CS101 PROJECT

YEAR OF COURSE:2014-2015

PROJECT TITLE: SKETCH BOT
GROUP NO:140
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INSTRUCTIONS TO RUN THE PROJECT:

The video tutorial for setting up of the project can be found at the given link."https://www.youtube.com/watch?v=8mN1DybcKo8"
This video guides the user in setting up all the required components for working of the project and also demonstrates the working of UI.

Apart from the setup,as mentioned in the video,user just needs to follow the steps given below for running the program:

1.Firstly load the file SketchBot_final.hex into AVR Bootloader.The file can be found in the folder "Source\SketchBot_final (Atmel)\SketchBot_final\Debug". Set the bot firebird V in program mode,and program it.

2.Next connect a XBee Module in port COM1 of your PC.

If not go to Device Manager. Then under Serial Ports right-click on the device, go to properties and under Advanced options change the COM port to COM1.

Assuming the XBee is configured(you can configure it using XCTU software), press the reset button of the bot.

3.Ensure that the pen is properly connected to the bot i.e. touches exactly at the center of the axis of the wheels in penDown position.

4.Run the java executable file SketchBot.jar.

5.Select one of the two options in the UI..If you choose Upload an image:

- Click on browse and select the image path. You need to ensure that the file named imageproc.exe(which can be found in the main directory of 140070006_grp140)is present in the same folder as that of the image i.e. copy the file imageproc.exe into the folder containing the image.
- Give the appropriate resolution and click submit.
- The original image as well as the image consisting of only the detected borders which will be drawn is shown.
- If the user doesn't want some part of the border to be drawn, he can erase that part by dragging the mouse over the region while keeping the right mouse button pressed.
- On pressing Enter, the bot will draw the given image,and a message "successfully drawn" will be displayed after that.

If you choose make an image:

- Click on browse and select the file imageproc.exe from the main directory of SketchBot.
- Draw the image in the window displayed and press enter.

- The bot will draw the given image, and a message "successfully drawn" will be displayed after that.

6.Ensure that you press the reset button of the bot every time you give a new input to the interface.