

USER EXPERIENCE HOMEWORK-4

In the Robot Vision version of the I-See-Bytes, there is a function called BarChart(.). It is declared in icmedia.h file:

```
// creates barchart of data
int* BarChart(ICBYTES& img, ICBYTES& data, int height, int barwidth = 14, unsigned
backcolor = 0, unsigned barcolor = 0xff00);
```

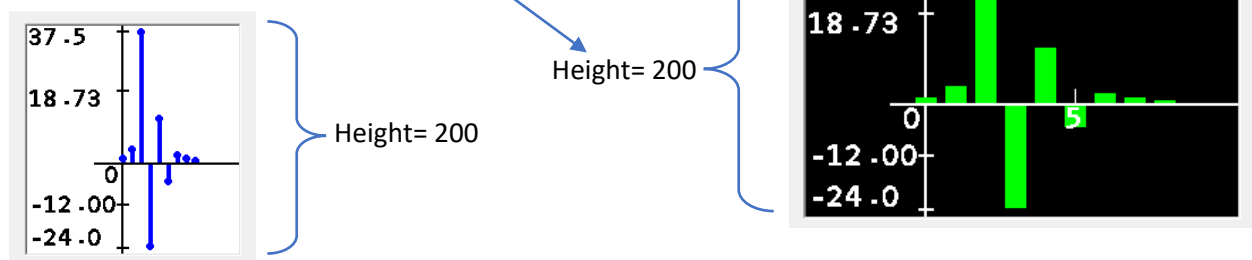
This definition tells us that this function creates a 32bit color image inside the “img” matrix.

The data that we wish to chart is in “data” matrix (or vector for this case).

It asks us what the “height” of the image will be but the rest of the parameters, default values are defined. If I write a code like this:

```
ICBYTES img, data = { 1.2, 3.89, 37.45, -24.0, 12.7, -5.5, 2.2, 1.1, 0.45 };
BarChart(img, data, 200);
DisplayImage(FRM1, img);
```

It creates a Picture as shown here →:



But, if I write:

```
BarChart(img, data, 200, 3, 0xffffffff, 0xff);
```

This is what I get. The function adjusts the axis color so that it is the opposite of background. The distance between the bars is automatically adjusted and so is the width of the entire char but height is still 200.

Now go to internet and find some chart (data representation) types that I mentioned in the last class and implement it just like this. By this, I mean get only a few of the parameters from the user and adjust everything else based on the data you receive. You can put limits on the size of data and the max and min of data inside the code. In your report you should explain what those limits are and why you put them. Explain what type of data your chart is useful for displaying (financial? Population? Time period? Etc.)

YOU WILL DECIDE WHAT TYPE OF CHART YOU WILL USE!

BEST DESIGNS WILL GET HIGHER MARKS.

YOU HAVE TO MAKE SURE THAT THE USER CAN NOT CRASH YOUR FUNCTION.

DON'T WRITE KINDERGARTEN LEVEL CODE! YOU'LL GET 0(ZERO).

WE WILL USE OUR OWN DATA TO TEST YOUR CODE!!!

YOU CAN USE EITHER STUDENT OR ROBOT VISION VERSIONS OF I-SEE-BYTES. (<http://otoidrak.com>)