

ABSTRACT GROUP 1
Mobile Networking CIS4930
Presentation 04/16/2013

We will be highlighting the simulation and the implementation done. In a nutshell, the presentation will be a step-by-step journey through our implementation up till now.

At the implementation phase we will be focusing on the challenges faced and how we overcame them. We will be showing our design process and how we subdivided our problem statement into various subgroups. Snapshots of the application would be present in the slides to showcase the development phases of our application.

Our application:- The mobile devices are updating their locations on a server <tunneling-localhost> The server checks if the nodes are under the limited/constrained distance as found by the simulations and decides whether to pass on the “short message or not” on being told so by the user of the mobile device.

It's a combination of Ad-Hoc + infrastructure based application. We are using 3G/mobile data for uploading locations on the server and using the Wi-Fi/Ad-hoc capabilities of the device for message transfer.

We will also be focusing on simulations to show our implementation-like scenario. We will take into consideration the radio propagation model (free space/two ray ground/shadowing model) that we used in our simulation and what we took out from those simulations. Further the simulations will be supported by our inferences of the TCP connection for the entire simulation time, between the mobile nodes to facilitate better understanding of the events taking place at the receiver or the sender. These inferences would also form the basis of determining some of the parameters like (limiting distance for transmission) in our application. If the destination node is not within these limits the server could give the sender an error message.

References:

- [1] <http://www.isi.edu/nsnam/ns/>
- [2] <http://developer.android.com/guide/topics/location/strategies.html>
- [3] <https://developers.google.com/maps/documentation/>
- [4] <https://forwardhq.com/in-use/responsive>
- [5] <http://php.net/manual/en/book.mysql.php>