Final Project Proposal

Due: April 25 in class

Overview

Your assignment is to propose an idea that will form the basis of a final project. This project will be developed during the remainder of the quarter (approximately 4 weeks) in small teams (2-3 persons). This assignment has two main parts:

1. In an essay, describe your proposed project so that people understand what it is and why it is valuable. Also, describe the project architecture so that it is clear that the system can be built given the available resources and technology.
2. Prepare a short "elevator pitch" (2-3 minutes) to present your idea to the class.

This is an individual assignment.

Project Requirements

The function performed by your project is entirely up to you. The only requirement for your project is that it must utilize the Hadoop cluster. We encourage you to find a problem whose solution benefits from such a distributed system. This could be porting an existing application to Hadoop, or something more unique.
With this assignment, you have the opportunity to propose a project that you believe is interesting and valuable, and if you can convince your peers, you can then design and build it in an team environment. With multiple developers and the resources we've provided (namely, our bad-ass cluster), you will have the power to build something phenomenal resume-worthy, sure to give you the street-cred you need to impress future employers or faculty-members.
If your product will depend on the availability of special software or datasets, it helps to get an early start to determine both feasibility and accessibility, so be sure to mention this upfront.

Deliverable

You will submit an essay of no more than 2 pages of text (illustrations are free). Your essay should follow the outline below.
1. Overview
1-2 paragraphs. Describe and analyze the problem or idea, giving background on the problem and listing some of the properties of existing solutions (if the idea isn't new). Also, briefly explain your proposed solution, describing your top-level objectives, differentiators, and the scope of the work.
2. Suggested Solution and System Architecture
2-3 paragraphs. Describe your solution in more detail, including essential system features and organization. Provide an analysis of the technical feasibility at this level. If necessary, include a high-level sketch of the components and how they will integrate (illustrations may help).
3. Development Plan
1 paragraph. Describe a high-level timeline for this project, consisting of major milestones and their short descriptions (1-2 sentences). This should help you to scope the work and determine the number of developers you might need to complete your project.
4. Feasibility Rationale
1 paragraph. Evaluate the conceptual integrity of your idea and identify any risks. This is an appropriate space to list concerns upfront which might require additional help from instructors or staff.
In addition to the essay, you will prepare an "elevator pitch" to be delivered to your peers during class. This short speech should be 2-3 minutes in length, giving a brief overview of the problem space, your

proposed solution and your development plan. A slide-deck is probably not necessary, though the projector will be available in the event that you want to share illustrations (please have these readily accessible via thumb-drive or web before the start of class).