Lesson 1

Android and SIP

Lesson 1 | Android and SIP

1 - SipProfile
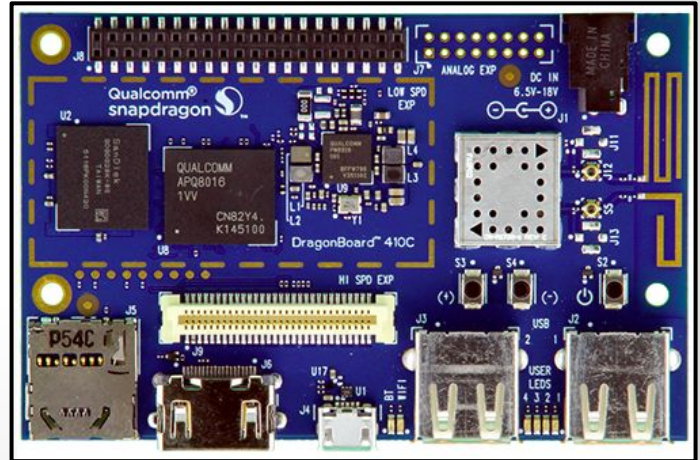
2 - SipManager

1 - SipProfile

1 | SipProfile

- for sip accounts

  - username, domain, password

- created using the **SipProfile.Builder** or obtained through sip sessions

- through **SipProfile.Builder**:

  - usually used for the local sip account

  - build or create the sip profile so a **SipManager** can log the user in

- or through **SipSessions** (calls):

  - allows the app to pull some credentials (like usernames/domains) of both ends of the call
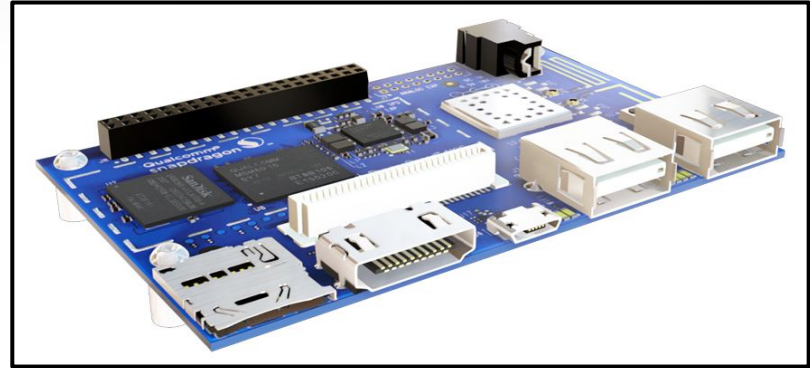
2 - SipManager

2 | SipManager

- to manage calls (**SipSessions**)

- the **SipManager** will use the **SipProfile** you created

- makes it possible for **SipAudioCalls** to happen (outgoing and incoming calls to the sip profile)

- **SipAudioCalls** and **SipSessions** are similar

  - both can be instantiated using the **SipManager**

  - the actual calling action (when a sip connection is created)

  - offers different ways to create calls (sending and receiving)
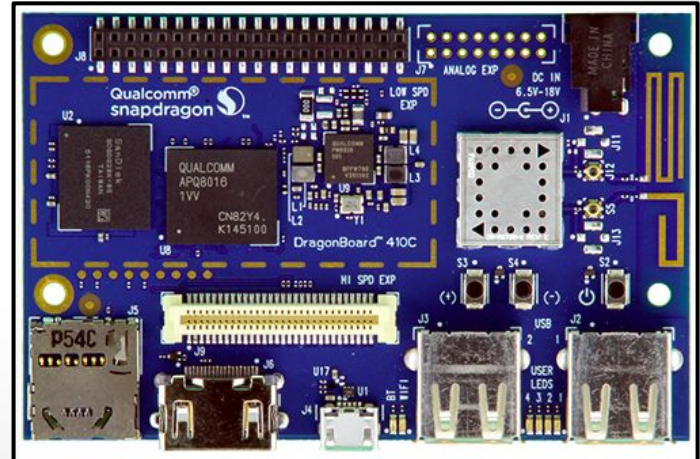
Lesson 1 | Summary + A Look Back

1 - SipProfile
- ● SipProfile.Builder

2 - SipManager
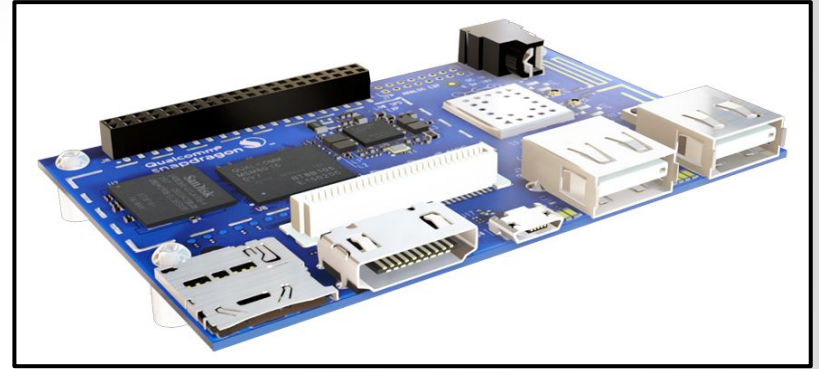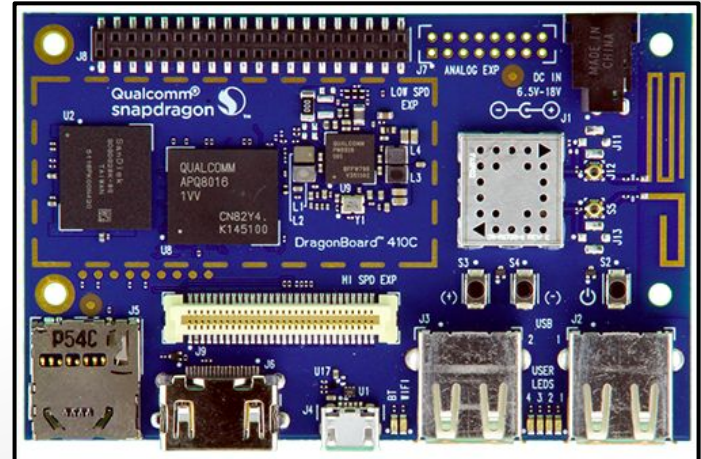- ● SipAudioCall
- ● SipSession

Lesson 2

Creating and Deploying a VoIP App

Lesson 2 | Creating and Deploying a VoIP App

1 - Code Walkthrough

2 - Deploy and Demo
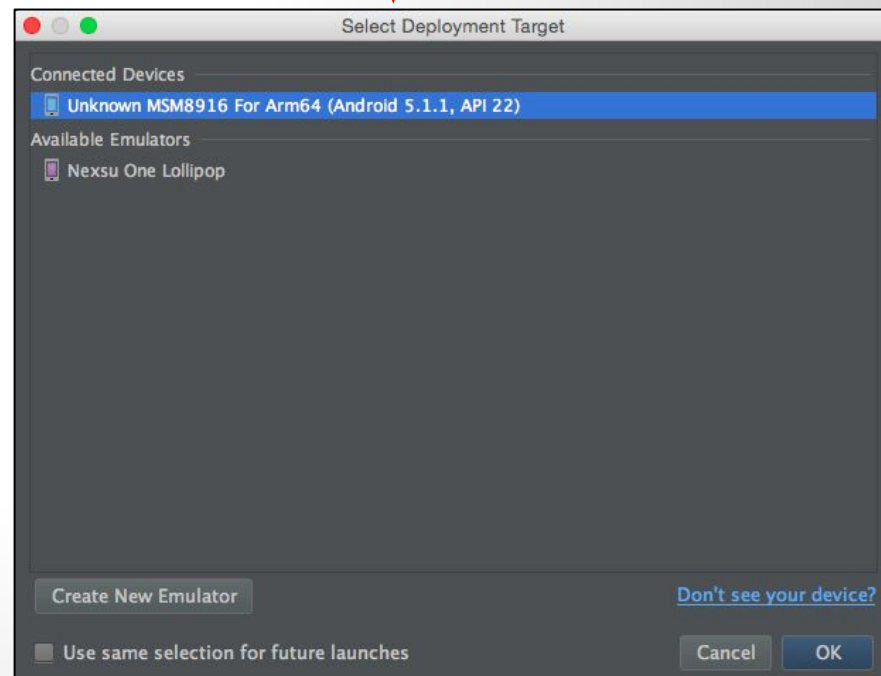
1 - Code Walkthrough

1 | Code Walkthrough

screen casterzs - lolzzs

2 - Deploy and Demo

2 | Deploy and Demo

- pull the code (Android Studios VCS)
- connect computer to board
  - make sure developer mode is on
  - Settings → About phone → click build number 7 times
- deploy to the board by clicking run (or drop down menu or use the hotkey, default control+R)
- finally, select your device

2 | Deploy and Demo
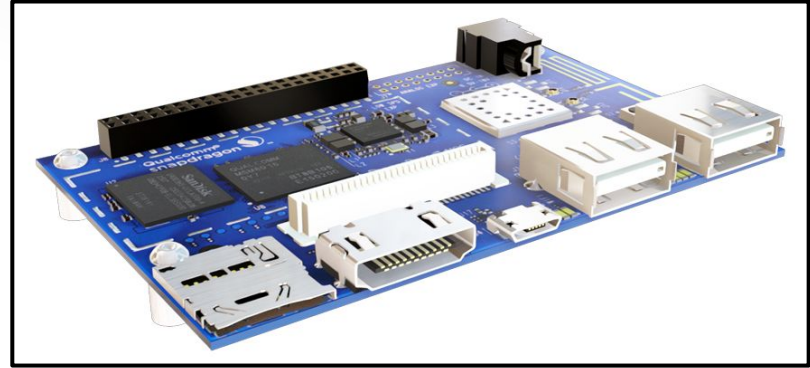
Some ways to improve the app:
- better security
- login screen
- saved logins
- contacts
- better UI
- call history
- mute
- hold

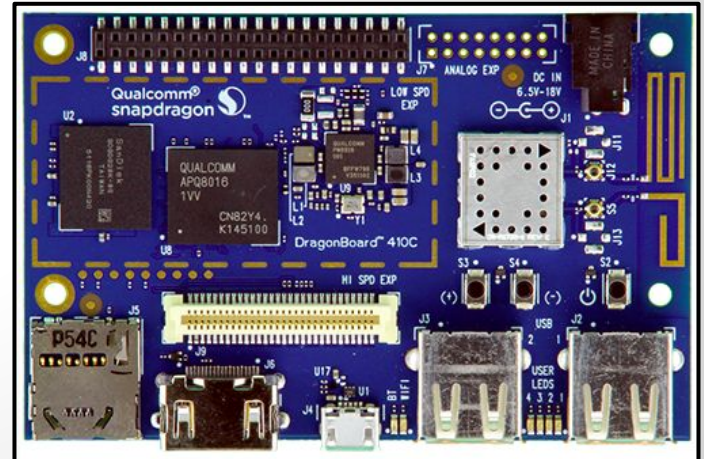Can post it for others to try out or just keep it for yourself.

Lesson 2 | Creating and Deploying a VoIP App

1 - Code Walkthrough
- ● creating sip profiles
- ● outgoing and incoming sip calls
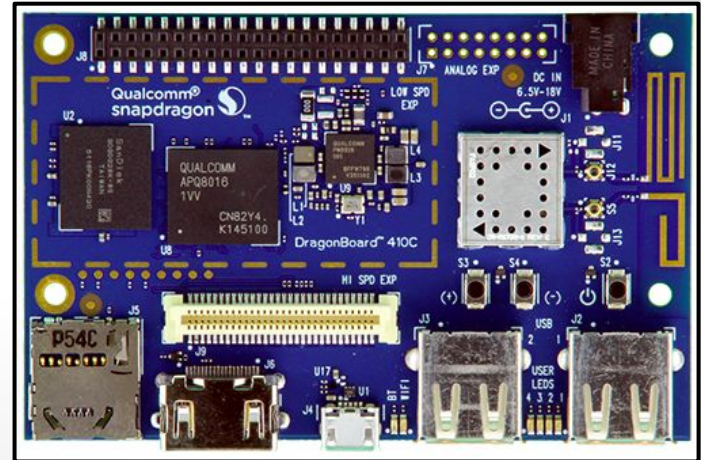
2 - Deploy and Demo
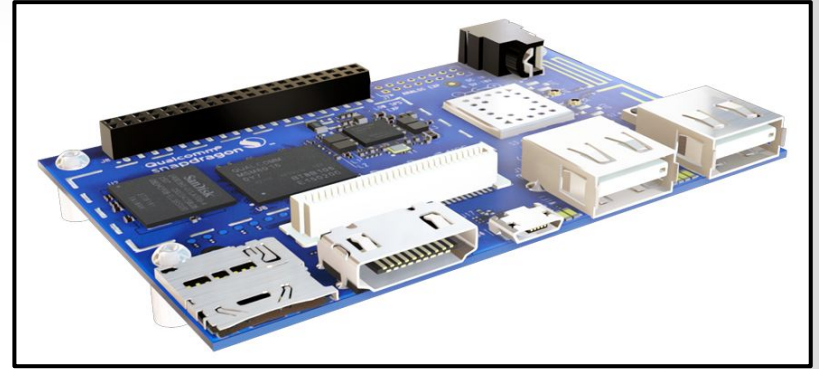
Lesson 3

VoIP and IoT

Lesson 3 | VoIP and IoT

1 - VoIP and the Smart Home

2 - VoIP and the Smart Office

3 - Mobile VoIP and EoIP

1 - VoIP and the Smart Home

1 | VoIP and the Smart Home

- Think of all VoIP applications in your home now

- What can we add? Which devices fit our model?

- Can everything truly communicate with each other?

- What about the door bell?

1 | VoIP and the Smart Home

- Capability to make the home "Smarter"

- Be at home, without actually being there!

- Control aspects of your home from a smart device

- Automated IoT devices, pre-programmed tasks

1 | VoIP and the Smart Home

1 | VoIP and the Smart Home

- Growing market

- So much left to develop

- Sensor and connectivity restraints?
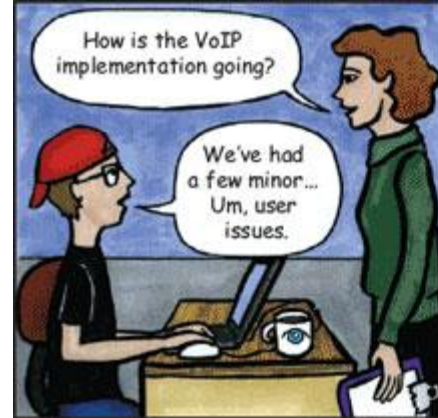
- Whats next?

http://freecode.com/tags/voip

2 - VoIP and the Smart Office
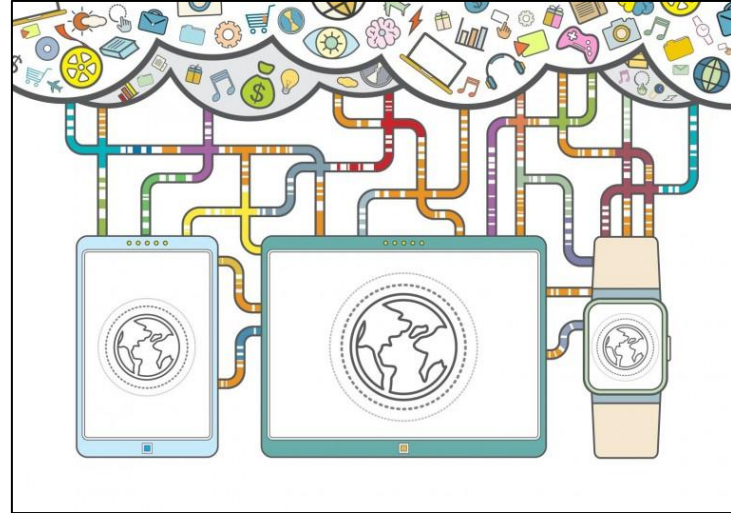
2 | VoIP and the Smart Office

- Objects in the traditional office

- What could we change? Make better.

- International business
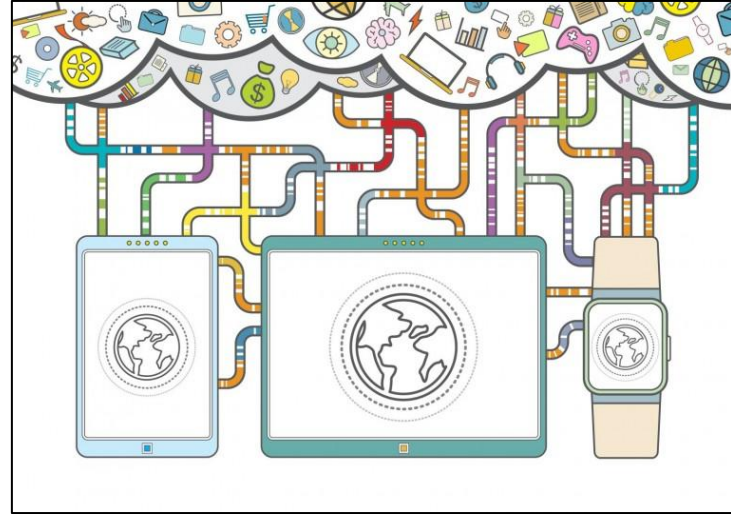
3 - Mobile VoIP and EoIP

3 | Mobile VoIP and EoIP

- Think everything mobile.

- Taking your VoIP service with you everywhere

- The mobile office

- IP-Based WiFi, LTE, and 3G

3 | Mobile VoIP and EoIP

- Everything over Internet Protocol

- An interconnected world

- Machine - to - Machine - to - Human

- Wide spread data exchange / sharing

Lesson 3 | Summary + A Look Back

1 - VoIP and the Smart Home

2 - VoIP and the Smart Office

3 - Mobile VoIP and EoIP