Working as a team

Teams are organized units with a common goal.

Groups are loosely related units with a common attribute.

Common Problems

- - no leadership in the team
  - conflicts within the team
  - team members who cannot cope

- - under-participation: time? slackness?
  - over-participation: big egos?

- - behind schedule
  - requirement surprises
  - technology surprises

Role of the Supervisor

- participate in weekly group meetings
- give general guidance and support to the team, especially with respect to managerial issues
- answers questions from the team about managerial issues e.g. how the team can be organised, what kind of thing should be in the requirement specification document etc.
- be the interface between the group and course co-ordinator
- report any likely delays to the course co-ordinator immediately
- read draft documents and give feedback to the team
- receive submitted project documents
- assist the course co-ordinator in assessing the group's performance by reading and commenting on each document
- assess individual contributions to the project work

Role of the Client/User

- provides initial project specification
- answers questions from the team about the project e.g. what hardware is it going to run on, what database will be used etc.
- will be involved in evaluating any prototype designs
- the client is only one user

Recommended Role of Team Members

- help to set the team goals (project goals, task allocations)
- help team move towards these goals by being supportive and helpful
- accomplish tasks allocated to them on time
- participate in team meetings
- contribute to developing a productive atmosphere within the team

Note: a team member is no more or less important than a team leader. Everyone must play their part in order to succeed.

Recommended Role of the Team Leader

- coordinator
  - tracks progress of members
  - coordinates the move to the next stage of the project
- motivator
- communicator
  - understands issues
  - communicate issues to team members
- interface to supervisor and client
- responsible for setting meeting agenda (can delegate!)
- possible additional roles : meeting facilitator, minute taker, helper, allocator of tasks
- role varies with the style of the team : democratic vs authoritarian (relates to how decisions will be made)

Team Organization

- specialization/task allocation for team members is important
- make the most of the people in your team by playing to their strengths and minimising their weaknesses
- identify talents of your team members
- devise an equitable task allocation scheme within your team
- specialised roles within the team may be assigned such as: the CASE tool expert, the architect, user-interface designer, user liaison person, developer, quality assurance/tester, toolsmith or build coordinator
- buddy systems may be helpful : to discuss problems, to check your work, to debug in pairs
  - formal? or informal?

Goal : keep meetings productive

- meet weekly at a preassigned time
- invite your supervisor to the meetings
- have a facilitator
- know what the purpose of the meeting is e.g. brainstorming, finalising a document, organising the team structure, etc.
- have an agenda : what really needs to be discussed at the meetings?
- keep discussions directed (describe issue, discuss issue, make a decision)
- record your decisions and your rationale for the decision
- make minutes available to all team members (web?)

Setting Goals for Components of the Project

- do technology assessment
  - make sure technology will do what you need
  - make sure you know basics of how to use it
  - do this *before* making detailed plans

- be realistic
  - carefully estimate the size of the component
  - identify the subset of features which are critical to your component
  - identify desired but non-essential features

- take particular care when specifying subgoals which will be shared by team members

- aim for a proof-of-concept of the component

- make sure everyone involved understands the issues
- let everyone have their say
- distinguish between critical and non-critical factors
- consider risks as well as hopes

- attempt consensus based on all good ideas

- set goals for both minimal and desirable success
- decide how to determine whether you're on track
- check your progress toward goals
- make contingency plans

Technology Overview

Web Browsers: send requests to and display pages from . . .

Web Servers: answer requests by reading files, especially . . .

HTML files: contain text, formatting, images, links, forms, and . . .

Program Calls: such as Java class constructors or methods, which can do anything, such as use . . .

SQL DBMS : to store, query, and retrieve data