

## 491 Weekly Report 7

**Team:** Dec15-13  
**Date:** 3/9/15  
**Advisor:** George Amariuca  
**Project:** Ad Hoc Mobile Network  
**Members:** Cole Cummings (Team Leader)  
Holden Rehg  
Cody Lougee  
Ethan Niemeyer

### Summary

This week, ETG set up XCode for us in the TLA. Now that we have access to XCode, we can begin actual development. Additionally, we were given a presentation during our advisor meeting on DSR.

### Group Meeting Notes

Worked on finding alternatives to working in the TLA, as well as establishing a stricter timeline of goals.

### Advisor Meeting Notes

DSR has two main parts. Route Discovery and Route Maintenance. RREQ is Route Request, RREP is Route Reply. When some node needs to find another node it sends out a RREQ with flooding. Once a RREQ reaches its destination the shortest path is returned as a RREP. If a node receives 2 or more RREQ's it drops all but the first one it received. RREQ's will have a source IP, a destination IP, and an ID. Together these can be used to identify RREQ's. Each node has an RREQ table where it tracks these. As the RREQ goes out and as the RREP goes back, the nodes update their routing table. Route Error or RRER's - when asking for RREQ's an acknowledgement is sent to the requester. If a node falls out of the table, then an RRER is sent back along the path it came from, RRER contain information about the node that left, other nodes remove from their routing table paths that contain the sequence of nodes that no longer exist.

Read 802.11s about mesh networking.

### Accomplishments

XCode set up in TLA  
Set up a timeline of goals

## Plans For Next Week

{Plans Here}

## Pending Issues

{Pending Issues Here}

## Individual Contribution

<b>Team Member</b>	<b>Hours</b>	<b>Descriptions</b>
Cole Cummings	3	Read 802.11s and looked more into specific implementations of DSR. Some research into OSX on windows and renting a VM.
Holden Rehg		
Cody Lougee	4	Looked into specifics of implementing DSR in swift
Ethan Niemeyer		

## Total Contribution

<b>Team Member</b>	<b>Hours</b>
Cole Cummings	23
Holden Rehg	19

Cody Lougee	25
Ethan Niemeyer	20