Python Project Suggestions

Below are some general suggestions for your semester-long group projects. These are meant to give you an idea of the depth/scope of the projects. Some are inherently more difficult to develop than others. If the project you choose is not as complex (the Personal Ledger application, for example), I expect it to be well-polished with a rich set of features. You can absolutely come up with a completely different idea than those listed here (and I encourage it). Try to come up with an idea that is really exciting and interesting to you and your group. I will require that every group do something unique so that we can share our projects with one another. You have until Monday, May 18 to decide on your topic. Submit a one page proposal to me in class outlining your group’s idea and some of the potential features of your project.

- **GUI Programming (TkInter, PyQT, etc...)**
  - Personal Ledger application: help user manage finances/learn how to manage household finances with a richly-featured graphical user interface.
  - Simulator for complex technical/mathematical concepts (i.e. an interactive pipeline simulator for CDA3101). Can use NumPy/SciPy, matplotlib, etc.

  - Combine with database functionality to create prototype e-commerce application (think Amazon, eBay, etc...).
  - Combine with crawling and scraping functionality to amalgamate and compare info on the web (Price comparisons, for example).

- **Networking (Twisted, Low-level sockets, etc.)**
  - Combine with GUI to create peer-to-peer messaging application.
  - Game server (match users up for games like tic-tac-toe, for example).
  - Richly-featured Mail Client or Reader.

- **Familiarize yourself with some of the top Python packages** ([http://pypi-ranking.info/alltime](http://pypi-ranking.info/alltime)) and come up with an interesting project idea.