**PIC Tutorial**

1. Download/install MPLab IDE 8.8 from <http://www.microchip.com/stellent/idcplg?IdcService=SS_GET_PAGE&nodeId=1406&dDocName=en019469>

2. Copy over the CCS folder from the solarcar server

- in your file explorer, type this into the address bar: [\\pc-solarcar.eng.mcmaster.ca](file:///\\pc-solarcar.eng.mcmaster.ca)

- user: remote , pass: phoenix

- CCS is in: files->software->CCS PCWHD

3. Installing CCS

- run pcwhdupd.exe

- it will ask for registration files. Don’t give any registration files and complete the installation

- run the keygen (in the CCS folder) and place files in the main part of the PIC C folder (C: -> program files (x86) -> PICC, unless you put it somewhere else). The keygen produces the registration files and keeping them in the PICC folder will enable them.

- run ideutilsupd.exe (in CCS folder)

- download and install the MPLab plug-in for CCS found here: <http://www.ccsinfo.com/downloads.php>

- to check if everything worked correctly: run the PIC C compiler ->project ->PIC Wizard. If you cannot select the PIC Wizard button, OR if there are no Devices to choose from while in the PIC Wizard, follow the next step. If you have these options, you are good.

- go to the Solarcar server -> files -> software ->CCS PCWHD ->example crg. Copy the registration files from there and replace your old files in your PICC folder with them. Everything should work now.

4. Starting a new project

- open PIC C and run the PIC Wizard. Save the project file somewhere

- in the setup menu, choose the correct device (we used PIC 16F883), correct frequency (we used 8,000,000), if you are not using an external oscillator: select internal RC Osc, go into Intr Oscillator Config-> and enable internal Oscillator.

- what this does is write a lot of the setup code and functions for you

- open MPLab and run the Project Wizard.

- select the same device as you did before

-under active toolsuite, select CCS C Compiler. If your computer did not find it for you, hit browse then: C->program (x86)->PICC->Ccsc.exe

- name and save the new project somewhere

- in step 4, find the CCS .c file that you created and ADD it to the right column.

- now the .c file is linked between the compiler and MPLab

5. Begin coding!

-PICC has a really good help search to look for functions