

## Chapter 0: Introduction

### Objective

Introduce self and other instructors

- Key is for students to learn – stop/ask questions if instructor is going too fast or if you don't understand

Show the class project and explain

- Show programmed kit
- Show AWS site
- Pass around kit (need USB charging bank)

### Prerequisites

C-programming and MCU concepts

### Assumption

96-page power point (literally) – 3 things:

1. Use a module partner
2. Cypress has most robust Wi-Fi
3. Use a cloud partner (99% reliable means 88 hours per year downtime, 99.9% is 8.8 hours, etc.)

### Scope

What is this class? An introduction to:

1. WICED Wi-Fi Ecosystem – chips, modules, IDE, SDK
2. Using the SDK to create IoT devices
3. TCP/IP
4. Wi-Fi
5. Cloud protocols and cloud providers (unfortunately, not just one protocol)
6. JSON and REST – formats used to transfer data

What this class is NOT:

1. A discussion of what WICED Studio COULD BE or SHOULD BE
2. C-programming class
3. Details of Wi-Fi
4. Using chip on board instead of a module
5. Network programming class
6. Bluetooth or ZigBee
7. Linux with WICED
8. Module selection

9. Details on MCU peripherals
10. Tutorial on advanced uses of WICED

## Agenda

1. Go through the agenda sections in detail
2. Each chapter will have lecture followed by labs
3. During lecture, we will highlight some things in the material but you still should read it
4. We will move on when time expires – try to get all basic labs done and then work on advanced
5. Solutions are provided but PLEASE do not cheat – you need to do the exercises to learn them
6. No breaks scheduled – take a break when you need it during the labs
7. No cell phones, email. We are dedicating 2 days (or more) to this and we expect you to do the same

The bottom line is that unless you are a giant customer... you aren't going to get help ... so you need to learn. You can make great products with WICED... and it isn't nearly the most complicated product at Cypress (the honor goes to fx3)... but you have to dig in and get it!

Ask for questions about content, agenda, logistics, etc.