LAB REPORT 3

VISUAL SEARCH EXPT:

**Introduction:**

Visual search is a goal-oriented activity that provides a closer look to the actions of attention in the real world. It requires attention that involves a scan of visual environment for an object. A visual experiment requires the observer to locate the target among few distractor items, this checks our accuracy.

**Method:**

**Apparatus:** Computer and a keyboard.

**Procedure:**

A target is predefined and a bunch of distractors.

Click on fixation, start time as 0 secs and stop time as 1 sec. Shape should be a cross. Layout as (0.1,0.1). Click on text component and write ‘t’ in the text. Keep duration as infinite. Name it as target. For a distractor, click on text and write L in the text and name it distr. Click on compilecode in the upper bar. Click on control and search for distr, copy the code. Paste the code in the code component in the **begin routine**. Remove the distractor from the main screen.

Code:

if random() > 0.5:

num\_distr = 10

thisExp.addData('num\_distr', num\_distr)

else:

num\_distr = 5

thisExp.addData('num\_distr', num\_distr)

distractors = []

for i in range(num\_distr):

distr = visual.TextStim(win=win, name='distr',

text='L',

font='Open Sans',

pos=(random()-0.5, random()-0.5), height=0.1,

wrapWidth=None, ori=randint(0,360),

color='white', colorSpace='rgb', opacity=None,

languageStyle='LTR',

depth=0.0);

distractors.append(distr)

for distr in distractors: distr.setAutoDraw(True)

**in the end routine**, paste the code:

for distr in distractors: distr.setAutoDraw(False)

Copy the position function from the code and paste it to the position of the target properties. Change to set every repeat. Add a mouse response by clicking on the mouse and write target in the clickable stimuli. Write on click in save mouse status. Write any click in the end routine on press. The stop time should be infinite. In data, write routine in time relative to. Add a loop and write trials as 200.

**Results:**

|  |  |  |  |
| --- | --- | --- | --- |
| x1 | 5 | 1.643596928 | y1 |
| x2 | 10 | 1.763705043 | y2 |
|  |  |  |  |

Data was collected and only the accurate trials were taken into consideration. The average Reaction time was calculated for each set sizes. The average RT for set size 5 is 1.6435 and RT for set size 10 is 1.763705. The reaction time for the set size 10 is higher than set size 5 which means it takes more time to respond. The slope was calculated by the formula: (y2-y1)/(x2-x1) and it is 0.024021.

**Discussion:**

The slope can be used to calculate the average rate of change. Here the average rate of change is 0.024021.This depicts that the attention required for responding with more distractors (set size 10) is higher than attention required for responding with less distractors.