

USING A REAL-LIFE SETTING TO COMBINE SOCIAL AND TECHNICAL SKILLS

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Abstract □ *Our students are highly competent in the technical area, but have little training in the non-technical area. This paper describes a course that is designed to increase the students ability to apply their technical skills in a professional way. Projects with real, low in IT skills, users are used to make the issue of being professional concrete. The aspect of communication, both between colleagues and between users of a product, is chosen as a theme. Relevant theory is introduced as close to the point in time when needed in the real project. This paper give the general setting of the course and observations from students and teachers about how well the goal are achived.*

Index Terms □ *Multi disciplinary, Project work, Social Skills, Technical skills.*

INTRODUCTION

Increasingly, industry demands that graduates demonstrate 'professional skills' in addition to technical competence (cf. [1]). An ability to communicate is one of the more important skills. This applies to communication both between peers and in inhomogeneous groups. The Master of Science Program in Information Technology Engineering at Uppsala University, initiated five years ago, aims explicitly to address this demand. The course 'IT in Society' is focal in this attempt. This paper reports on the current implementation of this course.

The 'IT in Society' course is a 10-credit course given in the fall semester of the fourth year in the Information Technology engineering study program. This means that it runs for the whole semester and should occupy half of the students' time, on average 400-500 hours. The course has now been run twice.

The main aim of this course is to provide a setting in which the students learn communication skills at the same time as they acquire multi-disciplinary knowledge and apply it in the practice of their future craft. The course is set in a real setting with authentional users.

The paper is structured around the way the course was run in 1999. The five projects are briefly presented as well as the major components of the course. One of the projects, the time tabling, is used as illustration of how the course

setting provides opportunities for improving both technical and social skills.

Some of our inspiration has come from the following references: [2-19].

COURSE SETTING

The following is excerpts from the document presented to the students at the start of the course:

The actual content of the course will to a large extent be driven by the needs of the project. The project this year is split into different sub-projects held together by the consulting company DoIT-society.

DoIT-society is owned by a consortium consisting of the main teachers. The company has just landed a couple of projects that all need to be done by Christmas and it has been decided to part time employ the students of IT4 in order to fulfill this time constraint. The assignment is out of the ordinary, since the customers have required that decisions and progress must be scientifically documented. The DoIT-society board has decided that internal as well as external experts will be called in where required to aid in meeting this unusual demand. The customers have also demanded that the assigned team will consist of at least five members.

The projects are [cut]

The customers have concerns about the "language differences" between their users and our expert consultants. They have therefore especially asked for focus on how language is used. DoIT-society has for this reason hired two experts from the Linguistics Department at Uppsala University.

The chosen method for management is to have weekly meetings with the team responsible, i.e. one of the owners of DoIT-society. These meetings are intended to serve as check-points to calm the management about their concern about having something to show before Christmas. These meetings will also serve as the primary channel to ask for assistance. The board also anticipates that there are gains to be made by having the groups know about the progress in the other groups. It has therefore been decided that a joint meeting with all groups will be held each fortnight where each group give short presentation of the status of their work

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