Architecture Project

- [ ] Write Fundraising letters
- [ ] git://github.com/mrerrormessage/n-body-architecture.git
- [ ] Planning
  - [x] ~~get GitHub working~~
  - [ ] Implement Algorithm in serial
    - [x] ~~Write makefile~~
    - [x] ~~Write Tests~~
    - [ ] Write Benchmarks
    - [x] ~~Data structure consideration~~
    - [x] ~~Consider use of different algorithms~~
  - [ ] Plan for parallel implementations
    - [x] ~~Consider how work should be parallelized~~
    - [ ] Write spec. for how this should work
- [ ] MPI
  - [ ] Learn MPI
    - [x] ~~Download~~
    - [x] ~~Write "Hello, World"~~
    - [ ] Write makefile
    - [ ] Write Unit tests for Algorithm
  - [ ] Plan
    - [ ] Consider how multiple processors should interact with data and with each other
    - [ ] Draw up spec to show this
  - [ ] Implement
    - [ ] Write Code
    - [ ] Compile
    - [ ] Test
  - [ ] Write-about
    - [ ] Disassembly

- [ ] Benchmark!
- [ ] CUDA
  - [ ] Learn CUDA
    - [x] ~~Download CUDA (or find a way to access it)~~
    - [ ] Write "Hello, world" (or equivalent
    - [ ] Write makefile
    - [ ] Write unit tests
  - [ ] Plan
    - [ ] Consider how CUDA can be used most effectively
    - [ ] Draw up spec to show this
  - [ ] Implement
    - [ ] Write code
    - [ ] Compile
    - [ ] Test
  - [ ] Write-about
    - [ ] Coding experience
    - [ ] Disassembly
    - [ ] Benchmark
- [ ] Writing
  - [ ] Write intro/abstract
  - [ ] Spend a bit of time talking about MPI & CUDA, how different paradigms work with implementation
- [ ] AP: Serial Algorithm finished writing
- [ ] AP: All "Planning finished"
- [ ] AP: MPI Learning and planning finished
- [ ] AP: MPI implementation finished
- [ ] AP: MPI write-about finished
- [ ] AP: "Learn CUDA" and CUDA Planning finished
- [ ] AP:CUDA Coding
- [ ] AP:CUDA Writeup
- [ ] AP:Benchmarking

- [ ] AP- rough draft must be finished
- [ ] AP:Revise Paper and finalize
- [ ] Architecture Project Due