Principles of Information and Database Management
198:336
Week 7 – Mar 21
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Project Overview
Three phases
- Project Design
- Database implementation
- Web interface

Outline in More Detail
Timeline – two week increments
- For the rest of the semester

Design – due April 4 – 2 weeks from today
Databases – due April 18
Interface – due May 2 (last day of class)

Outline in More Detail
Database implementation
- Build ER diagram
- Write SQL code to create database
- Formulate, test and debug queries that will allow your application to carry out example scenarios

Outline in More Detail
Web interface
- Write code to access the database and show the results over the web
- Using Java serverlets and html or Java server pages or PHP…
Suppose you have this interface:

That corresponds to a browser program
- It says you have a form to fill out
- It gives another page on the server
- When the form is filled out, that page gets called with the new data

A few lines of HTML
- We’ll see more of this next week.

You now have a request
- Do a search by author, with author “rowling”
- This is implemented by connecting to a DBMS posing an SQL request visualizing the results

Here you want to:
- Open a connection to the books database
- Construct a query
  select * from books where author=rowling
  - This is partly prewritten
    select * from books where author = ?
  - And partly assembled based on form data
- Explore the resulting table

Finally, visualizing the table means
- Looping over the returned results
- Formatting a display in HTML
  Laying things out in a table
  Describing individual elements
  Adding links to additional scripts

So you get something like this