

OculoChroma

Team 8 TAJ Studios

OculoChroma

A fun alternative to the typical color vision test.

Users are given a grid of squares and challenged to find the square with a **different hue** than the others. As users correctly complete grids, the test grows increasingly difficult, with **closer hues** and **larger grids**. Once time expires or users can no longer distinguish the difference in hue, the game ends and a guide is given to interpret results.

There is a freestyle option.

Responsibilities

Tamra Tawakol	Amanda Xu	Julia Gu
<ul style="list-style-type: none">- Main class- Timer- Debugging	<ul style="list-style-type: none">- UML- Buttons & screens- Debugging	<ul style="list-style-type: none">- Architecture- Background classes- ReadMe

Classes

1. OculoChroma (Tamra, Amanda, Julia)

Defines the window and screen changes for a color vision test.

2. Screen (Julia, Amanda)

Defines the layout of each screen in OculoChroma.

3. Button (Julia)

Customizes the buttons that appear in OculoChroma.

4. Square (Julia, Amanda)

A special Button with a color, equal width and height, and no text.

5. SquareGrid (Julia)

Represents a 2D array of colored Squares.

Difficulties

1. Switching JPanels (Tamra, Amanda)

had trouble writing the method that switches panels without accessing the JFrame and the current screen, and we couldn't paint the buttons onto the screen once the solved by removing all former panels before adding the new panel by repainting

2. Timer (Tamra, Julia)

java.util.Timer had thread issues
solved with javax.swing.Timer

Bugs

- after around level 20 on the macOS, the squares lose their border and there is no space between them
- buttons respond to clicks slightly right of and below them



Next Steps

1. Adding a proper hint button
2. Adding a gradient to startScreen
3. Adding music
4. Align the writing on the screens

UML



implements



is-a



depends-on



has-a

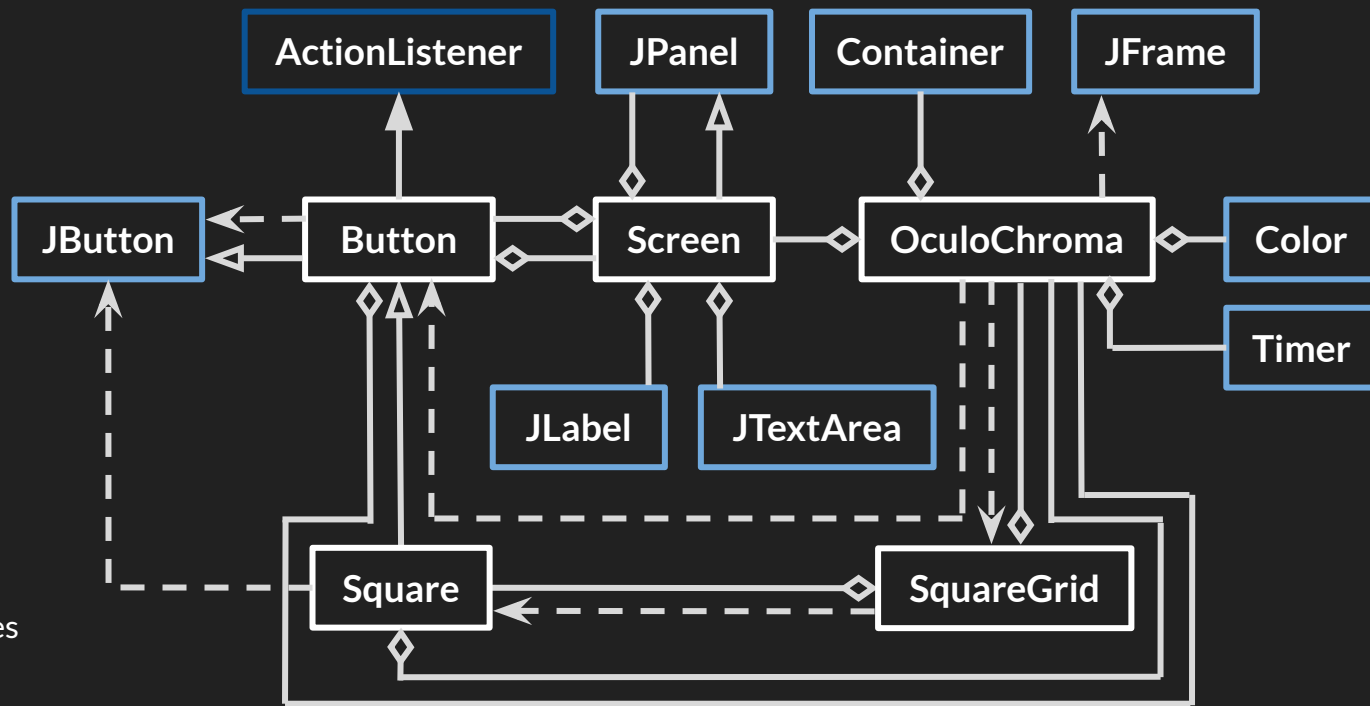


our classes



java library classes

interface



Questions