

# CPT 211: Assignment 2 – (Due 12pm-28/5/2014)

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## Objectives:

- To introduce (Internet of Things) IoT concept to the 2<sup>nd</sup> year students.
- To apply and augment the basic concept through Blink example.

## Outcome:

- Since IoT concept is huge, there are plenty of opportunities for students to explore. As for this assignment, students should be able to explore basic network computing knowledge and simple playground provided by Intel Galileo.

The purpose of this assignment is to explore basic features of Intel Galileo. Before attempting the assignment, please ensure that the programming environment is set up properly by following the tutorials mentioned below as covered in the lab sessions.

## References:

1. [Intel: Getting Started](#)
2. [Setup and Hello World](#)
3. [Language Reference for Arduino](#)

## Assignment: Galileo Web Server Morse Code Control

The idea: to provide a publicly accessible website through Intel Galileo which Morse code signal messages within the network can be turned on and off. Only one user is allowed at a time to play the message, which means NO ONE can interfere during the signaling. Show the status that the signal is being flag at the moment. Your boards also will be expected to complete the display of Morse code signal messages through serial monitor. Provide these 3 messages through your Galileo web server:

- Hello World
- SOS
- I am fabulous

## Checklists

- Implement Intel Galileo board as web server.
- Implement Morse code control signal through Galileo web server.
- Implement a public signal status flag through web server.
- Demonstrate Morse code message through Serial Monitor.
- Demonstrate all listed three messages of Morse code.
- Demonstrate through Smartphone.

**Deliverables** (Team leader submission to **hadri.hilmi@gmail.com** by 28/5/2014, 12:00PM)

[E-mail message subject title – **CPT 211 Assignment 2 (team name)**]

1. Team assignment demo during lab session on 26/5/2014 and 27/5/2014
2. Source code submission
  - Inside the code: indicate the team name and members inside the comments
  - Include appropriate comments for code readability
3. Presentation slides submission
  - Indicate the team name and members on the slide cover
  - Slides page limit: 5 pages including the slide cover.
  - Slide contents should include the followings:
    - i. Web server setup
    - ii. Morse code implementation
    - iii. Lesson learned