Graphics Library Testing Plan - Regular Shape

Plan Progress: Complete

Plan Written by: Luke Warbey

Testing Progress: Complete

Tested by: Zhihao Ma

( For cinveneice, I only mark the Failed methods)

Module Version: RegularShape v1.0:

| Test Case | Test Criteria  | Input value | Expected Result | Actual Result | Pass/Fail |
| --- | --- | --- | --- | --- | --- |
| RegularShape() | Constructor with validparameters | 5, 50, Color.RED, 1.0,200, 200 | testGetNumberOfSides() = 5, testGetSize() = 50, testGetColor() = Color.RED, testGetStrokeWidth() = 1.0, testGetWidth() = 200, testGetHeight() = 200 |  |  |
| Constructor with in-valid parameters (3sides) | 3, 50, Color.RED, 1.0,200, 200 | testInvalidSidesException() = IllegalArgumentException |  |  |
| Constructor with validparameters and gradi-ent | 5, 50, Color.RED,Color.BLUE, 45, 1.0,200, 200 | testGetStartColor() = Color.RED, testGetEndColor() = Color.BLUE, testGetGradientAngle() = 45, testGetOpacity() = 1.0, testGetCenterX() = 200, testGetCenterY() = 200 |  |  |
| rotate() | rotate() | 45 | testGetRotationAngle() = 45 |  |  |
| Invalid | N/A |  | Failed  | Failed  |
| setStroke() | setStroke() | Color.BLUE, 2.0 | testGetStrokeColor() = Color.BLUE, testGetStrokeWidth() = 2.0 |  |  |
| Invalid | Color.BLUE, -2.0 | testInvalidStrokeWidthException() = IllegalArgumentException | Failed  | Failed  |
| setCenterX() | setCenterX() | 300 | testSetCenterX() = 300 |  |  |
| Invalid | -300 | testInvalidCenterXException() = IllegalArgumentException | Failed  | Failed  |
| setCenterY() | setCenterY() | 300 | testSetCenterY() = 300 |  |  |
| Invalid | -300 | testInvalidCenterYException() = IllegalArgumentException | Failed  | Failed  |
| setVisibleAfterDelay() | setVisibleAfterDelay() | 2.0 | testVisibilityAfterDelay() = true, testDelay() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidTimeException() = IllegalArgumentException | Failed  | Failed  |
| setInvisibleAfterDelay() | setInvisibleAfterDelay() | 2.0 | testVisibilityAfterDelay() = false, testDelay() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidTimeException() = IllegalArgumentException | Failed  | Failed  |
| fadeIn() | fadeIn() | 2.0 | testFadeIn() = true, testFadeDuration() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidCenterXException() = IllegalArgumentException | Failed  | Failed  |
| fadeOut() | fadeOut() | 2.0 | testFadeOut() = true, testFadeDuration() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidCenterXException() = IllegalArgumentException | Failed  | Failed  |
| setGradient() | setGradient() | Color.RED,Color.BLUE, 45 | testGetStartColor() = Color.RED, testGetEndColor() = Color.BLUE, testGetGradientAngle() = 45 |  |  |
| Invalid | N/A |  | Failed  | Failed  |