

# CPE403 – Advanced Embedded Systems

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## Design Assignment #

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DO NOT REMOVE THIS PAGE DURING SUBMISSION:

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Github Repository link (root):

<https://github.com/saibalaji1997/githubfiles/tree/main/CC1352/Assignment%205>

Youtube Playlist link (root): <https://www.youtube.com/shorts/tIyZTPN0yMc>

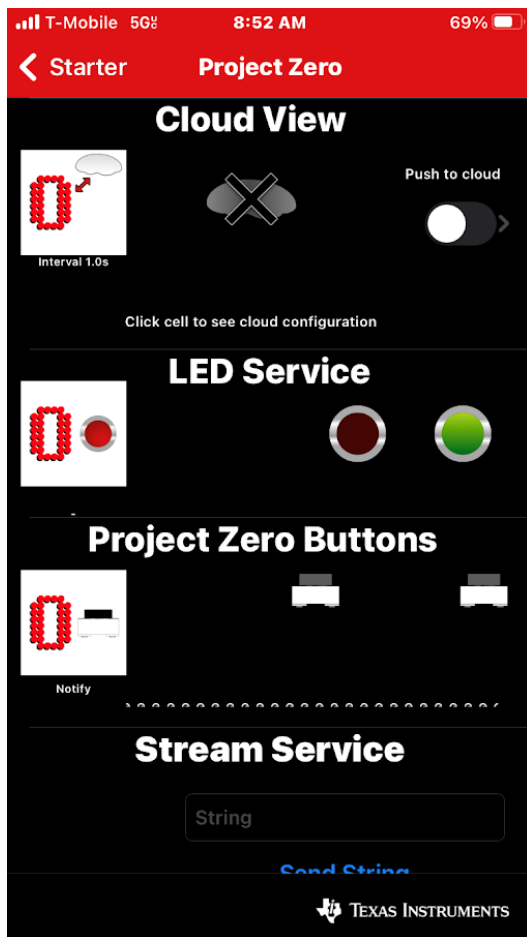
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**Follow the submission guideline to be awarded points for this Assignment.**

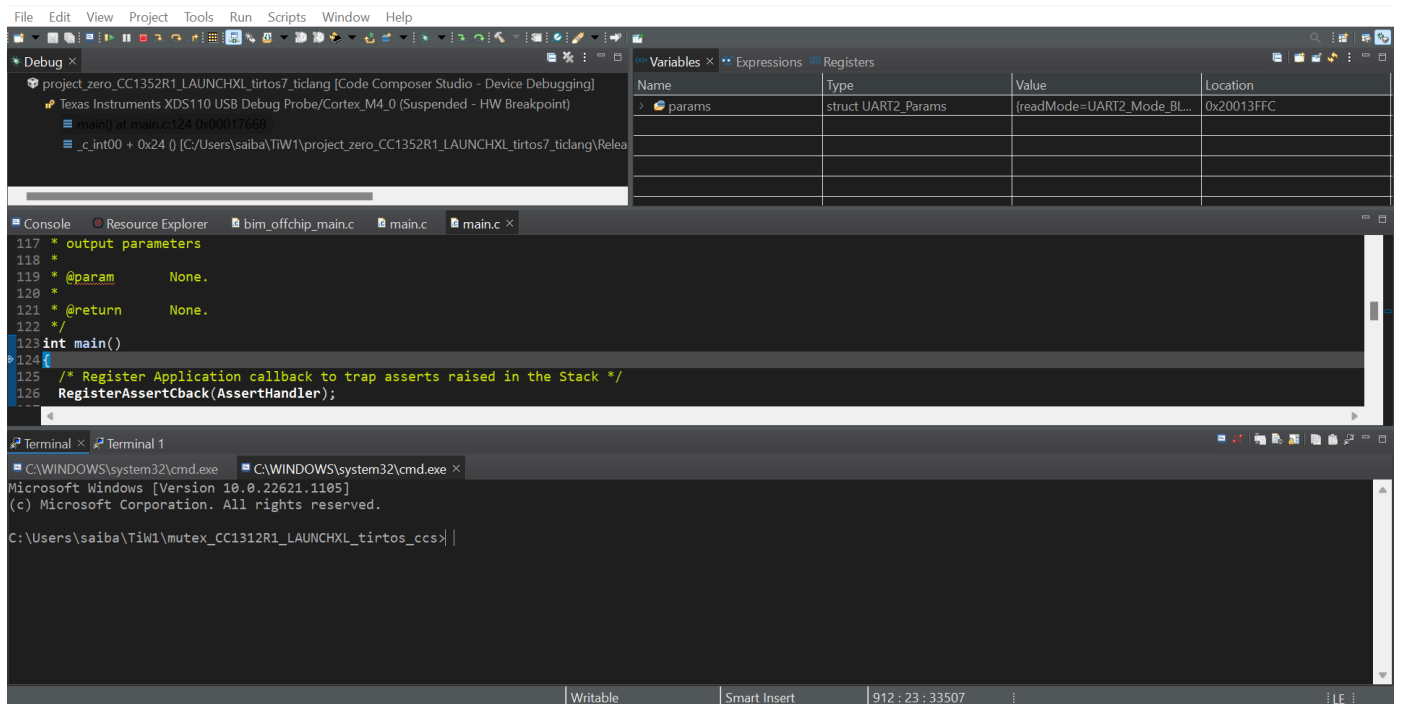
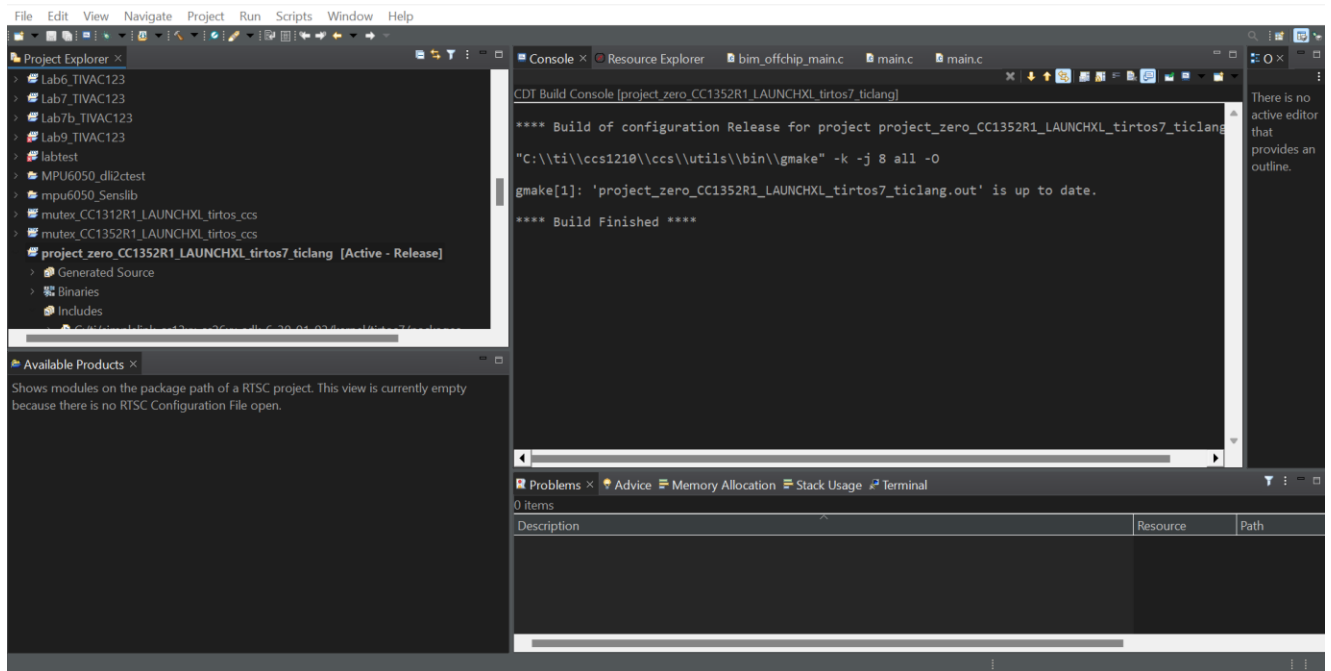
Submit the following for all Assignments:

1. In the document, for each task submit the modified or included code (from the base code) with highlights and justifications of the modifications. Also include the comments. If no base code is provided, submit the base code for the first task only.
2. Create a private Github repository with a random name (no CPE/403, Lastname, Firstname). Place all labs under the root folder TIVAC, sub-folder named Assignment1, with one document and one video link file for each lab, place modified c files named as asng\_taskxx.c.
3. If multiple c files or other libraries are used, create a folder asng1\_t01 and place these files inside the folder.
4. The folder should have a) Word document (see template), b) source code file(s) with startup\_ccs.c and other include files, c) text file with youtube video links (see template).
5. Submit the doc file in canvas before the due date. The root folder of the github assignment directory should have the documentation and the text file with youtube video links.
6. Organize your youtube videos as playlist under the name “cpe403”. The playlist should have the video sequence arranged as submission or due dates.
7. Only submit pdf documents. Do not forget to upload this document in the github repository and in the canvas submission portal.

1. Block diagram and/or Schematics showing the components, pins used, and interface.



2. Screenshots of the IDE, physical setup, debugging process - Provide screenshot of successful compilation, screenshots of registers, variables, graphs, etc.



PuTTY (inactive)

```
#000001 [ 0.035 ] INFO: (led_service.c:221) Registered service, 5 attributes, status 0x00
#000002 [ 0.036 ] INFO: (button_service.c:260) Registered service, 7 attributes
#000003 [ 0.036 ] INFO: (data_service.c:239) Registered service, 6 attributes
#000004 [ 0.037 ] INFO: (project_zero.c:597) Registered OAD Service
#000005 [ 0.037 ] INFO: (project_zero.c:2912) Left button not held under boot, not reverting to factory.
#000006 [ 0.037 ] INFO: (project_zero.c:2914) Right+Left button not held under boot, not erasing external flash.
#000007 [ 0.037 ] INFO: (project_zero.c:615) OAD Image v0001
#000008 [ 0.037 ] INFO: (led_service.c:237) Registered callbacks to application. Struct @20002170
#000009 [ 0.037 ] INFO: (button_service.c:278) Registered callbacks to application. Struct @20002178
#000010 [ 0.037 ] INFO: (data_service.c:257) Registered callbacks to application. Struct @20002180
#000011 [ 0.037 ] INFO: (led_service.c:272) SetParameter : LED0 len: 1
#000012 [ 0.037 ] INFO: (led_service.c:280) SetParameter : LED1 len: 1
#000013 [ 0.037 ] INFO: (button_service.c:319) SetParameter : BUTTON0 len: 1
#000014 [ 0.037 ] INFO: (button_service.c:352) Trying to send noti/ind: connHandle ffff, Noti/ind disabled
#000015 [ 0.037 ] INFO: (button_service.c:330) SetParameter : BUTTON1 len: 1
#000016 [ 0.037 ] INFO: (button_service.c:352) Trying to send noti/ind: connHandle ffff, Noti/ind disabled
#000017 [ 0.037 ] INFO: (data_service.c:295) SetParameter : String len: 40
#000018 [ 0.037 ] INFO: (data_service.c:306) SetParameter : Stream len: 20
#000019 [ 0.037 ] INFO: (data_service.c:328) Trying to send noti/ind: connHandle ffff, Noti/ind disabled
#000020 [ 0.040 ] INFO: (project_zero.c:1125) GAP is started. Our address: FC:A8:9B:EC:AB:25
#000021 [ 0.040 ] INFO: (project_zero.c:1140) Name in advData1 array: Project Zero
#000022 [ 0.044 ] INFO: (project_zero.c:1380) Adv Set 0 Enabled
```

3. Declaration

I understand the Student Academic Misconduct Policy -  
<http://studentconduct.unlv.edu/misconduct/policy.html>

"This assignment submission is my own, original work".

Name of the Student

Sai Balaji Jai Kumar