CC1352 WSN ASSIGNMENT

Objective

Goal of this assignment is to create a star-topology networks for a Sub-1GHz application or a 2.4GHz application. Complete the following pre-assignments: 1*. LPSTK TI 15.4-Stack, and 2**. Sensor and Collector - TI 15.4-Stack Project Zero (no sensor terminal required/available). You'll not need the booster pack for this assignment, since you'll be using the CC1352 LPSTK that has the sensor. Use the HDC2080 (temperature and humidity) and OPT3001 (light) sensors in the CC1352 LPSTK to modify the sensor code (see 2**). The CC1352LPSTK will contain the sensor code and CC1352LP will be the collector. Create a new sensor message to transmit the number of LPSTK BTN-2 press (see TI 15.4-Stack - Adding a New Sensor). Display the data from the sensor node on the collectors terminal (Humidity, Temperature, Light, BTN-2 Count). PS: You'll be recreating the demo code in 1* from scratch without the DMM feature.

Submit the following:

- Demo (Video link text file), Document, and Code.
- Documentation: Submit the midterm report with 1) Goal, 2) Detailed Implementation, 3) Schematics, 4) Video links, 5) Screenshots, and 6) Conclusions (tasks completed).

Marks are awarded based on the following criteria:

Requirements:

- C - Code submitted with comments and project support materials (30%)
- D - Documentation with comments, variations for tasks, schematics (30%)
- V - Video Demo in txt file, I - Image Screenshots in Document or links (40%)

Follow the submission guideline to be awarded points for this Project.

Submit the following for all Labs:

- In the existing Github submission repository, place all assignment files under the root folder CC1352-WSN, subdirectory TIRTOS-Assignment with one document and one video link file for each sub-task, place modified c files named as cc1352_main.c, cc1352_tirtos.c, cc1352_tirtos.cfg, and cc1352_tirtos.syscfg.
- The folder should have a) Word document (see template), b) source code file(s) with cfg and all '.c' files and other include files, c) text file with youtube video links (see template).