Project Assignment

SecRout Implementation

Goal: Implement SecRout, a secure routing protocol for wireless sensor networks, using socket programming on a single computer.

Description:

The details of SecRout can be found in the following article:

SecRout: a secure routing protocol for sensor networks
Authors: J. Yin and S. Madria
Publication: Proceedings of the 20th International Conference on Advanced Information Networking and Applications (AINA'06), Volume 1, April 2006.
(Downloadable from UIS Library's IEEE Xplore)

The following key features of SecRout are required for this project:

- Secure route request
- Secure route reply
- Secure data forwarding

In the implementation, wireless nodes are to be simulated using processes/threads in network socket programming. Packet forwarding can be done through TCP or UDP socket. When the project is completed, a short demonstration is expected as the evidence of successful implementation.

Teamwork:

Team work (up to 3 persons) is allowed in this project. All members will receive the same grade on this assignment.

What to turn in:

- Source code (with comments)
- Brief instructions on how to compile and run your program
- Report: document the additional assumptions you have made for this project, and provide evidences that the implementation is correct and successful.
- **Zip** everything in a file named after your **last name** (e.g., Lee.zip) and submit it through **Digital Dropbox** in Blackboard.