Design Project
Final Deliverables

Overview

Each team is asked to produce **two deliverables**: **the software design proposal document** and the **presentation**.

The following due dates are in effect:

Deliverable	Due Date
Design document	*June 1, 2012*
Presentation	June 5, 2012

Software Design Proposal

The software design proposal shall include the following information.

1. **Title.** Title of your proposal/name of the software system, team name, names of team members.
2. **Introduction/Executive Summary.** Provide a brief outline of your design.
3. **Stakeholders.** Identify the stakeholders chosen for the project. For each stakeholder describe their interests and desires for the software. Analyze possible conflicts between the stakeholders.
4. **Services.** Specify the services to be provided by the software system. Identify which stakeholder needs and desires the services address.
5. **Architecture.** Describe the proposed software/hardware architecture. Outline major components of the system. Identify any hardware needs for the system (if such exist beyond what's been described in the assignment).

6. **Components.** Describe each major component of the system. Specify, which services (if any) each component provides, what data it produces, and what other possible roles it plays.

7. **Data.** Describe the structure/architecture of the data warehouse. Identify which components of the data warehouse are generated internally by your system and which come from outside. Identify the sources of outside data.

8. **Analytical Tasks.** The analytical tasks you are planning to perform. Describe the questions, the data used in the analysis, the KDD tasks (e.g., classification, time series analysis, outlier detection, link mining) you will be performing with the data. Explain why the task is performed and who will benefit from the obtained information.

You are expected to give a clear picture of your system in addressing items 2 – 4 from the list above. However, since the course is devoted to the study of KDD techniques, your software design should concentrate on the last two items.

Deliverable

The report, including any diagrams, figures, tables, etc., shall exist as a single file. You can use any text-processing software you want (Word, LaTeX, etc.), as well as any software for the figures/diagrams, as long as they can be embedded in your document.

Submit the final electronic version of the design document by posting it to the course wiki by the due date.

Presentation

Each team will have a **15-20 minute slot** to present its project during the final exam time on June 5 (7am — 10am). Plan to give a 10-12 minute presentation. We reserve the remaining time for questions.

Presentations shall be made using electronic visual aids (read: presentation slides made using an appropriate software package). The soft copy of the presentation shall be posted by each team on the wiki. I would appreciate all presentations being made available by evening of June 4: this will give me an ability to preview them before the exam time.

The presentations should be rehearsed. I expect each team to have at least one meeting devoted to rehearsing the presentation. There is no requirement for each team member to actually present. Each team should feel free to organize its presentation as it sees fit (one person presents everything, all people present equal shares, one person drives, others fill in certain places, etc.)

Evaluation. Each student will be given five (identical) evaluation sheets and be asked to provide a brief evaluation of the projects of other teams. The evaluation sheets will be collected at the end of the presentation period (I strongly encourage everyone to submit evaluations at the end of each team's presentaion, but will allow you to finish off evaluations after all presentations are completed).

Grading

The grade for the project will be based on the following (in order of descending importance):

- **Design.** How cohesive the design is, how well the design outlines the needs of the stakeholders, and how well it meets them; whether the data warehouse is outlined in full detail, whether proposed analytical tasks are useful, and whether they are feasible. This will be judged based on the design document, your presentation, post-presentation Q&A and peer evaluations.
- **Design document.** How well the document is written, whether it covers all the ground. Will be judged based on the document itself.
- **Presentation.** How well was the presentation structured, how the material was delivered, whether the presentation faithfully reflected the design of the software for the project and the overall approach of the team. Will be based on the presentations and peer evaluations.
- **Evaluations.** Whether members of the team took active part in evaluations during the presentations.

All components will be assessed on a team basis. That is, I expect to give each team member the same grade for the project.

Requests for **differential grading** must be submitted **prior to the presentation**. Email me such a request (as an individual or as a team), specify briefly the reasons why. I will try to meet with the members of the affected team and determine the appropriate grading solution prior to the presentations.

Good Luck!