IU Bloomington

Luddy School of Informatics, Computing, and Engineering

Department of Information and Library Science

Z515: Information Architecture

Taught by:
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Introduction

The backbone of good user experience is findability and discoverability of content. Principles in information architecture applied to digital ecosystems enable users to navigate with ease and intuitively understand categories of information. Traditional systematic structures will be covered, such as classification schemes, ontologies, controlled vocabularies, and thesauri.

This course also reviews research in information science, cognitive science, semiotics, and computer science that has contributed to an understanding of how communities represent, organize, retrieve, and ultimately use information. This research can inform current practices of representation and organization in the design of more effective information systems.

Course Objectives

By the end of the course, you will:

1. Understand the objectives, functions and applications of information architectures in a variety of environments.
2. Become familiar with a range of structured models of information representation and organization and discern the implications for effective retrieval and/or navigation inherent in each type of system.
3. Be able to identify and analyze the problems of a given information architecture and to suggest a more effective and efficient architecture based on the framework of representation and organization.

Course Organization

Each class session will cover the topic(s) indicated on the syllabus for that day. Class sessions will include lectures by the instructor, class discussions of assigned readings, and/or in-class activities designed to illustrate the principles and theories presented in readings and lectures. You may also be asked to work in small groups and to report to the class on your results.

Readings

Required readings have been selected to encourage participation in class discussions and in-class group activities. The course outline lists session

topics and required readings. Assigned readings are subject to amendment by the instructor.

There is one required textbook for this class: **The Elements of User Experience by Jesse James Garrett. 2nd ed.** (ISBN: 0-321-68368-4).

Required readings other than those from the required textbook will be available on Canvas

Assignments

All assignment details in Canvas.

In-Class Participation

In the job market, your work won't be the only thing that will be used to determine what kind of job you're doing—the way you interact with others also plays a big role. You never know if you'll come across one of your classmates in a professional setting in the future. You'll be expected to participate consistently in class discussion (both in person and online), be a good team member during group work, and show overall professionalism.

Unexcused missed class sessions will result in points being deducted.

Grading

Definitions of letter grades

Letter grades have been defined as follows by student and faculty members of the Curriculum Steering Committee and have been approved by the faculty as an aid in evaluation of academic performance and to assist students by giving them an understanding of the grading standards of the Department of Information and Library Science.

Grade	Numerical Equivalent	Definition
A	4.0	Outstanding achievement. Student performance demonstrates full command of the course materials and evinces a high level of originality and/or creativity that far surpasses course expectations.
A-	3.7	Excellent achievement. Student performance demonstrates thorough knowledge of the course materials and exceeds course expectations by completing all requirements in a superior manner.

Grade	Numerical Equivalent	Definition
B+	3.3	Very good work. Student performance demonstrates above-average comprehension of the course materials and exceeds course expectations on all tasks as defined in the course syllabus.
B	3.0	Good work. Student performance meets designated course expectations, demonstrates understanding of the course materials and is at an acceptable level.
B-	2.7	Marginal work. Student performance demonstrates incomplete understanding of course materials.
C+ C	2.3 2.0	Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course materials. Coursework performed at this level or below will not count toward the MLS or MIS degree. For the course to count towards the degree, the student must repeat the course with a passing grade.
C- D+ D D-	1.7 1.3 1.0 .7	Unacceptable work. Coursework performed at this level will not count toward the MLS or MIS degree. For the course to count toward the degree, the student must repeat the course with a passing grade.
F	0.0	Failing. Student may continue in program only with permission of the Dean.

Grades are assigned by individual instructors based on a combination of student performance measures developed for each course. Student achievement of course objectives is usually assessed through the use of multiple performance measures. For example, a combination of several of the following assessment methods is common: examinations, class participation, written assignments and exercises, research papers, or term projects. Other methods, depending on course content and objectives, may include in-class small-group exercises, oral presentations, field-based projects and field experiences, or case study presentations.

No course in which a student receives a grade lower than C (2.0) will be counted toward requirement for any ILS degree. **Any required course on which a grade lower than B- is received must be repeated**; an elective course in which an unacceptable grade is earned need not be repeated, but it may be repeated or another course must be taken in its place. Repeating a course in which the student received an unacceptable grade or taking another in its place does not remove the credit points for that course from a student's cumulative grade point average. All grades achieved in ILS courses will be counted in the ILS and IU GPA. Because a minimum GPA of 3.0 (B) is required for graduation, any grade below B must be balanced by another sufficiently

above B to keep the GPA at the 3.0 level.

Late Submissions

In fairness to students who turn in assignments on time, late assignments will not be accepted unless arrangements have been made with the instructor **prior to the submission date**.

Incompletes

Each student is expected to complete all coursework by the end of the term. A grade of incomplete [I] will be assigned **only when exceptional circumstances warrant**. In such cases timely notification is critical.

Academic Integrity

There is extensive documentation and discussion of the issue of academic dishonesty in the Indiana University "Code of Student Rights, Responsibilities and Conduct". Of particular relevance is the section on plagiarism:

3. Plagiarism

Plagiarism is defined as presenting someone else's work, including the work of other students, as one's own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered "common knowledge" may differ from course to course.

a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.

b. A student must give credit to the originality of others and acknowledge indebtedness whenever:

    1. Directly quoting another person's actual words, whether oral or written;

    2. Using another person's ideas, opinions, or theories;

    3. Paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;

    4. Borrowing facts, statistics, or illustrative material; or

    5. Offering materials assembled or collected by others in the form of

projects or collections without acknowledgment.

From: Part II: Student Responsibilities - G. Uphold and maintain academic and professional honesty and integrity - 3. Plagiarism

Plagiarism is the use of someone else's ideas, words, or opinions without attribution. Any assignment that contains plagiarized material or indicates any other form of academic dishonesty will receive a grade of "F". A second instance will result in an automatic grade of "F" for the course. Penalties may be harsher depending upon the severity of the offense. See Indiana University's "Code of Student Rights, Responsibilities and Conduct" (link above).

There is more to avoiding plagiarism than simply citing a reference. To aid students both in recognizing plagiarism and in avoiding the appearance of plagiarism, Indiana University's Writing Tutorial Services has prepared a short guide entitled Plagiarism: What it is and how to recognize and avoid it. For example, here are some strategies for avoiding plagiarism:

1. Put in quotations everything that comes directly from the text especially when taking notes.
2. Paraphrase, but be sure you are not just rearranging or replacing a few words. Instead, read over what you want to paraphrase carefully, cover up the text with your hand, or close the text so you can't see any of it (and so aren't tempted to use the text as a "guide"). Write out the idea in your own words without peeking.
3. Check your paraphrase against the original text to be sure you have not accidentally used the same phrases or words, and that the information is accurate.

This guide provides explicit examples of plagiarism and offers strategies for avoiding it. Each student should be familiar with this document and use it as a guide when completing assignments. In fact, there are many pamphlets at Writing Tutorial Services that you might find useful as you begin your graduate work.

Indiana University and Department of Information and Library Science policies on academic dishonesty will be followed. Students found to be engaging in plagiarism, cheating, and other types of dishonesty will receive an F for the assignment and additional penalties applied at the discretion of the instructor.

Statement for Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact IU Disability Services for Students.

COVID-19 Information

If you must miss class in-person due to illness, let me know before class. I will arrange to record the class session.

Course Outline

Chapters from the book are listed with the class session they should be read for—all other readings are in Canvas.

Session 1 | August 27th

Intro to the course; what to expect, etc.

Session 2 | September 3rd

Topic: IA and user experience

Garrett, J.J. (2011). Chapter 1: User experience and why it matters (pp. 2-17). In Elements of user experience: user-centered design for the web. 2nd ed. Boston: New Riders.

Session 3 | September 10th

Topic: Representation and mental models

Session 4 | September 17th

Topic: IA Research, evaluation & design

Garrett, J.J. (2011). Chapter 2: Meet the elements (pp. 18-33). In Elements of user experience: user-centered design for the web. 2nd ed. Boston: New Riders.

Session 5 | September 24th

Topic: IA Research, evaluation & design. Part 2.

Garrett, J.J. (2011). Chapter 3: The strategy plane (pp. 34-54). Chapter 4: The scope plane (pp. 56- 77). In Elements of user experience: user-centered design for the web. 2nd ed. Boston: New Riders.

Session 6 | October 1st

Topic: Order versus organization

Garrett, J.J. (2011). Chapter 5: The structure plane (pp. 78-105). In Elements of user experience: user-centered design for the web. 2nd ed. Boston: New Riders.

Session 7 | October 8th

Topic: Order and organization for navigation

Garrett, J.J. (2011). Chapter 6: The skeleton plane (pp. 106-131). Chapter 8: The elements applied (pp. 152-163). In Elements of user experience: user-centered design for the web. 2nd ed. Boston: New Riders.

Session 8 | October 15th

Topic: Metadata and tagging

Session 9 | October 22nd

Topic: Controlled vocabularies, facets, and labeling systems

Session 10 | October 29th

Topic: Site maps and flow charts

Session 11 | November 5th

Topic: Wireframes

Session 12 | November 12th

Topic: Wireframes, continued

Session 13 | November 19th

Working session

Session 14 | December 3rd

Wireframe critiques

Session 15 | December 10th

Wireframe critiques