ENGR101 Project 3

Instructions- Team 19

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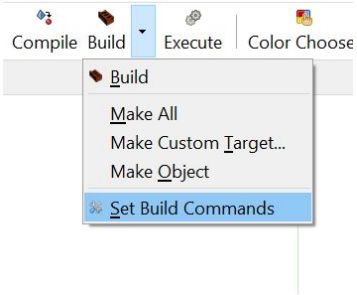
Instructions for making the robot run on Windows;

1. Download and install the MinGW[1] compiler and MinGW SFML for windows https://www.sfml-dev.org/download/sfml/2.5.1/
2. Unzip the SFML file into a new folder
3. Rename to 'SFML'
4. Download and unzip AVC_Win10.zip into this same folder
5. Download Geany (instructions below)
6. Open 'makefile' and 'robot.cpp' through Geany in the AVC_robot folder
7. Change the makefile txt to the following:

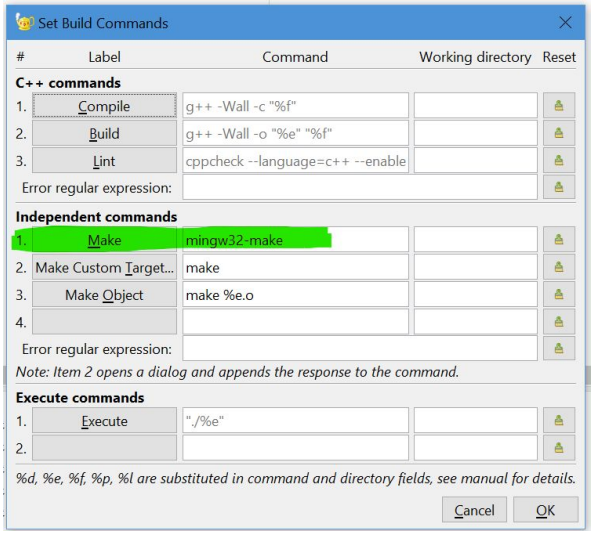
```
1  INCLUDE = -I C:\Users\HP\Documents\University\ENGR101\robot2\SFML\include
2  LIBS = -L C:\Users\HP\Documents\University\ENGR101\robot2\SFML\lib
3  robot.exe: robot.o
4      g++ $(LIBS) -o robot robot.o -lsfml-window  -lsfml-graphics -lsfml-system -lsfml-network
5  robot.o: robot.cpp
6      g++  -c $(INCLUDE) robot.cpp
7
```

   Where the file path on line 1 is to the SFML include file and line to is the SFML lib file
8. Delete robot.o and robot.exe in the AVC_robot folder
9. Open robot.cpp and click the downward arrow on the right of the build button. Then click set build commands



[1] Add mingw installation folder name to Windows PATH environmental variable

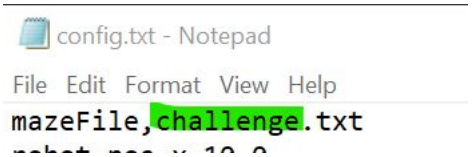
10. Change the 1st make command to ‘mingw32-make’ and press OK



11. Click the same downward arrow next to the build like before and press ‘make all’
12. After this is done, robot.cpp should compile successfully
13. Now open the makefile and server3.cpp in the AVC_server folder through geany like you did with the robot ones
14. Copy the makefile from the AVC_robot folder and paste it into the makefile for AVC_server
15. Replace all ‘robot’ with ‘server3’ like below

```
1  INCLUDE = -I C:\Users\HP\Documents\University\ENGR101\robot2\SFML\include
2  LIBS = -L C:\Users\HP\Documents\University\ENGR101\robot2\SFML\lib
3  server3.exe: server3.o
4      g++ $(LIBS) -o server3 server3.o -lsfml-window  -lsfml-graphics -lsfml-system -lsfml-network
5  server3.o: server3.cpp
6      g++  -c $(INCLUDE) server3.cpp
7
```

16. Delete server3.o and server3.exe in the AVC_server folder
17. Open server3.cpp and press ‘make all’ like before
18. This should compile successfully
19. To run the actual robot, I suggest you close all geany files and open server3.cpp again and the robot.cpp in a new instance of geany
20. Press build then make and execute server3.cpp and then open robot.cpp and execute this too. Click on the Global view window and your robot should be running
21. To change the courses between core, completion, and challenge, open cofig.txt in the AVC_server folder and change ‘**core**.txt’ to any of these on line 1 then save this txt file



Each time you want to run the robot from now on, begin from step 19

Instructions for using Geany;

https://osdn.net/projects/mingw/releases/

1. Install the Mingw software associated with your pc (**mingw-get-setup.exe)**
2. Click next on the install page and agree to the license agreement
3. Close the current version
4. Reopen and choose the components that you need and run the g++ compiler to check if it is working properly. Otherwise you are able to run the installer again to add more components.
5. Use the default destination folder (C:\MinGW).
   https://www.geany.org/download/releases/
6. Download Geany for your operating system with the above link. (Windows/Linux/Mac)