Graphics Library Testing Plan - Rectangle

Plan Progress: Complete

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Testing Progress: Complete

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( For cinveneice, I only mark the Failed methods)

Module Version: Rectangle v1.0:

| Test Case | Test Criteria | Input value | Expected Result | Actual Result | Pass/Fail |
| --- | --- | --- | --- | --- | --- |
| Rectangle() | Constructor with valid  parameters | 50, 30, Color.BLUE,  1.0, 200, 200 | testGetWidth() = 50, testGetHeight() = 30, testGetColor() = Color.BLUE, testGetStrokeWidth() = 1.0, testGetWidth() = 200, testGetHeight() = 200 |  |  |
| Constructor with in-  valid parameters (neg-  ative width/height) | -50, 30, Color.BLUE,  1.0, 200, 200 | testInvalidWidthException() = IllegalArgumentException, testInvalidHeightException() = IllegalArgumentException | Failed | Failed |
| Constructor with valid  parameters and gradi-  ent | 50, 30, Color.RED,  Color.BLUE, 45, 1.0,  200, 200 | testGetStartColor() = Color.RED, testGetEndColor() = Color.BLUE, testGetGradientAngle() = 45, testGetOpacity() = 1.0, testGetCenterX() = 200, testGetCenterY() = 200 |  |  |
| Constructor with valid  parameters (rounded  rectangle) | 50, 30, Color.BLUE,  1.0, 200, 200, 10 | testGetWidth() = 50, testGetHeight() = 30, testGetColor() = Color.BLUE, testGetStrokeWidth() = 1.0, testGetWidth() = 200, testGetHeight() = 200, testGetCornerRadius() = 10 |  |  |
| Constructor with valid  parameters (rounded rectangle) and gradi-  ent | 50, 30, Color.RED,  Color.BLUE, 45, 1.0,  200, 200, 10 | testGetStartColor() = Color.RED, testGetEndColor() = Color.BLUE, testGetGradientAngle() = 45, testGetOpacity() = 1.0, testGetCenterX() = 200, testGetCenterY() = 200, testGetCornerRadius() = 10 |  |  |
| setPosition() | setPosition() | 100, 100 | testGetPositionX() = 100, testGetPositionY() = 100 |  |  |
| Invalid | -100, 100 | testInvalidPositionException() = IllegalArgumentException | Failed | Failed |
| setStroke() | setStroke() | Color.BLUE, 2.0 | testGetStrokeColor() = Color.BLUE, testGetStrokeWidth() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidStrokeWidthException() = IllegalArgumentException | Failed | Failed |
| rotate() | rotate() | 45 | testGetRotateAngle() = 45 |  |  |
| Invalid? | N/A |  | Failed | Failed |
| fadeIn() | fadeIn() | 2.0 | testFadeIn() = true, testFadeDuration() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidDelayException() = IllegalArgumentException | Failed | Failed |
| fadeOut() | fadeOut() | 2.0 | testFadeOut() = true, testFadeDuration() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidDelayException() = IllegalArgumentException | Failed | Failed |
| setVisibleAfterDelay() | setVisibleAfterDelay() | 2.0 | testVisibilityAfterDelay() = true, testDelay() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidDelayException() = IllegalArgumentException | Failed | Failed |
| setInvisibleAfterDelay() | setInvisibleAfterDelay() | 2.0 | testVisibilityAfterDelay() =false, testDelay() = 2.0 |  |  |
| Invalid | -2.0 | testInvalidDelayException() = IllegalArgumentException | Failed | Failed |
| setGradient() | setGradient() | Color.RED,  Color.BLUE, 45 | testGetStartColor() = Color.RED, testGetEndColor() = Color.BLUE, |  |  |
| Invalid? | N/A |  | Failed | Failed |