

# WEEKLY REPORT

## TRANQUILLUM

### 12/11/2012

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#### **Abdullah Hasan Taher Bayrakdar**

- Attended Zigbee tutorial of Fatih Gökçe on Thursday this week. Learned communication over X-CTU and took notes about XBee documentation provided by Digi. In the tutorial I learned that the communication between two zigbee devices must be done with a frame of different components such as size of package, bytes to be sent, checksum etc.
- According to the tutorial I Tested the communication between Zigbee Coordinator & End device on Windows with X-CTU on 2 PCs. In the next step we should find a proper API for replacing X-CTU and use it to carry the communication among two PCs on Linux environment.
- SRS Document – Part of Overall Description, Gantt chart (Planning) and state transition diagrams (Behavioral model) have been completed and whole document revised and edited before submission.

#### **Anıl Ulutürk**

- Tested Zigbee communication with XBee Python API, but couldn't receive-transmit a well formed frame between 2 computers. After checking few sample codes and documentation of Python API [1], I tested receiving data in a python code on OpenSUSE. But I couldn't succeed on this endeavor, since sending a package with a frame failed when AT mode commands didn't act as I expected. I will try to solve this problem in next days.
- SRS Document – Overall Description, Planning and Conclusion parts have been completed and submitted. In the SRS document, Data Model section was missing because we didn't decide on any data packages to be used as a standard form between all devices. We need to work on this section after we deal with proper usage of python API or Java alternative [2] on the internet.
- Attended Zigbee tutorial of Fatih Gökçe on Thursday this week. Learned communication over X-CTU and took notes about XBee documentation provided by Digi (manufacturer).

### **Şerafettin Öztürk**

- Attended Zigbee tutorial of Fatih Gökçe on Thursday this week. Learned communication over X-CTU and took notes about XBee. In the tutorial, I learned how to use XBee in AT and API modes. Also I learned the rules of sending data in API mode.
- I take part in mainly product functions, design constraints section and half of the functional requirements section in SRS Document. Also take some part in revising and editing the whole document.

### **Zeynep Mavuş**

- I also attended ZigBee tutorial presented by Fatih Gökçe on Thursday in this week. I learned how to communicate two ZigBee over X-CTU. I also learned the data sending modes, which are transparent and API. However, we concentrated on the API mode which is more useful for our project process.
- I also took part in the SRS documentation. The parts include mainly product features, performance requirements in the non-functional requirements section and half of the functional requirements section. After completion, I also revised the whole document as my team friends.

### **As a Group:**

- This week, we focused on writing SRS which helped us think more about what we are going to do upcoming weeks.
- Also, we work on communicating the Zigbee's using a few sample codes and what we learned from the tutorial presented by Fatih Gökçe. We will try to present a demo for using Zigbee devices on Linux in next week's weekly meeting.

**References:**

- [1] <http://code.google.com/p/python-xbee/>
- [2] <http://code.google.com/p/xbee-api/>