# Chapter 1: Tour of WICED Wi-Fi

## Objective

Objective is to understand the parts that make up the WICED ecosystem

Software is based on Eclipse and is called WICED Studio

### Tour of WICED Studio SDK

#### First Look

Talk about the 5 boxes on the IDE window. Note that we will show a demo in the next chapter.

1. File Editor
2. Project Explorer
3. Make Target
4. Console
5. Help

Use Reset Perspective or Window > Show View if you lose a window

#### Project Explorer

README.txt and version.txt

##### Apps

Apps - where all projects go (examples, demos, and yours)

##### Doc

API.html is most useful in the directory

##### Platforms

A platform is a specific piece of hardware (e.g. a kit, your own custom board)

1. Contains necessary information to program kit
2. Contains macros for resources such as button, LEDs

We will use a kit plus shield and will have a platform defined for that combination

##### Libraries

Useful functions such as:

1. U8G graphics LCD (which is on our shield)
2. Parsing JSON
3. Working with filesystems

##### Resources

Files required by application other than .c and .h

1. HTML files for a web server
2. Security certificates and keys

### Tour of Documentation

#### In the SDK Workspace

API.html

#### On the Web

Community

#### Reporting Issues

Use JIRA

### Tour of WICED SDK Structure

SDK Structure

1. RTOS
2. Hardware layer, intermediate layers, API layer, your application

### Tour of Wi-Fi

WICED chips support all flavors of Wi-Fi

For the most part, you just say connect and the SDK takes care of the rest:

1. Finding the frequency and channel
2. Using the fastest connection possible

### Tour of Chips

* Older chips start with BCM, newer Cypress branded chips start with CYW
* Wi-Fi chip numbers all start with 4
* Kit numbers all start with 9, such as the CYW943907AEVAL1F

### Tour of Partners

* Module makers
* Technology partners such as Amazon web services
* Value Added Resellers
* ODMs

### Tour of Development Kits

## Exercise(s)

Exercises – 30 minutes

* Create a forum account and explore the online forum
* Look at the documentation in WICED Studio