Expectations List for Developer Liberation Front (http://research.csc.ncsu.edu/dlf/)

Successful Outcomes (REU student):

- You have a PhD student-like experience, so you know what graduate school would be like, so you can make an informed choice about whether a PhD and research career is right for you
- I can write you a good letter of recommendation (for jobs, grad school, etc), based on my interactions with you
- You submit to a an SRC
 - Financing: I'll put up \$500, \$500 from SRC
- Stretch: You write a successful ICSE or CHI submission
 - Coauthor with others is more doable

Successful Outcomes (PhD first semester):

- Have DLF experience, so you can make an informed choice about whether our lab is right for you
- Impress me so that I want you to join our group, or I can strongly recommend you to someone else's group
- Otherwise, person/project specific

Successful Behaviors (All)

- Takes notes
- Be at school whenever the university is open, unless you arrange with me at least two weeks in advance.
- Be on time. Send email when you're not. Whenever possible, spend your time in the lab.
- Respond promptly to emails from me and labmates. Response within 24 hours is fairly reasonable, excepting weekends and holidays.
- Be observant and replicate (good) behaviors of others
- Be an active participant in lab, including reading group
- Keep me abreast of your progress
 - Make find-grained plans and deliver on them
 - Anti-pattern: "I'm working on..."
- Set your own tasks
 - Ask me to confirm, not invent
 - o Can help prioritize, but you tell me initially what priority you want
- Set an ambitious schedule, keep to it, adapt as necessary
- Carve out what you find interesting -- don't just do what I find interesting
- Distinguish your work from others'
- Structure work so that there are intermediate research accomplishments (not just technical ones)
- Figure out what you need to do to work with me, your research advisor, effectively
 - Seek out help from me when you need it

- Try to get help on your own, and from your peers, first
- Take my advice when it's the best course of action, and when it's not, tell me why
 not (don't drop it silently -- I don't like repeating myself). If you think you may not
 understand the advice, ask me to explain.
- Infer the pattern from my advice, implement it
- Regular events
 - Read 2 papers per week, post to citeulike, write a 2-sentence summary, then relate it to your work
 - Go to one meetup per month

PhD Student Behaviors

- Make insightful observations. How?
 - Point out internal contradictions
 - Make connections between seemingly disparate things
 - Find evidence against some weakly held assumptions
- Prioritize Science over Engineering
 - What can we learn without a full solution?
 - What can you cut responsibly and still do your study?
- Come up with new ideas that haven't been researched before
- Evaluate the ideas and work of yourself and others critically
 - o Is it feasible?
 - What are the advantages and disadvantages?
 - o Give constructive feedback on others' work

Questions

- What motivates you?
- What schedule do you want this summer/semester?
- What do you imagine for yourself beyond this summer/semester?
- Do you have other questions for me?