**Sample Coding in Wireless**

Here Guys this is an sample tcl coding   
  
  
# Define options  
set val(chan) Channel/WirelessChannel ;# channel type  
set val(prop) Propagation/TwoRayGround ;# radio-propagation model  
set val(netif) Phy/WirelessPhy ;# network interface type  
set val(mac) Mac/802\_11 ;# MAC type  
set val(ifq) Queue/DropTail/PriQueue ;# interface queue type  
set val(ll) LL ;# link layer type  
set val(ant) Antenna/OmniAntenna ;# antenna model  
set val(ifqlen) 50 ;# max packet in ifq  
set val(nn) 50 ;# number of mobilenodes  
set val(rp) DSDV ;# routing protocol  
set val(x) 1000 ;# X dimension of topography  
set val(y) 1000 ;# Y dimension of topography   
set val(stop) 150 ;# time of simulation end  
  
set ns [new Simulator]  
set tracefd [open simple.tr w]  
set namtrace [open simwrls.nam w]   
  
$ns trace-all $tracefd  
$ns namtrace-all-wireless $namtrace $val(x) $val(y)  
  
# set up topography object  
set topo [new Topography]  
  
$topo load\_flatgrid $val(x) $val(y)  
  
create-god $val(nn)  
  
  
  
# configure the nodes  
$ns node-config -adhocRouting $val(rp) \  
-llType $val(ll) \  
-macType $val(mac) \  
-ifqType $val(ifq) \  
-ifqLen $val(ifqlen) \  
-antType $val(ant) \  
-propType $val(prop) \  
-phyType $val(netif) \  
-channelType $val(chan) \  
-topoInstance $topo \  
-agentTrace ON \  
-routerTrace ON \  
-macTrace OFF \  
-movementTrace ON  
  
for {set i 0} {$i < $val(nn) } { incr i } {  
set n($i) [$ns node]   
}  
  
# Provide initial location of mobilenodes  
$n(0) set X\_ 347.0  
$n(0) set Y\_ 3.0  
$n(0) set Z\_ 0.0  
  
$n(1) set X\_ 345.0  
$n(1) set Y\_ 36.0  
$n(1) set Z\_ 0.0  
  
$n(2) set X\_ 330.0  
$n(2) set Y\_ 121.0  
$n(2) set Z\_ 0.0  
  
$n(3) set X\_ 316.0  
$n(3) set Y\_ 152.0  
$n(3) set Z\_ 0.0  
  
$n(4) set X\_ 246.0  
$n(4) set Y\_ 90.0  
$n(4) set Z\_ 0.0  
  
$n(5) set X\_ 379.0  
$n(5) set Y\_ 6.0  
$n(5) set Z\_ 0.0  
  
  
  
# Set a TCP connection between n(1) and n(31)  
set tcp [new Agent/TCP/Newreno]  
$tcp set class\_ 2  
set sink [new Agent/TCPSink]  
$ns attach-agent $n(1) $tcp  
$ns attach-agent $n(31) $sink  
$ns connect $tcp $sink  
set ftp [new Application/FTP]  
$ftp attach-agent $tcp  
$ns at 10.0 "$ftp start"   
  
# Set a TCP connection between n(31) and n(43)  
set tcp [new Agent/TCP/Newreno]  
$tcp set class\_ 2  
set sink [new Agent/TCPSink]  
$ns attach-agent $n(31) $tcp  
$ns attach-agent $n(43) $sink  
$ns connect $tcp $sink  
  
#defining heads  
$ns at 0.0 "$n(0) label CH"  
$ns at 0.0 "$n(1) label Source"  
#$ns at 0.0 "$n(2) label N2"  
  
  
  
$ns at 10.0 "$n(5) setdest 785.0 228.0 5.0"   
$ns at 13.0 "$n(26) setdest 700.0 20.0 5.0"   
$ns at 15.0 "$n(14) setdest 115.0 85.0 5.0"   
  
#Color change while moving from one group to another  
$ns at 73.0 "$n(2) delete-mark N2"  
$ns at 73.0 "$n(2) add-mark N2 pink circle"  
$ns at 124.0 "$n(11) delete-mark N11"  
$ns at 124.0 "$n(11) add-mark N11 purple circle"  
$ns at 103.0 "$n(5) delete-mark N5"  
$ns at 103.0 "$n(5) add-mark N5 white circle"  
$ns at 87.0 "$n(26) delete-mark N26"  
$ns at 87.0 "$n(26) add-mark N26 yellow circle"  
$ns at 92.0 "$n(14) delete-mark N14"  
$ns at 92.0 "$n(14) add-mark N14 green circle"  
  
# Define node initial position in nam  
for {set i 0} {$i < $val(nn)} { incr i } {  
# 20 defines the node size for nam  
$ns initial\_node\_pos $n($i) 20  
}  
  
# Telling nodes when the simulation ends  
for {set i 0} {$i < $val(nn) } { incr i } {  
$ns at $val(stop) "$n($i) reset";  
}  
  
# ending nam and the simulation   
$ns at $val(stop) "$ns nam-end-wireless $val(stop)"  
$ns at $val(stop) "stop"  
$ns at 150.01 "puts \"end simulation\" ; $ns halt"  
proc stop {} {  
global ns tracefd namtrace  
$ns flush-trace  
close $tracefd  
close $namtrace  
exec nam simwrls.nam &  
}  
  
$ns run