# Student Originated Software – Fall 2001 Project Syllabus

# Description

The primary vehicle for learning how to write software will be a yearlong software project for an identified real-world customer (or identifiable user community). Most teams will follow a development schedule similar to the following. Fall: identify a viable project and "customer", perform a preliminary systems analysis and feasibility study. Winter: develop and evaluate a working prototype with user guides, systems analysis and design documents. Spring: refine the prototype; complete the programming; finalize user's guides, maintenance plans and installation; and evaluate the final system. Projects will be "completed" by the first day of the last week of spring quarter, and demonstrated at a software fair.

# **Fall Quarter Deliverables:**

In week ten, students will deliver a project presentation along with the beginnings of a project notebook. The notebook will include a feasibility study, a project scope document, and status reports.

## **Expectations and Requirements:**

To receive credit, students must participate in team meetings and complete fall quarter deliverables.

Students will be evaluated on the quality of their project presentation and notebook and their ability to function in a team.

### **Ground Rules:**

The following are intended to be non-negotiable.

- 1. Each project team will consist of 3 5 team members; 6 is OK, but it is getting too large. Each team should have a 'real world client'; alternatively, a team may (a) identify a real-world consultant who is willing to spend time working with them on "reality checks" and (b) write a seriously researched survey of similar software available.
- 2. Each project must be worthy of upper division computer science credit and deemed feasible by faculty, i.e., resources must be available. Faculty will work with student teams on this.
- 3. Each member of the program enrolled for project should join a project by the end of week 4 or 5, but students are encouraged not to join before week 4. An exception to this are "student sponsors"; prospective projects initiated by one or more students.
- 4. Each team member must work with the rest of the team in an inter-dependent (not independent) manner.
- 5. Team members are in charge of their project but certain actions can only be undertaken after discussion and concurrence of faculty members. These include switching team members from one project to another or removing a team member from a project.
- 6. Students are expected to work full-time in this program and must discuss any deviation from this with the faculty members and other team members, and submit in writing part time schedules.

### **Guidelines:**

These guidelines, unlike the ground rules, are suggestions. We believe that if you follow them -- or at least consider them -- you will make your life and those of your team members easier. One of the most crucial aspects of future success is shared expectations and we hope that these guidelines can help you build those shared expectations.

We encourage students to develop project covenants. These covenants are intended to reflect your team's philosophy as well as individual and broad team roles and responsibilities. These team covenants should be developed collaboratively and signed by each team member.

We also encourage students to develop a management plan for the project. This plan should delineate roles, scheduling and other resource management issues, responsibilities, decision-making procedures, modes of communication, change management, and other aspects of maintaining effective teamwork. Although it may not be "the Evergreen Way" it might be a good idea for the team to designate a "manager" with managerial responsibilities such as monitoring the schedule and checking the progress of

other team members. This job generally provides very good experience and can potentially be rotated among all team members.

Team members should treat the client with respect and communicate regularly with him or her. They are volunteering their time to assist with your education. Team members must work with the clients to determine the best way to communicate and coordinate over the course of the project. Team members have the responsibility to communicate with each other. Information should be communicated efficiently to all appropriate team members. If a team member needs to be out of town or is ill, he or she must let others know. It will be important for teams to divide up and assign specialized tasks to individual team members. At the same time, this is an educational project and all team members are expected to participate in all aspects of the project; including communicating with the client, attending team meetings, writing documents, and writing software. Finally it should be mentioned, everybody is part of a team. It will be necessary to help each other in a variety of ways throughout the year to make the project successful. This may include providing information or advice or, on occasion, emotional support.

## **Tentative Schedule:**

1 Sept 25<sup>th</sup> – at the organic farm

Team Exercises: Organizing into Workshop/Assignment teams

Sep 27<sup>th</sup>

Team Exercises: Brainstorming potential projects

2 Oct 4<sup>th</sup>

More brainstorming potential projects

3 Oct 11th

Potential Projects Guest Speaker All sponsored projects identified

4 Oct 18th

Organizing into yearlong teams with projects

5 Oct 25th

Project Dynamics (status reports, issue tracking, etc.) Final teams Projects and teams matched up.

6 Nov 1<sup>st</sup>

Project team meetings

Faculty retreat

7 Nov 8<sup>th</sup>

**Estimating Workshop** 

8 Nov 15<sup>th</sup>

SOS Alum Panel

9 Nov 29th

**Project Meetings with Faculty** 

10 Dec 6th

**Project Presentations**