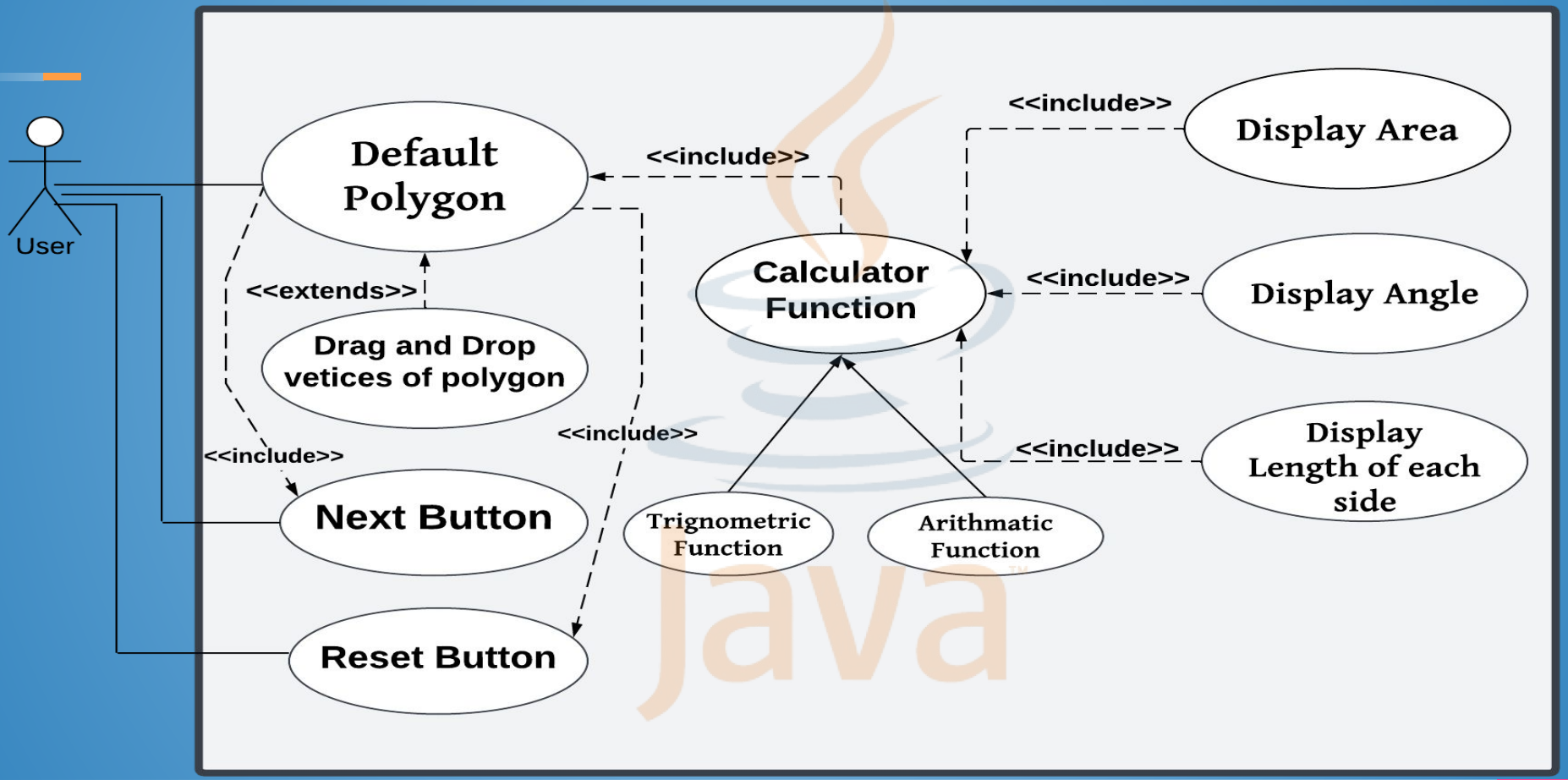
Modeling language to visualize, specify, construct, and document software system

1) USE Case Diagram

A use case diagram is a graphical depiction of a user's possible interactions with a system and used to represent the dynamic behavior of a system.

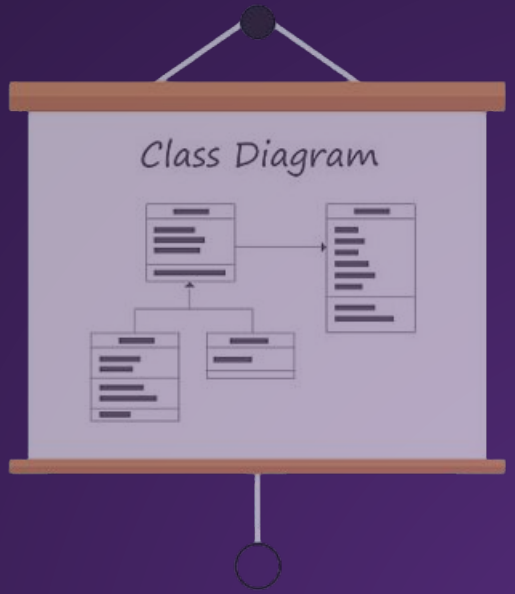


USE CASE DIAGRAM

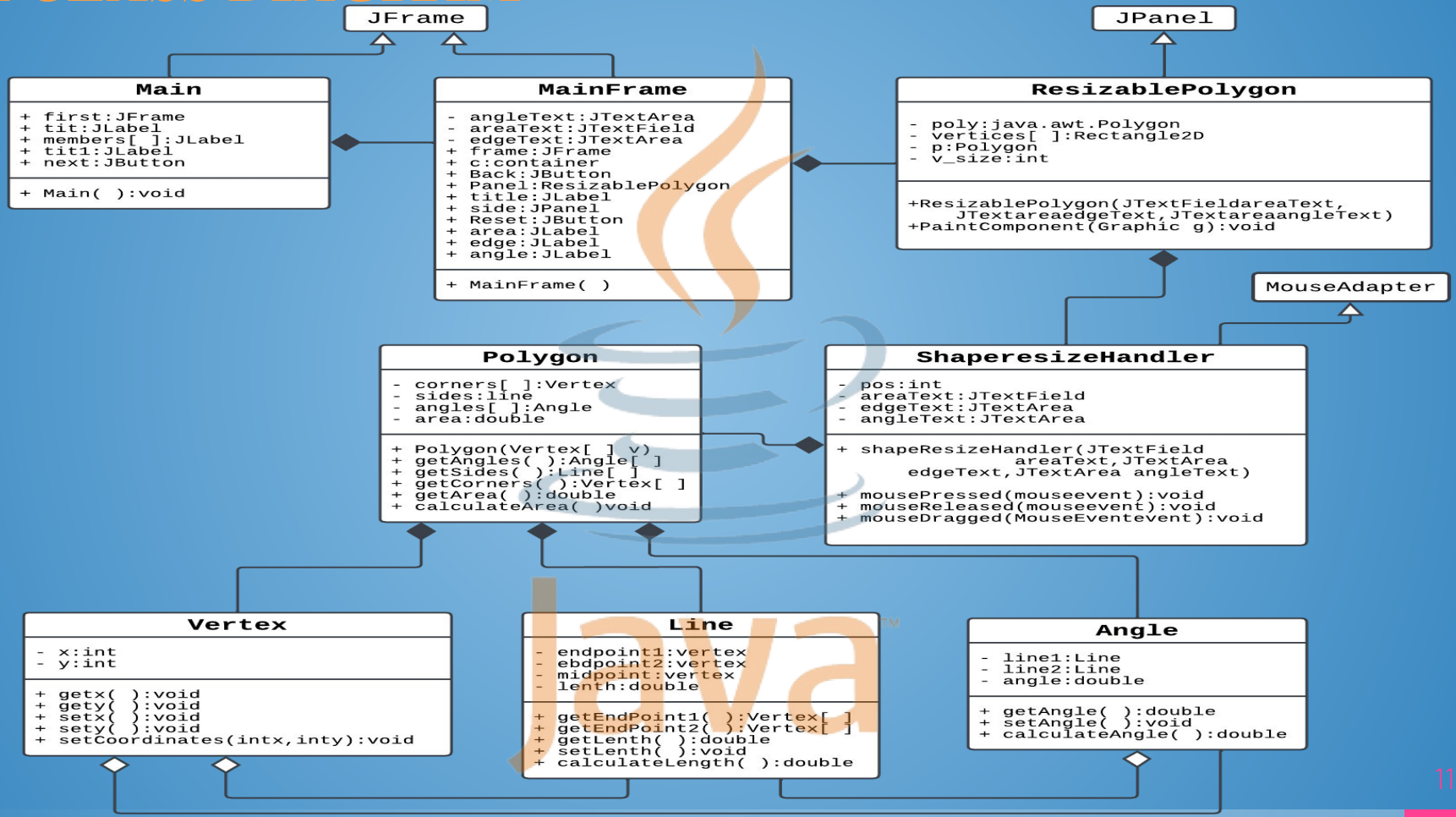


2) Class Diagram

Class diagrams are **the blueprints of our system or subsystem.** We can use class diagrams to model the objects that make up the system, to display the relationships between the objects.



UML CLASS DIAGRAM



3) CRC Diagram

Class-Responsibility Collaborator (CRC) card visualize classes in card-like presentation. Each CRC card contains information like the description of class, its attributes and responsibility. A CRC card diagram is a holder of these cards.

CRC DIAGRAM

Main	
Responsibility	**Collaborators**
Adding JFrame , Jlabel,Button and calling main	members, title and next button

MainFrame	
Responsibility	**Collaborators**
adding container c, panel, JtextArea,JTextField, JTextArea and call MainFrame constructor	area, edge, angle. Back Button, Reset Button

Polygon	
Responsibility	**Collaborators**
adding array of corners, angle and call CalculateArea() and polygon(vertex[ ] v)	Polygon(vertex[ ] v), sides: line, Area, corner, Angle

ShapeResizeHandler	
Responsibility	**Collaborators**
Resize the shape of polygon by dragging and dropping the vertex	mousePressed, mouseReleased, mouseDragged

ResizablePolygon	
Responsibility	**Collaborators**
Add array of vertices, Polygon p and v-size. and call constructor and paintComponent	JPanel, Rectangle2D, Poly: java.awt.polygon

Thank You..!!