

# LAB6: Guidance to Final Projects

## CS169: Mobile Wireless Networks - Winter 2018

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# How to create a new ns-3 model?

- Implement the new model: “mparf-wifi-manager.h” and “mparf-wifi-manager.cc”
- Decide where in the source tree the new model should reside:  
/ns-3.25/src/wifi/model/
- Integrate your new source files into Waf build system: add names of the source files “mparf-wifi-manager.h” and “mparf-wifi-manager.cc” to the file /ns-3.25/src/wifi/wscript
- Build the code: ns-3.25\$ ./test.py

# How to implement MparfWifiManager?

- MparfWifiManager is based on ParfWifiManager
- Location of the source files of ParfWifiManager:  
/ns-3.25/src/wifi/model/parf-wifi-manager.h and  
/ns-3.25/src/wifi/model/parf-wifi-manager.cc
- Try to understand parf-wifi-manager.h and parf-wifi-manager.cc
- Refer to the project description and pseudocode for the difference between MparfWifiManager and ParfWifiManager
- Write the code for “mparf-wifi-manager.h” and “mparf-wifi-manager.cc”

# How to write your test program?

- The test program (e.g., my\_power\_test.cc) should be put in the “scratch” folder
- How to create PacketSinkApplication: PacketSinkHelper
- How to create OnOffApplication: OnOffHelper
- How to use schedule in ns-3: Simulator::Schedule (refer to the function “void MyApp::ScheduleTx (void)” in fifth.cc for more info)