Assignment 6 UML Diagram

<<interface>> ShapeAnimationModel

+ void makeShape(Shape shape)
+ void removeShape(Shape shape)
+ void createTransformation(Transformation transformation)
+ String animationReadback()
+ ArrayList<ShapeInterface> getShape()

ShapeAnimationModelImpl

-List<Shape> shapeList
-List<Transformation> transformationList

+ void makeShape(Shape shape)
+ void removeShape(Shape shape)
+ void createTransformation(Transformation transformation)
+ String animationReadback()
+ ArrayList<Shape> getShape()

ShapeSort

+ int compare(Shape s1, Shape s2)

TransformationSort

+ int compare(Transformation t1, Transformation t2)

<<interface>> Shape

+ String getName()
+ String getType()
+ Point2D getLocation()
+ Color getColor()
+ int getAppearTime()
+ int getDisappearTime()
+ ArrayList<Transformation> getTransformations()
+ double getWidth()
+ double getHeight()
+ String toString()

Point2D

-double x
-double y

+ double getX()
+ double getY()
+ String toString()
+ double setX()
+ double setY()

<<interface>> Transformation

+ void transform(Shape shape)
+ String getName()
+ int getFromTime()
+ int getToTime()
+ String toString()
+ Point2D getNewLocation()
+ void updateLocation()

AbstractShape

String name
Point2D currentLocation
Color color
int appearTime
int disappearTime
ArrayList<Transformatioin> transformationsList
double width
double height

+ String getName()
+ String getType()
+ Point2D getLocation()
+ Color getColor()
+ int getAppearTime()
+ int getDisappearTime()
+ ArrayList<Transformation> getTransformations()
+ double getWidth()
+ double getHeight()
+ String toString()

AbstractTransformation

String name
int fromTime
int toTime
ArrrayList<Shape> transformedShape

+ String getName()
+ int getFromTime()
+ int getToTime()
+ void transform(Shape shape)
+ String toString()
+ Point2D getNewLocation()
+ void updateLocation()

Color

-double red
-double green
-double blue

+ double getRed()
+ double getGreen()
+ double getBlue()
+ String toString()

Oval

Super (String name, Point2D currentLocation, Color color, int appearTime, int disappearTime, double xRadius, double yRadius)

String type

+ double getWidth()
+ double getHeight()
+ String getType()
+ String toString()

Rectangle

Super (String name, Point2D currentLocation, Color color, int appearTime, int disappearTime, double width, double height)

String type

+ String getType()
+ String toString()

Move

super(name, fromTime, toTime)
Point2D newLocation

+ void transform(Shape shape)
+ Point2D getNewLocation()
+ void updateLocation()
+ String toString()

ChangeColor

super (name, fromTime, toTime)
Color color

+ Color getColor()
+ String toString()

Scale

super(name, fromTime, toTime)
double toWidth
double toHeight

+ void transform(Shape shape)
+ String toString()