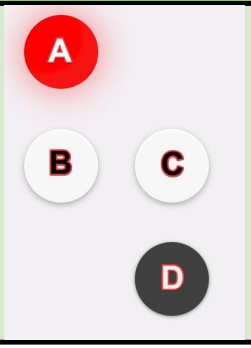
Test Environment URL:	https://nwtg.workroomprds.com/puzzle11.html
Start:	08/01/2024, 09:00
Tester:	**Shubina Nataliia**
Duration:	6h
Testing Notes:	Table below

Testing goal
Acquaintance with application Find out what the program does

Legend.
Button names



Testing Notes	
0 step.Observation	
Button	Observations
A	1. The blinking indicator. 2. Not clickable. 3. The indicator changes color from gray to red and vice versa.
B	Clickable button
C	Clickable button
D	1. Indicator/Lamp 2. Not clickable.
1 step. Clicking on buttons (Unit testing)	
Action	Result
Press the **B** button	1. The button changes its color from white to blue and returns to white after a few seconds. 2. A large number of clicks on a button keeps the blue color longer 3. In some cases, the **D indicator lights up** when the B button is pressed
Press the **C** button	1. The button changes its color from white to blue and returns to white after a few seconds. 2. A large number of clicks on a button keeps the blue color longer 3. In some cases, the **D indicator lights up/OFF** when the C button is pressed

2step. Iterations between buttons		
Case	Observation	Test Link
Button B can independently turn on indicator D	1. Button B can turn on indicator D when its first press in a session is when indicator A is red 2. Indicator A affects the operation of button B	Check #1
Button **B** can independently turn OFF indicator D	1. Button B cannot turn OFF indicator D. 2. Indicator A affects the operation of button B	Check #2
The **C** button can independently turn ON the D indicator	1. Button C cannot toggle ON the state of indicator D by itself (when the B button isn't pressed) 2. Indicator A does not affect the operation of button C	Check #3
The **C** button can independently turn OFF the D indicator	1. Button C cannot toggle OFF the state of indicator D by itself (when the B button isn't pressed) 2. Indicator A does not affect the operation of button C	Check #4
Button **B** TURNS ON indicator D when interacting with button C	Button B can turn on indicator D only if button C is pressed before button B is pressed (when the B button was never pressed))	Check #5
Button **B** TURNS OFF indicator D when interacting with button C	The B button cannot turn off the D indicator. Only the C button can	Check #6
Button **C** TURNS ON indicator D when interacting with button B	1. Button B affects whether button C can turn On the D indicator 2. Button C can turn on indicator D when button B has been pressed first on gray indicator A and then on red (one time at a time)	Check #7
Button **C** TURNS ON indicator D when interacting with button B	1. Button B affects whether button C can turn off the indicator 2 Button C can turn off indicator D when button B has been pressed on red indicator A and gray (something like a 0 1 signal where 0 is off/grey and 1 is on/red)	Check #8
A simple sequence of button presses	1. The number of clicks on button B on the red indicator A - is responsible for how many clicks button C must be made to switch the indicator D from red to gray 2. The number of clicks on the B button when the A indicator is black - is responsible for how many clicks the C button must be made to switch the D indicator from gray to red	Check #9
Complex sequence	1. Indicator D displays the full sequence of gray and red colors (set by button B) when button C is pressed. 2. New B button presses are added to the end of the sequence. 3. The D indicator continues to display the colors corresponding to its place in the sequence	Check #10

Conclusion
In my opinion, the main task of the program is to turn the D indicator on and off according to the sequence specified by pressing the B button. There is probably a counter that counts the number of times the B button is pressed on the red and black colors of the A indicator and stores this sequence in memory. Each new click with button B on a certain color of the indicator is saved at the end of the already existing sequence Click on button C - transfers the stored sequence (red/black color) to indicator D. Indicator D should repeat the same colors as in the specified sequence. This sequence is looped (ie, when the sequence reaches the end, it will start over in a circle). Despite the fact that the sequence can be replenished (with new presses of the B button), when the C button is pressed, the D indicator will continue to repeat from the place/index it was at.

Time on Design and Execution:	
Analyzing and Investigation	30%
Test Design	15%
Execution	55%

Pre-conditions:	For every test Clear cash and refresh the page

Check #1

Can button B **TURN ON** indicator D independently?

Buttons and indicators			
A	B	C	D
+	Click	No action	+

Buttons and indicators			
A	B	C	D
-	Click	No action	-

Buttons and indicators			
A	B	C	D
-	Click	No action	-
+	Click	No action	-

RESULT:

Button B **can turn on indicator D** when its first press in a session is when indicator A is red

Check #2

Can the B button **TURN OFF** the D indicator independently?

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	Click	No action	-

RESULT:

Button B **cannot turn OFF** indicator D.

Check #3

Can the C button **TURN ON** the D indicator independently?

Buttons and indicators			
A	B	C	D
+	No action	Click	-

Buttons and indicators			
A	B	C	D
-	No action	Click	-

RESULT:

1. Button C cannot toggle the state of indicator D
2. Indicator A does not affect the operation of button C

Check #4

Can the C button **TURN OFF** the D indicator independently?

Buttons and indicators			
A	B	C	D
+	Click	No action	+
+	No action	Click	-

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	No action	Click	-

RESULT:

1. Button C cannot toggle the state of indicator D
2. Indicator A does not affect the operation of button C

Check #5

Can the B button **TURN ON** the D indicator when interacting with the C button?

Buttons and indicators			
A	B	C	D
Any	No action	Click	-
+	Click	No action	+

Buttons and indicators			
A	B	C	D
-	No action	Click	-
+	No action	Click	No changes
+	Click	No action	+

RESULT:

Button B can turn on indicator D if button C is pressed several times before pressing button B for the first time

Check #6

Can the B button **TURN OFF** the D indicator when interacting with the C button?

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	No action	Click	No changes
-	Click	No action	No changes
-	No action	Click	-

Buttons and indicators			
A	B	C	D
-	No action	Click	-
+	No action	Click	No changes
+	Click	No action	+

RESULT:

The B button cannot turn off the D indicator. Only the C button can

Check #7

Can the C button **TURN ON** the D indicator in interaction with the B button?

Buttons and indicators			
A	B	C	D
-	Click	No action	-
+	Click	No action	No changes
Any	No action	Click	+

Buttons and indicators			
A	B	C	D
-	No action	Click	-
-	Click	No action	No changes
+	No action	Click	No changes
+	Click	No action	No changes
Any	No action	Click	+
Any	No action	Click	+
Any	No action	Click	-

RESULT:

1. Button B affects whether button C can turn On the D indicator
2. Button C can turn on indicator D when button B has been pressed first on gray indicator A and then on red (one time at a time)

Check #8

Can the C button **TURN OFF** the D indicator in interaction with the B button?

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	Click	No action	No changes
Any	No action	Click	-
Any	No action	Click	+

RESULT:

1. Button B affects whether button C can turn off the indicator
2 Button C can turn off indicator D when button B has been pressed on red indicator A and gray (something like a 0 1 signal where 0 is off/grey and 1 is on/red)

Check #9

A simple sequence of button presses

//This check is aimed at understanding the sequence of actions with a small number of button presses:

The user presses button B a certain number of times when indicator A lights up in only one color (eg, red) and then a certain number of times when it lights up in a different color (eg, gray).
A new iteration will start if the user changes the last color of the previous iteration to the opposite (for example, red-gray-red)

* It does not matter how many times the indicator color changes. It is important on which colors of the indicator the B button will be pressed

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	Click	No action	No changes
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	+

Buttons and indicators			
A	B	C	D
+	Click	No action	+
+	Click	No action	No changes
-	Click	No action	No changes
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	+
Any	No action	Click	-

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	Click	No action	No changes
-	Click	No action	No changes
Any	No action	Click	-
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	-

RESULTS:

1. The number of clicks on button B on the red indicator A - is responsible for how many clicks button C must be made to switch the indicator D from red to gray
2. The number of clicks on the B button when the A indicator is black - is responsible for how many clicks the C button must be made to switch the D indicator from gray to red

Check #10

Complex sequence
This test is aimed at understanding the sequence of actions with a large number of button presses:

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	Click	No action	No changes
+	Click	No action	No changes
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	+
Any	No action	Click	-

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	Click	No action	No changes
+	Click	No action	No changes
-	Click	No action	No changes
-	Click	No action	No changes
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	-

Buttons and indicators			
A	B	C	D
+	Click	No action	+
-	Click	No action	No changes
+	Click	No action	No changes
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	+
Any	No action	Click	-
-	Click	No action	No changes
+	Click	No action	No changes
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	-
Any	No action	Click	+
Any	No action	Click	+
Any	No action	Click	-

RESULTS:

1. Indicator D displays the full sequence of gray and red colors (set by button B) when button C is pressed.
2. New B button presses are added to the end of the sequence.
3. The D indicator continues to display the colors corresponding to its place in the sequence