PaintDotOrgRefactored UML Diagram

PurchaseManager

-costToPurchaseAllFeatures : int
-featuresToPurchase : int
+featureAndPurchaseStatus:
HashMap<String, Boolean>
+featureAndCost:
HashMap<String, Integer>
+featureAndComponentBorder
AfterPurchase:
HashMap<String, Border>
-tools : Tools

+PurchaseManager(Tools tools):
PurchaseManager
+initializeFeatureAndPurchase
StatusHashMap : void
+initializeFeatureAndCostHash
Map : void
+initializeFeatureAndComponent
BorderAfterPurchaseHashMap : void
+checkIfFeaturePurchased
(String feature) : boolean
+attemptToMakeFeaturePurchase
(String feature, JComponent
component, JFrame frame) : boolean
+purchaseRemainingFeatures
(Driver driver, JFrame frame) : void
+luhnCheck(String creditCardNumber) :
boolean
+calculateCheckDigit
(String creditCardNumber) : String

Driver

-driver : Driver
-frame : JFrame
-drawingArea : JPanel
-toolBar : JPanel
-tools : Tools

+main(String args[][]) : void
+Driver() : Driver

DrawingArea

+startX : int
+startY : int
+endX : int
+endY : int
+lineThickness : int
+fillColor : Color
+pointColor : Color
+eraserColor : Color
+textToDisplay : String
+textName : String
+textStyle : int
+textSize : int
+textColor : Color
+drawings : ArrayList<Drawing>
-fill : FillAction();
-select : SelectAction
+userIOActions : IOActions
-drawerHelper : DrawerHelper
-dragging : boolean
+drawingRectangle : boolean
+drawingCircle : boolean
+drawingLine : boolean
+usingPencil : boolean
+usingEraser : boolean
+drawingText : boolean
+filling : boolean
+selecting : boolean
+generalPath : GeneralPath

+DrawingArea() : DrawingArea
+paintComponent(Graphics gfx) : void
+mousePressed(MouseEvent me) : void
+mouseDragged(MouseEvent me) : void
+mouseReleased(MouseEvent me) : void
+mouseClicked(MouseEvent me) : void
+mouseEntered(MouseEvent me) : void
+mouseExited(MouseEvent me) : void
+mouseMoved(MouseEvent me) : void
+initialize() : void
+drawDrawings(Graphics2D g) : void
+disableAllFeatures() : void
+drawRectangle():void
+drawCircle():void
+drawPencil():void
+drawEraser():void
+drawLine():void
+drawText():void
+drawFill():void
+drawSelect():void
+setPath(GeneralPath newPath) : void

DrawerHelper

-drawingArea : DrawingArea

+drawRectangle(boolean isTemp,
Graphics2D g) : void
+drawCircle(boolean isTemp, Graphics2D g)
: void
+drawLine(boolean isTemp, Graphics2D g)
: void
+drawPath : void
+drawText : void
+drawImage : void

Tools

-driver : Driver
-frame : JFrame
-drawingArea : JPanel
-purchaseManager : PurchaseManager

+openRecentComboBox : JComboBox
+saveAsButton : JButton
-saveButton : JButton
-openButton : JButton
-exportButton : JButton
-newProjectButton : JButton
-pencilButton : JButton
-eraserButton : JButton
-fillButton : JButton
-rectangleButton : JButton
-circleButton : JButton
lineButton : JButton
-lineThicknessSlider : JSlider
-typedTextTextField : JTextField
-textButton : JButton
-pencilColorButton : JButton
-fillColorButton : JButton
-textColorButton : JButton
-textFontLabel : JLabel
-selectTextFontComboBox : JComboBox
-textStyleLabel : JLabel
-selectTextStyleComboBox : JComboBox
-textSizeComboBox : JComboBox
-selectTextSizeComboBox : JComboBox
-selectButton : JButton
-rotateButton : JButton
-importImageButton : JButton
-buyAllRemainingFeaturesButton : JButton

+Tools(Driver driver, JFrame frame,
JPanel drawingArea) : Tools
+initializeToolbarComponents() : void
+actionPerformed(ActionEvent e) : void

RectangleDrawing

-draggable : boolean

+RectangleDrawing(int startX, int startY, int endX, int endY, Color color,
int thickness, boolean draggable, boolean filled) : RectangleDrawing
+draw(Graphics2D g) : void
+ checkForIntersectionWithMousePoint(MouseEvent me, DrawingArea
drawingArea) : boolean

FillAction

+fillDrawing(MouseEvent me, DrawingArea drawingArea) : void

SelectAction

-drawingSelected : Drawing

+determineSelectedDrawing(MouseEvent me, DrawingArea drawingArea)
: void
+moveSelectedDrawing(MouseEvent me, DrawingArea drawingArea)
: void

LineDrawing

+LineDrawing(int startX, int startY, int endX, int endY, Color color,
int thickness) : LineDrawing
+draw(Graphics2D g) : void
+checkForIntersectionWithMousePoint(MouseEvent me, DrawingArea
drawingArea) : boolean

RotateAction

-degrees:int

+determineSelectedDrawing(MouseEvent me, DrawingArea drawingArea)
: void

CircleDrawing

+CircleDrawing(int startX, int startY, int endX, int endY, Color color, int thickness, boolean filled) : CircleDrawing
+draw(Graphics2D g) : void
+checkForIntersectionWithMousePoint(MouseEvent me, DrawingArea drawingArea) : boolean

PathDrawing

-path : GeneralPath

+PathDrawing(GeneralPath path, Color color, int thickness) : PathDrawing
+draw(Graphics2D g) : void
+checkForIntersectionWithMousePoint(MouseEvent me, DrawingArea drawingArea) : boolean

TextDrawing

-textToDisplay : String
-textName : String
-textStyle : int
-textSize : int

+TextDrawing(int startX, int startY, Color color,String textToDisplay, String name, int style, int size) : TextDrawing
+draw(Graphics2D g) : void
+checkForIntersectionWithMousePoint(MouseEvent me, DrawingArea drawingArea) : boolean

ImageDrawing

-image : BufferedImage
-isDraggable : boolean
-drawingArea : DrawingArea

+ImageDrawing(BufferedImage image, int startX, int startY, int endX, int endY, boolean draggable, DrawingArea drawingArea) : ImageDrawing
+draw(Graphics2D g) : void
+checkForIntersectionWithMousePoint(MouseEvent me, DrawingArea drawingArea) : boolean

+rotateSelectedDrawing(MouseEvent me, DrawingArea drawingArea) : void

IOActions

+savePath:Path
-saveFile:File
+loadedImage:bufferedImage
-openRecent:boolean
+oadedImageDraggable:boolean
-drawingArea : DrawingArea

+saveAs(DrawingArea drawingArea):void
+save(DrawingArea drawingArea):void
+open(DrawingArea drawingArea):void
+openRecent(DrawingArea drawingArea,Path loadFilePath):void
+newProject(DrawingArea drawingArea):void
+importImage(DrawingArea drawingArea):void
+addLoadedImageToDrawingArea() : void

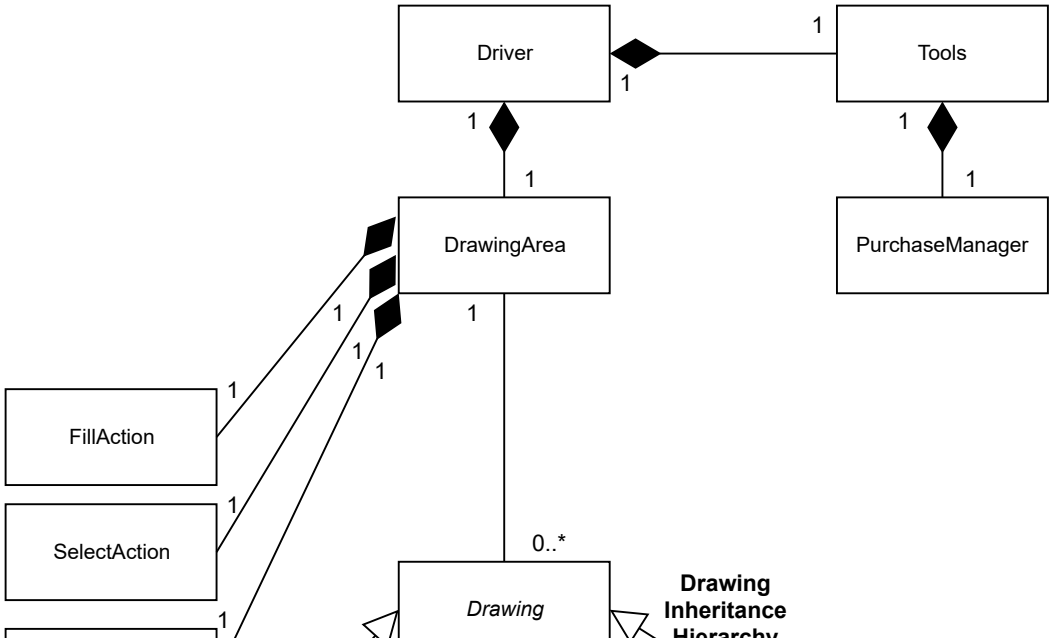
Drawing

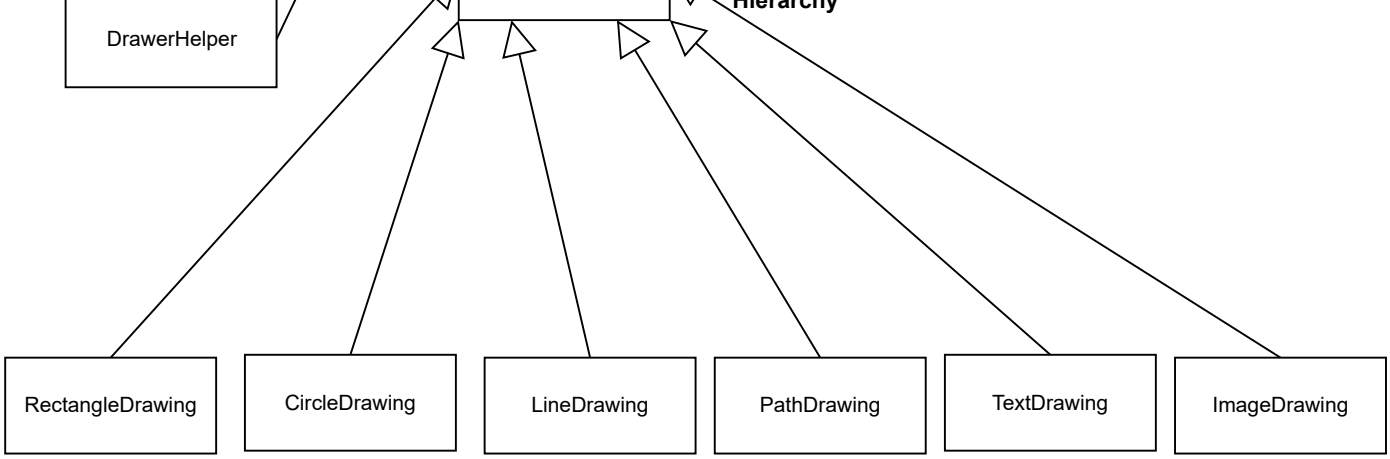
#thickness : int
#startX : int
#startY : int
#endX : int
#endY : int
#filled : boolean
#color : Color

+draw(Graphics2D g) : void
+checkForIntersectionWith MousePoint(MouseEvent me, DrawingArea drawingArea) : boolean

Class Relationships

(all one-to-one relationships)




DrawerHelper
Hierarchy
RectangleDrawing
CircleDrawing
LineDrawing
PathDrawing
TextDrawing
ImageDrawing