System Project Evaluation Guidelines

(Winter 2003)

The objective of the Systems Project is to work in a group development environment on a real-world project, with a real-world client, to develop a fully functional computer application. Each project will be evaluated on all of the work done from the beginning of the semester in addition to the evaluation of the working project at the end of the semester.

Each group is assigned a **faculty advisor** who will:

1. Set the time and place for mandatory weekly progress meetings with the group.
2. Record attendance at these meetings.
3. Advise you throughout the project.

EVALUATION STAGES

There are three major components of the project evaluation:

1. **Weekly Project Meetings**: The group is expected to meet weekly with its faculty advisor, and produce minutes after each meeting, within two days of the meeting. The minutes should have enough detail to identify topics discussed, actions to be done and individuals responsible for the actions. In progress deliverables, for example a standard's document, should be reviewed at these meetings. The weekly meetings allow the faculty advisor to evaluate how the group is working together as a team and progressing through the project process, as well as how the group is communicating with their client.

2. **Formal Design Presentation/Client Presentation**: At the midway point in the project, the group will present the formal design to its faculty advisor. This is a dry run presentation with the faculty playing the part of the client. At this stage you will be evaluated on your progress to date, and the quality of your design and design presentation. The faculty advisor will follow-up with a progress report that indicates the performance of the group to date, and whether the students are on track for an excellent mark, or average mark or a failing mark. This is a progress report for feedback purposes and is not intended as a part mark. After the formal design presentation to the faculty advisor, the group will then need to present the design to the client. The client will then comment on the design and may suggest design modifications.

3. **Final Evaluation**: Final evaluation occurs in the final weeks of the project. The group may be required to summarize or present the final project to the faculty advisor. The major component of the final evaluation occurs when the faculty advisor tests the completed application. Please note that the faculty advisor will actually test the application. The faculty advisor will look for completion of date entry and table updating, perform data integrity checks, evaluate the user interface design and examine the flow of the application and the suitability of the application to the client's requirements. The faculty advisor will follow-up with a formal evaluation to the group.

GRADING GUIDELINES FOR PROJECTS

1. Each individual, group, and project will be evaluated on factors including, but not limited to, the quality and/or scope of the following:

- Attendance at meetings.
- Adherence to project deadlines and proper project process.
- Contribution and input to the application design.
- Database design to 3rd normal and/or most appropriate form.
- Screen designs.
- Completeness of the application with respect to the processing and presentation of information.
- Design presentation, including participation from all group members. To be done in a professional manner and describe an application that will be workable and will meet the design goals.
- Final Project Presentation.
- Ability to progress through coding stage, incorporating suggestions of the faculty advisor, or explanations as to why suggested modifications are not appropriate.
- Ability of the group to manage and control the scope of the project as it progresses.
- Demonstrations of the project component parts.
- Well written and complete documentation.
- Application help files (required to at least the forms level).
- Application functionality. Completeness related to design goals, ease-of-use, as well as adherence to accepted standards for application operation (e.g. F1 is help key).
- Completeness of application and readiness for installation in client's environment.
- Suitability of application for client. Will it perform useful work for the client?
- Innovation
- Complexity

2. A Fully-functional Working project is required.

Each group must complete a fully functional project by the end of this semester. If the group fails to meet this target an "Incomplete" may be granted at the discretion of the faculty advisor. Students may be allowed additional time (not to exceed 6 weeks) to correct their problems. If they do succeed a maximum grade of 55 is assigned.

3. Signs of a Failing Project

- Group members unprepared for weekly meetings.
- Group members miss the weekly meetings.
- Group has difficulty designing the database
- Design presentation is poor. For example screen designs missing controls that are necessary for the operator to use a form properly.
- Significant coding problems are experienced during the development stage and group members are unable to understand suggestions made by faculty advisor.
- Application has many errors and is unable to perform the basic functions.
- Data entered into the application not handled appropriately. For example, a new customer is created but user is not able to select this new customer to enter an order.
- Controls are ***not*** adequate to ensure data integrity. For example, deleting a customer with active transactions.

PROJECT TIMELINES/DELIVERABLES

Below is a table identifying the major phases of the project, the approximate timing and an indication of some of the deliverables that will be required at each stage.

PHASE I – System Analysis/Preliminary Design	**Deliverable**	**Due**
1.0 **Define the Application Objectives**		
1.1. Prepare document outlining scope of project.		
1.2. Prepare project standards document.	Standards document	Week 2
2.0 **Conduct Detail System Investigation and Analysis**		
2.1 Identify major source documents.		
2.2 Identify transaction types.		
2.3 Identify system controls.		
2.4 List and define system terminology.		Week 3
3.0 **Identify Major Processes**		
3.1 Use analysis tools to identify processes where the user interacts with the system.	DFD's, Process Diagrams or UML Modeling	Week 4
4.0 **Database Design**		
4.1 Identify major collections of data.		
4.2 Design database schema.		
4.3 Identify table relationships.	ERD	Week 5
5.0 **Screen/Report Design**		
5.1 Prepare data entry/view screen designs.		
5.2 Prepare report layouts.	Rpt Layout Document or prototypes	Week 6

PHASE II – Detailed Design	**Deliverable**	**Due**
6.0 **Prepare Detailed Design Plan**		
6.1 Prepare screen designs for major processing points.		
6.2 Describe the processing methods.	Design Plan	
7.0 **Present Project Plan to Faculty Advisor**		
7.1 Obtain approval to present plan to client.	Formal Presentation	Week 7
8.0 **Present Project Plan to Client**		
8.1 Obtain approval to proceed to coding stage.		Week 8

PHASE III – Coding and Testing	**Deliverable**	**Due**
9.0 **Code Programs and Test**		
9.1 Prepare module planning documents.		
9.2 Code modules.		
9.3 Prepare data to test module.		
9.4 Test individual modules.	Test Plan, Test Scripts, Test Results	Week 12

PHASE IV – Final System Development	**Deliverable**	**Due**
10.0 **Assemble Module to Make the System**		
10.1 Combine the individual modules to make a unified system.		
10.2 Test system as a "whole".		
10.3 Test for consistence of data.	Test Results	
10.4 Prepare user manual.	User Manual	
10.5 Prepare system documents.	System Docs	Week 14

PHASE V – System Installation	**Deliverable**	**Due**
11.0 **Client Installation**		
11.1 Prepare installation diskettes.		
11.2 Install system on client computer.		
11.3 Train client.	Install Demo	Week 14

PHASE VI – System Demonstration	**Deliverable**	**Due**
12.0 **Public Demonstration**		
12.1 Present completed project to public.	Formal Presentation	Week 15-16
	Final Documents	Week 15-16
	Testing by Advisor	Week 15-16
	Demo Day	After Exams