Document for templates for GIT

**The following are folders that should be created for the C coding**



Config folder :

This folder will contain all the configuration related to application.

Namely App\_config.h , which will different section for various configuration of peripheral, protocols and external devices used in the application. Example



DOC folder :

This will have the required documents for the using the application and configure the same.

Include folder:

This Includes all the header file data that we will using for the application

Example : stdio.h, conio.h, 8051.h , p16f877a.h etc

This will also contain other typdef and customer specific macros and arrays that is used across the application

**Example : char const cust\_data[] = “Welcome and have a nice day”**

Main folder :

This folder contains main file, which runs the application. This will also contain the HEX file which was built

Project folder:

This folder contains all the files related for the building the project

Source folder

This folder will contain the all the driver files of the peripherals and other device

Example: lcd\_driver.c, keypad\_driver.c, spi\_driver.c, rs232\_driver.c etc.

Template for any Header file

File name : XXX\_config.h

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#ifndef \_\_XXX\_config **/\* include this for mutual exclusion of header file\*/**

#define \_\_XXX\_config

**/\* configure application specific driver \*/**

#define XXX\_DRIVER\_ENABLED TRUE

#define YYY\_DRIVER\_ENABLED FALSE

**/\* include driver files \*/**

#if (XXX\_DRIVER\_ENABLED == TRUE)

#include "..\source\xxx\_driver.c"

#endif

#if (YYY\_DRIVER\_ENABLED == TRUE)

#include "..\source\yyy\_driver.c"

#endif

#endif

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

Template for main.c file

File name: app\_main.c

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Include files \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#include "..\include\Header.h"

#include "..\config\APP\_config.h"

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Define sates \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

enum conditions

{

STATE1, STATE2, STATE3, STATE4, STATE5 };

enum conditions state=STATE1;

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Main function \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

void main()

{

while(1)

{

switch(state)

{

case STATE1 :

app\_initialization ();

state= STATE2;

break;

case STATE2:

{

run\_application();

state=STATE3;

break;

}

case STATE3 :

{

Run\_application2();

state=STATE4;

break;

}

case STATE4 :

{

end\_application();

break;

}

}

}

C coding standard

Please refer these links [press CNTRL + click]:

[Jetcafe : C coding standard](http://www.jetcafe.org/jim/c-style.html#Preprocessor)

General naming conventions:

* Macros should be all CAPS [eg: # define LCD\_ENABLE ]
* Local variable should be all small [eg: int lcd\_data]
* Static variable and Global should be have first letter as CAPS and others small

[eg: Lcd\_data \_array [] ]

* Function name should have some proper name [eg: read\_adc]