

Project Management

Outline

Roles

Team Meetings

Other Team Issues

Plans & Schedules

Supervisors/Reporting Requirements

Roles

Role *versus* Task

Role

- ◇ recurrent/ongoing
- ◇ product and/or process

Task

- ◇ has result or deliverable
- ◇ usually product
- ◇ process deliverable also possible
e.g plan

& People

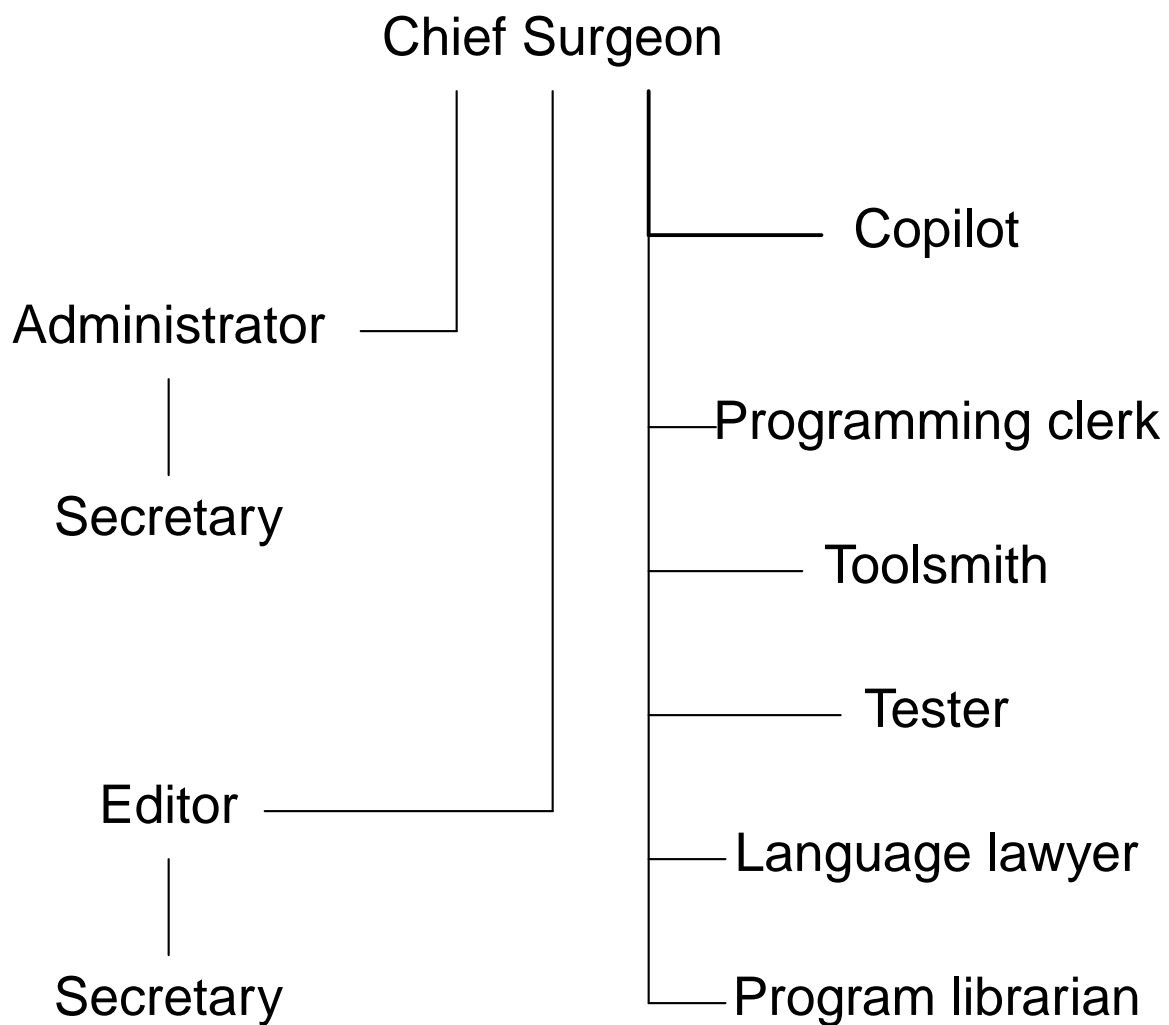
- usually one person does role at any one time
- often one person does several roles
- many ways to designate
- designations must be formally recognized

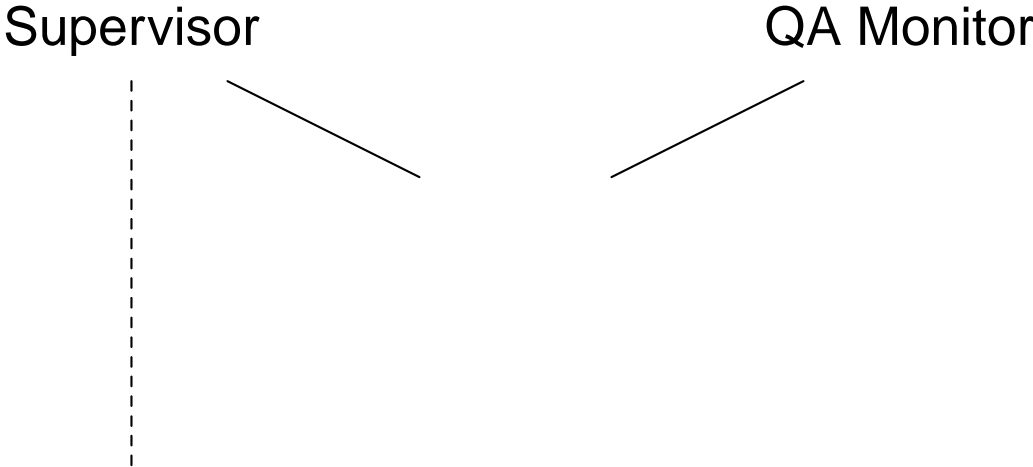
Role Time Spans

- Project (or project phase)
- Meeting

Role Example - "The Surgical Team"

One suggestion for team organization, after Harlan Mills and Fred Brooks.





InfoSys Project Roles - Ongoing (Process)

Convener

- calls meetings
- organizes intra-team communication

Task Assigner

Task Monitor

Supervisor Liaison

Instructor Liaison

Client Liaison

- coordinator, not sole contact

Secretary

- maintains project log

Librarian

- maintains repository of documents and programs
- monitors configuration - C³M

“Guru”

- toolkit/language/platform specialist
- teach tool to other team members

InfoSys Project Roles - Task Specific (Product)

Technical - Milestone Dependent

- analyst/modeler
- designer
- programmer

Tester

Writer

Editor

this is distinct from Writer!!

General & Role-Specific Requirements

Effective team member

- communication
- participation [during meetings]
- effort [out of meetings]

Liaisons

- First point-of-contact
- Switchboard operator, not messenger

Facilitator/leader

- identify strengths & weaknesses
clarify expectations & goals
- encourage
effort
contribution
- role assignment
more later

Leadership Functions

Communication

Coordination

Setting goals & objectives

Role model

Represent group to outside

Represent outside to group

NOT: Give orders

Organizing Your Team – Leadership

Leadership

- ★ role and task assignment *crucial*
- **Democratic**
assignment done collectively
- **Centralized**
designated leader makes assignments

Responsibility and Freedom

- if you demonstrate you can handle it,
your can organize your own team
- if you can't organize your team,
the supervisor will

Organizing Your Team – Role Assignment

Organization: Roles → Members

may have temporal aspect

	Sue	Kofi	Bill	Maria
convener				
task assigner				
task monitor				
supervisor liaison				
instructor liaison				
client liaison				
secretary				
librarian				
guru				

Implementation is task-specific, so

Organization: Roles × Tasks → Members

	prog.	tester	writer	editor
module 1	Maria	Kofi	Sue	
User's Man. - Ch. 1			Bill	Sue
<i>etc.</i>		...		

Meeting Factors

Format

≡ process

Agenda

≡ content

Roles

Meetings don't just happen

planning
preparation
attention
commitment
effort

Team Meetings – Roles

from project roles

- Convener
- Task assigner
- Task monitor
- ? Secretary
formal reports, esp. to other participants

specific to meetings

- Focus monitor
- Motivator
- Group facilitator
- Scribe (\neq secretary)
special need during interview meetings recording helps
but does not replace scribe
- Targeted listener
effective when linked to tasks, *e.g.* gathering information
requirements
- Devil's advocate

Team Meetings – Activities

- Status evaluation
 - ◇ at start, review previous meeting(s)
 - ◇ at finish, summarize this meeting
 - ◇ “Where are we now?”

- Planning
 - ◇ task identification
 - ◇ task assignment
 - ◇ “Where should we be going?”

- Reporting
 - ◇ for example, meeting with client

- Analysis
 - ◇ examining the facts

- Invention
 - ◇ brainstorming
 - ◇ filtering

- ☆ ☆ Pizza ☆ ☆

Dealing with Tasks

1. Define task:
 - ◇ reasonable size
 - ◇ measurable result/deliverable

2. Assign task:
 - ◇ identify responsible person
 - identify collaborators if needed
 - ◇ establish completion date
 - ◇ log assignment

3. Monitor progress:
 - ◇ through regular reports
 - ◇ log status

4. Deliver results:
 - ◇ configuration management

5. Achieve closure:
 - ◇ acceptance review
 - ◇ log results

Team Conflicts

- **Structural conflicts**
two roles have opposing objectives

- **Issue conflicts**
ok if it remains focused on the issues

- **Performance conflicts**
 - ◇ missing tasks
 - ◇ violating rules or standards

- **Interaction conflicts**
 - ◇ mismatched goals
 - ◇ culture & communications modality
 - ◇ arise from violated expectations
interpersonal more the performance

Key Points for Project Success

Designated responsibilities

There are many options as to *how* these responsibilities are designated and enforced.

Collective commitment

Sharing ideas

positive suggestions
critique, don't criticize "egoless programming"

Definite, dependable communication channels

internal and external
regular, fixed meetings
common repositories

Planning

- ESSENTIAL
- General framework pre-defined
in InfoSys: waterfall model and milestones
in industry: local lifecycle standard
- Plan includes plan refinement
- Activities in parallel
 - ◇ Prototype || Requirements
 - ◇ Test Plans || Designs

Task Scheduling

Presentation and analysis techniques

PERT

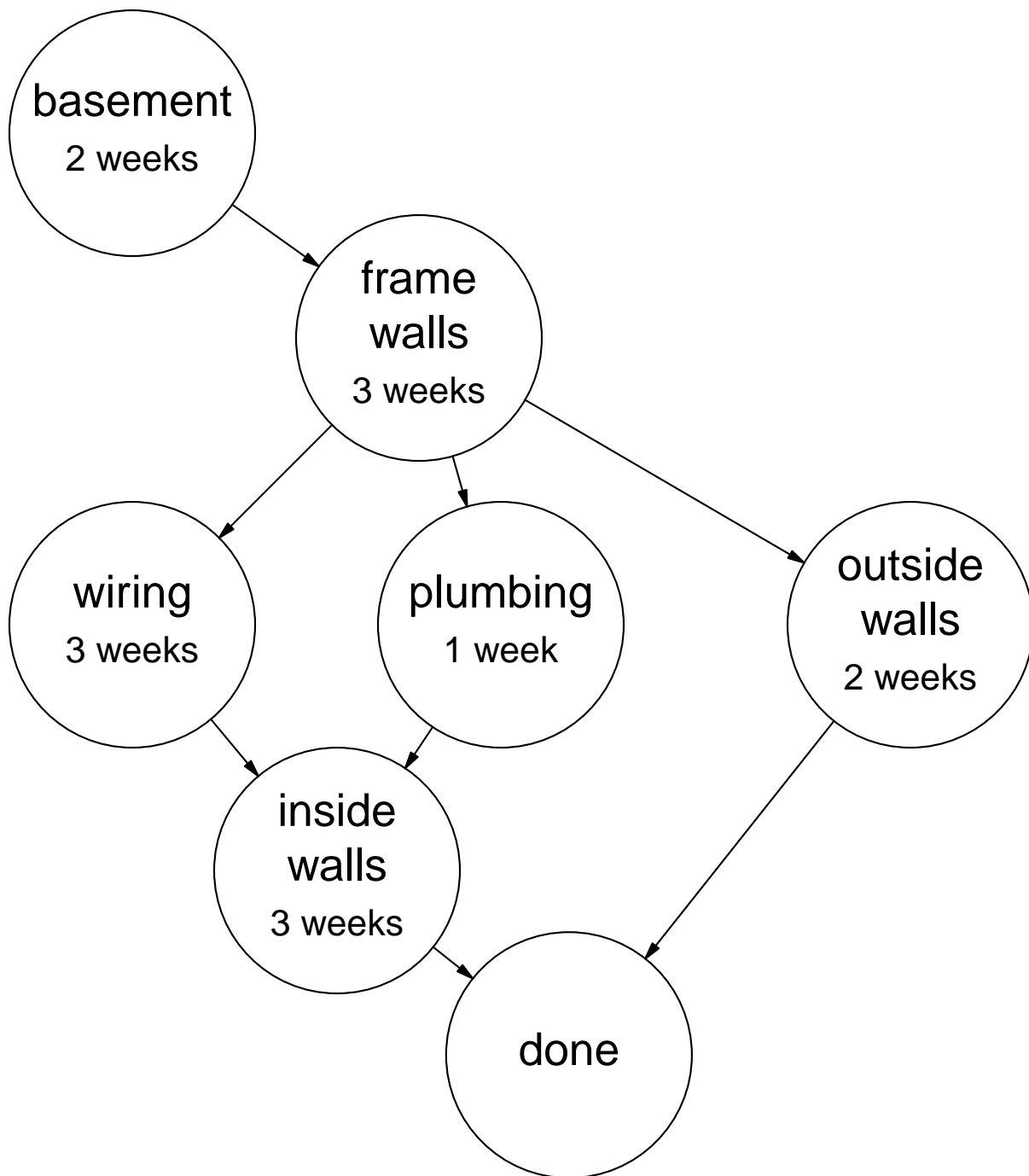
Program Evaluation and Review Technique

- graphical presentation of logical dependencies among subprojects
- derive timing constraints, including “critical path”

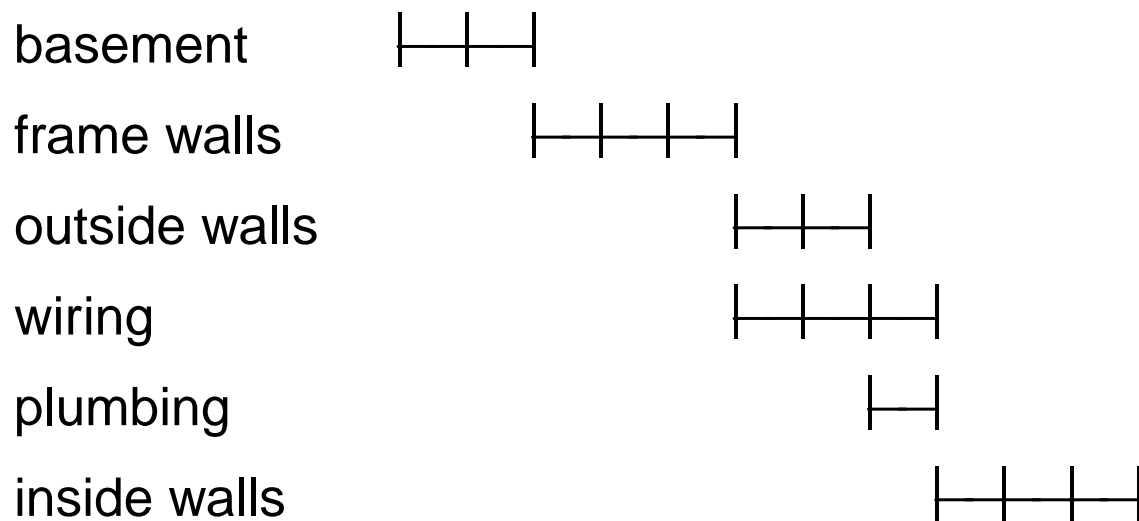
Gantt chart

- graphical presentation of subproject timing
- may indicate resource use

Task Scheduling Example (PERT)



Task Scheduling (Gantt Charts)



– time →

InfoSys Supervisors

Two major roles:

- Monitor:
 - ◇ meet weekly with team
 - ◇ receive log weekly
 - ◇ monitor teams' role performance
 - includes both product and process
 - ◇ report to me
 - weekly on general status
 - recommend drastic action
 - end-of-semester reports
 - ◇ feedback to team

- Advisor:
 - ◇ voice of experience
 - ◇ information resources
 - ◇ critique documents and programs
 - ⇒ show outlines & drafts early

- ? metaphors:
 - ◇ smoke detector
 - ◇ grandfather
 - ◇ Simon Legree

Reporting Requirements

Send to Supervisor *each week*:

Information Systems Project Team -- Weekly Log

Group: Recording Date:
Meeting Date(s):

Attending:

Current Milestone: Due (on syllabus):
Group Target Date:

Deliverables Due:

SUMMARY OF MEETING(S):

NEW TASK ASSIGNMENTS:

task ; assigned-to ; due-date
;

CARRY-FORWARD TASK ASSIGNMENTS:

task ; assigned-to ; due-date ; status
;

UPCOMING MEETINGS:

OTHER:

INDIVIDUAL GOALS & ACCOMPLISHMENTS:

(Material in this section is contributed by each team member for him/herself. Information on tasks may repeat, and therefore confirm, status information in the carry-forward section above.)

During the past week I

initiate tasks:
completed tasks:
made progress on tasks:
assisted on tasks:
met with (beyond regular meetings):