
Any JavaScript Book with which you feel comfortable.

### Supplemental Materials

- **Class Web Site**: [http://www.umsl.edu/~sauter/DSS/6833start.html](http://www.umsl.edu/~sauter/DSS/6833start.html)
- **JAVA Script Help**: [http://www.umsl.edu/~sauter/help/Links_java.html](http://www.umsl.edu/~sauter/help/Links_java.html)
- **Student Information Form**: [http://www.umsl.edu/~sauter/DSS/student_info.html](http://www.umsl.edu/~sauter/DSS/student_info.html)
- **Group Evaluation Form**: [http://www.umsl.edu/~sauter/DSS/group_eval.html](http://www.umsl.edu/~sauter/DSS/group_eval.html)

### Prerequisites

LOM 5300: Statistical Analysis

### Semester Goals

Decision Support Systems are tools decision makers use to gain a better understanding of their business and customers. They are the “front-end” technology that is generally associated with a data warehouse, and which provides the modeling and analysis capabilities to help decision makers see avenues through which to gain competitive advantage. As the name suggests, a DSS focuses how models, data, and other analytical tools decision makers might use in the reasoned consideration of the options available to them. In the current environment in most businesses, DSS are being implemented as intranets and so require web-based technologies.

### Assignments

#### Individual Assignments:

1. **Blogs:**

   One primary difference between a Decision Support System and other systems is the inclusion of models – from descriptive statistical models to financial models to optimization models, and even artificial
intelligence. So, we really need to focus on models – what they are and how they can be used to support decision making, as well as what happens when they are not present in decision making. Hence, to ensure that we all are regularly thinking about the modeling in terms of DSS, we will maintain “blogs” (a sort of a journal of news articles) on the topic during the semester.

2. Technology Assignments:
Since the programming in advanced html and in javascript is new to most students in the class, we will have some homework assignments that ensure no one falls too far behind. These generally will be short assignments that demonstrate tools and functionality we discuss in class. Assignments will be intermittent, and will be announced in class. To start this effort, you must demonstrate that you can create a web page that has at least the following characteristics:

• Your page must have a theme that is displayed in the background, icons and layout of the page.
• You must include at least two images or graphics on your home page. You may either copy the image to your public_html directory, or you may create a direct link to the image's original site.
• You must include two or more buttons on the page.
• You must also include one or more tables in the design of your page.
• Your home page must have a title (what the browser displays at the top of the window).
• The page must have a link to the class page.
• The page should include a link to any other web pages you maintain.
• The body of the personal home page should have your name and a hot-linked e-mail address.
• Make use of the available headings to give a professional appearance to your page.
• You are free to add more and make your page more interesting and “cool.”
Post the webpage on the internet and send the url to Professor Sauter. These preliminary pages are due by February 6.

3. “Networking” Activities:
Learning to network, and learning to learn about new topics is an important part of any IS Professional's life. Therefore, you are going to practice that activity this semester by attending at least three external events. These might include the IS Mentoring Program, the IS Programming Club, the Career Services Etiquette Banquet, the Executive Leadership Institute's Lunch Series, ITS' High Performance Computing Day, Student Night Seminars sponsored by the Institute of Internal Auditors and the Information Systems Audit and Control Associations, the local Web Developers Chapter, Saint Louis Visual Basic Users Group, the XPSTL Group, the Wireless SIG or any other IS-related seminar by a campus based or local professional organization (if it is not in this list, be sure to get permission before you go). The base grade will be the percentage of the expected events (3) you attend. Any you attend above three will count as extra credit. To get credit for attendance, you must bring a note from an officer of the organization noting the date of your attendance, your name and the speaker’s topic.

4. Papers:
Each student must complete a term paper investigating how DSS technologies can facilitate business intelligence. These papers discuss the aspect of the system that makes it excellence-enhancing, and the enabling aspect of DSS that extends what we cover in class. To that end, the papers must include citations to both scholarly and practitioner work and must demonstrate a significant effort. Some of the topics you might consider for these papers include:

• Role of DSS in Electronic Commerce
• Intranets and their Relationship to DSS
• Intelligent Agents on the Web as a DSS tool
• Data Warehousing
• Online Analytical Processing (OLAP)
• Data Mining
• How to Incorporate Qualitative Data Effectively
• GDSS and their Relationship to Re-engineering
• Cultural Preferences in DSS Use and Design
• DSS for Enterprise Resource Planning
• Negotiation Support Systems
• Knowledge Management Technology
• Spatial Decision Support Systems (and GIS)  • Model Management

The papers must be no longer than 15 pages plus citations. The papers must be typed (or word-processed), double-spaced, numbered, with one-inch margins on all sides. All citations must be complete references to the material. Topics should be approved by the instructor. Final papers are due no later than Monday, April 10.

Group Assignments

Each student will get “hands-on” experience with the evaluation of a decision support system. Students will work in groups of 2-3. These groups must be identified and reported to the instructor no later than February 6.

1. Systems Development

Each group will select a kind of company to investigate the development of a competitive intelligence, strategic system, or CRM system for a company of their choice. Students will generate access data “warehouses,” provide initial analytical products, and will create a system to provide decision support to an appropriate user.

The groups will provide a URL of a working system that they write as well as a report justifying their system. This paper must identify and justify the system characteristics. It must include a discussion of what the system does, and why your group elected to implement the system in the fashion chosen. This includes:

1. a description of the decision process
2. a justification for how the process would be improved with this system
3. the goals/objectives of the DSS
4. a discussion of how those goals/objectives meet the needs of the users
5. a discussion of how the DSS might be integrated into normal work processes
6. an explanation of what types of information will the system require, and how will that information be maintained
7. an explanation of what type(s) of modeling the DSS will use

Students will probably want to include a section, “what we wanted to do, but didn’t know how or didn’t get to.” Papers must be typed (or word-processed), double-spaced with one-inch margins on all sides, and with page numbers. The maximum length for the paper is 10 pages. The paper and system will be due on May 5.

Exams:

There will be a final exam on Monday, May 8, 7:45 - 9:45 pm.
Make-up exams will be provided only if Dr. Sauter has been notified prior to the exam and if you have an acceptable reason for missing the exam. Under all other circumstances, a grade of zero (0) will be assigned.

Grading Policy:

The following proportions will be used for grading.

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Networking Activities</td>
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<tr>
<td>Technology Assignments</td>
<td>10%</td>
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<td>Blogs</td>
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<tr>
<td>Paper</td>
<td>25%</td>
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<td>DSS</td>
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<tr>
<td>Final Exam</td>
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Approximate letter grades will be assigned when exams and projects are returned. Students should remember, however, that the term average is a weighted average of the numerical grades, not an average of the approximate letter grades.

Drop Policy: For the purposes of this policy, the “effective drop date” is the date which I am informed of the drop or the actual date of the drop, which ever is later. Students can and may inform me by leaving me a note in my mailbox, leaving me a message (on voice mail or email) or by speaking to me in person or over the telephone.
A student may drop this class until March 19 with a passing grade. (Note the University policy states that you may drop until February 9 without receiving a grade; this policy is simply an extension of the University policy.) Between March 20 and April 3, a student will receive either a passing grade (excused) or a failing grade (F) depending upon his or her performance (current grade) in the course. A student may withdraw after April 3 only with and solely with the approval of the dean of his or her division. If you want to withdraw after this date, go directly to your dean; do not ask for my signature -- my signature is not needed and I will not provide it. Under no circumstance may a student drop this class after May 5, 2006.

**Academic Honesty:** According to the University Standard of Conduct, Section 6.0101,

> The Board of Curators recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work.

> Students have a special obligation to adhere to such standards.

For the purposes of this class, cheating will include: plagiarism (using the writings of another without proper citation), copying of another (either current or past student's work), working with another on individually assigned work or exams, unauthorized marking on a graded paper or exam, or in any other way presenting as one's own work that which is not entirely one's own work.

Any student who is caught cheating on any assignment or exam will receive a grade of zero (0) for that assignment or exam. Further, a recommendation will be made to the appropriate university officials that additional disciplinary action be taken.

**Rights and Responsibilities of Computer Users**

As part of its educational and research missions, the University of Missouri-St. Louis strives to provide quality computing facilities. These include large and small systems, communication networks, and personal computers, as well as associated software, files and data. Although computers affect how individuals communicate and interact with each other, computers do not change underlying societal values and established individual rights with respect to personal privacy and ownership of property. Computing facilities are recognized as community resources. Each computer user, therefore, is expected to act responsibly so as not to violate the rights of others. Access to computing resources is contingent upon prudent and responsible use. Inappropriate use of computing services and facilities will not be tolerated and may result in loss of computing privileges. In addition, disciplinary and/or legal action will be pursued for violation of these codes and statutes through appropriate University procedures.

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<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction and Definitions</td>
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<td>2-3</td>
<td>Decision Making</td>
<td>2</td>
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<td>4-6</td>
<td>Models and Model Management Components</td>
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<td>7-8</td>
<td>Programming and Decision Support Systems</td>
<td>9</td>
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<td>9-10</td>
<td>User Interface Components</td>
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<td>11-12</td>
<td>Data Components</td>
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<td>Data Warehousing</td>
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<td>Data Mining</td>
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<td>13-14</td>
<td>International Issues in Decision Making</td>
<td>7</td>
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* Approximate allocation of time to topics.