

## Homework # 5.

Send solution by email to Milad (milad.naghizadeh@uleth.ca) by Monday (Oct. 22) 3pm.

For questions below, please modify program we wrote in class which is posted at

[http://people.uleth.ca/~luczak/Matlab2018/class11\\_game.m](http://people.uleth.ca/~luczak/Matlab2018/class11_game.m)

If some things in questions are not specified then it is up to you to decide. All answers can be combined in one program or each question can be a separate version of our program (in such case use one .m file with different questions separated by 'return' command). Each question is worth 2 points. Chose 5 out of 7 questions. Please specify which questions you have chosen.

1. The program remembers all the previous games and displays the highest score so far. Tip: use 'save' and 'load' functions to make program to 'remember' previous games.
2. Have ranking of player's score such that less than 10 sec is gold, less than 15 sec is silver, less than 20 sec is bronze, and above 20 sec no medal. Tip: color of medal can be displayed in command window as a text.
3. Start as a big target circle to click and then keep decreasing the size of the circle as you proceed. Tip: Each iteration of main loop may decrease size of circle by 1. Check 'MarkerSize' option for 'plot' function.
4. Calculate accuracy for players by taking into account both how far the click is from the actual location and how long it takes for the player to complete the six targets. For example:  $\text{score} = \text{time} + \text{dist} * 2$ .
5. Add random things in the plot as distractions to the real target. For example, at each iteration you may display 5 additional circles but with different colors than the real target.
6. Penalize player with having to wait for next trial if she/he misses. Tip: check function 'pause'.
7. If we miss circle then it moves to new location.

Remember that you can get extra points for most creative / interesting answers.

Good luck,

Artur