Team name: Data Miners

Team Composition

What are the names and NetIDs of all your team members? Who is the captain? The captain will have more administrative duties than team members.

Wasique Ahmad: wasique2
Sajid Shaikh: sajidas2 (captain)

System and Topics

What system have you chosen? Which subtopic(s) under the system?

Educational Web System: improving the usability and reach of the existing system.

- Trim the entries in the ‘Lectures’ dropdown. Each line starts with something like ‘02 Week 1 02 Week 1 Lesson 01 Lesson 1…’. Remove the redundant parts
- Add material from a couple of other courses such as CS 425: Distributed Systems, CS 445 Computational Photography, etc. with all current functionality applicable (Related slides, Download, Explanation, ...). Adding crawling or adding more courses can be considered after improving the performance of the system.
- Add a home / landing page that lists the courses included in this system. Add a link to the home page so users can easily navigate back to the home page.
- Improve presentation on a few screens
    - Add week / lecture number to ‘Related slides’
    - Add week / lecture number to ‘Search results’
    - Add week / lecture number to current slide shown
- Bulk download
    - Download entire lecture slide and video
    - Download entire week slides and video
    - Download entire course slides and video (multiple files separated by each week)
- Explanations: add more context and improve the presentation

Datasets and Algorithms

Briefly describe the datasets, algorithms or techniques you plan to use

Datasets: training slides for courses such as Distributed Systems, Computational Photography, …
Algorithms and Techniques: we will explore, understand and build on the existing algorithms and techniques that are currently employed in the system.

What is the function of the tool

The Educational Web system is a tool to help students learn from course slides. It has two main functionalities currently: 1) Retrieve and 2) recommend relevant slides for each slide.

Who will benefit from such improvement

Students, Educators, Researchers etc. @ University of Illinois

Demonstration

If you are adding a function, how will you demonstrate that it works as expected? If you are improving a function, how will you show your implementation actually works better?

Demonstrate live using the http://timan102.cs.illinois.edu/ system

Code interaction with system

How will your code communicate with or utilize the system? It is also fine to build your own systems, just please state your plan clearly

We will add code and data sets to the existing system to enhance the functionality and usability described above.

Programming language

Which programming language do you plan to use?
Python

Work breakdown structure

*Please justify that the workload of your topic is at least 20*N hours, N being the total number of students in your team. You may list the main tasks to be completed, and the estimated time cost for each task.*

#	Hours	Task
1	2	Proposal, Writing user stories
2	6	Set up and build the code
3	6	Understanding the existing system and design

4	8	Design of enhancements
5	20	Development, code reviews and unit-testing
6	6	Testing: Verification, Load testing
7	8	Documentation
8	4	Demonstration preparations
9	4	Presentation
Total	**64**	