

Team Assignment #1 CSCI 479 August 30, 2009

Each Team is to write a Formal Memo (described later) to me that describes the **problem** the team is trying to solve. This is **due in class Friday September 4, 2009**.

Place yourselves in the role of a manager who is writing a memo that describes the problem to a design team. It is important that the manager does not limit or constrain the design team in how they solve the problem. Therefore, the problem statement should *not* have implementation details. The focus should be on “WHAT” the solution will do and not on “HOW” the solution will work.

Here are several sample problem statements based on last year’s projects:

“Marketing has determined that software engineers need a shared whiteboard system which would allow them to collaborate over long distances. Marketing’s study indicates that such a product could bring in lots of revenue for Bison Scientific. Your team is to research, design and build a prototype system.”

“The Bucknell Student Government has determined that students need an on-line system to monitor the residential hall laundry rooms. Your team is to research, design and build a prototype system.”

“Many students are unhappy with the Campus Bookstore’s buy-back policy on textbooks. A group of students are asking your team to research, design and build a prototype system that will effectively allow students to purchase textbooks directly from one another.”

Since the team will be writing XP stories based on the problem statement, it is important that the problem statement have a clear focus. You don’t want to say the following: “Design a fun game” or “Need a distant learning system.”

Characteristics of Solution:

The solution to the problem is a significant software design project with the following characteristics:

1. The solution requires a distributed system, i.e., a system with multiple human users interacting across a network of computers.
2. The system needs to authenticate users.
3. The system needs to connect to a database to store and retrieve data.
4. Must be an original design and implementation. Can’t just copy a design and implementation off the Internet.

Constraints on the Project:

1. Most team members only know Java programming language.
2. Team has only one semester of time.
3. Team has no external funding.
4. Team members must act in a legal, ethical and professional manner.

Formal Memo:

Before writing your Team's memo, all the members of the Team are required to read and study the web pages "Memo to describe organization of a memo"

<http://www.eg.bucknell.edu/~cs479/2009-fall/Memos.pdf>

and the "How to Write Better Memos" article

<http://www.eg.bucknell.edu/~cs479/2009-fall/HowToWriteMemos.pdf>

Your Formal Memo must following the guidelines described in the two web pages. The memo is due in class Friday September 4, 2009.