Technical Communication for Computer Scientists

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Learning Objectives for Today

- Review of Active Listening and Logical Speaking

- Project Management

- Project Management Game

Active Listening

Eye Contact

Eye contact during the conversation shows the speaker that you give him your attention and that you really care about what he says.

Avoid Distractions

There are so many examples of distractions such as our thoughts, mobile phones, gadgets, music, side activities, other people and more. Learn to avoid these distractions otherwise they can destroy your conversation.

Body Gestures

Body gestures and language are a whole science. Your body gestures tell the speaker whether you listen carefully or not.

Give Feedback

Ask questions to clarify certain points, tell your opinions, summarize the speaker's comments.

Show That You're Listening

Use facial expressions such as smile, note your posture, encourage the speaker to share and to continue.

Listening allows you to learn, to have relationships, to plan, to develop, to be the part of something, to create, to think…. and much more!

10/16/20

www.businessphrases.net

MECE:
Mutually Exclusive
Collectively Exhaustive

$$P1 \cap P2 = \emptyset$$
$$P1 \cap P3 = \emptyset \qquad P1 \cup P2 \cup P3 = 1$$
$$P2 \cap P3 = \emptyset$$

Logical Speaking

The Pyramid Principle
- Barbara Minto

Pyramid Structure

Key Message/Point/Answer

Main Point 1 → Main Point 2 → Main Point 3
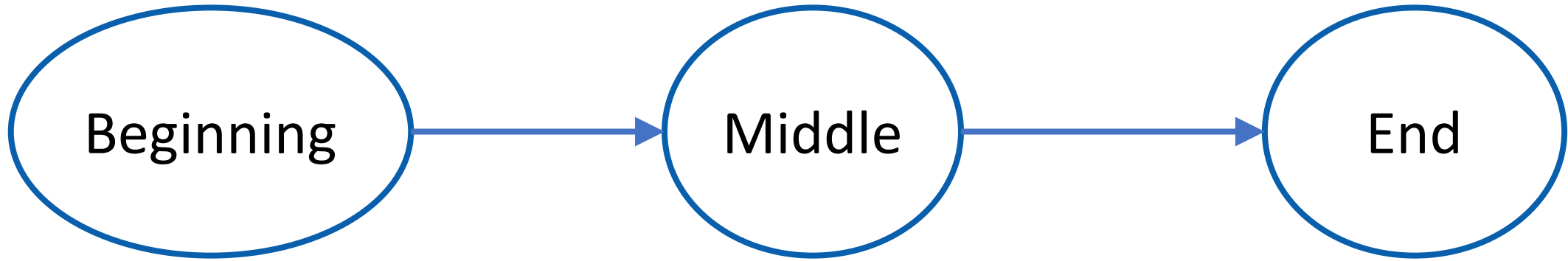
supporting details

Conclusion

Project Management

8 things you want to know

- What is a Project?
- Process Groups
- The Triple Constraint
- Project Management Framework

What is a Project
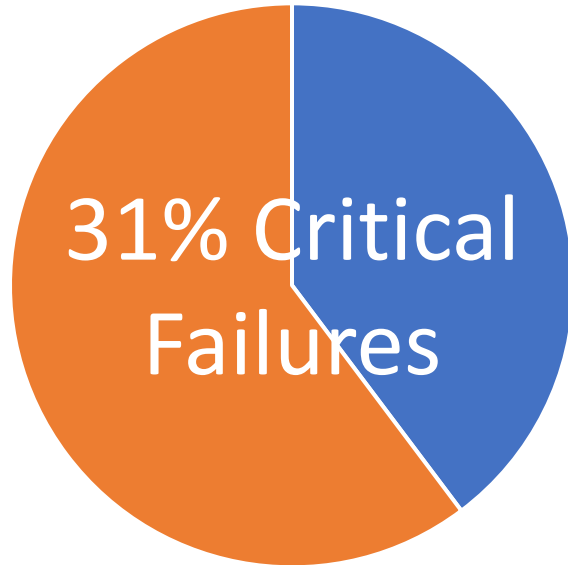

All projects have a beginning, a middle and an end.
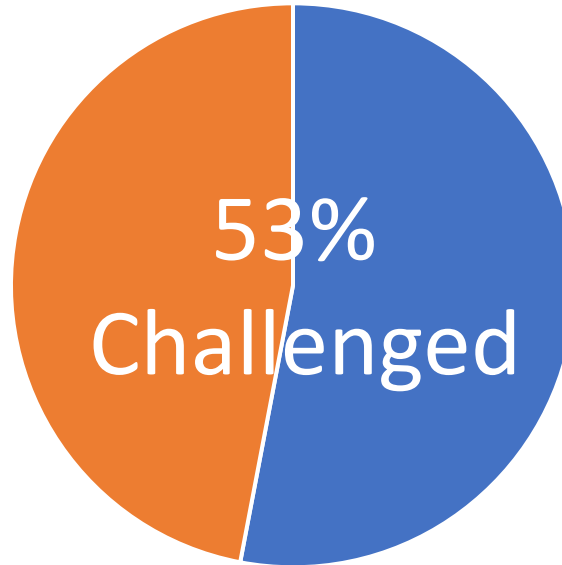
What is a Project

A definition

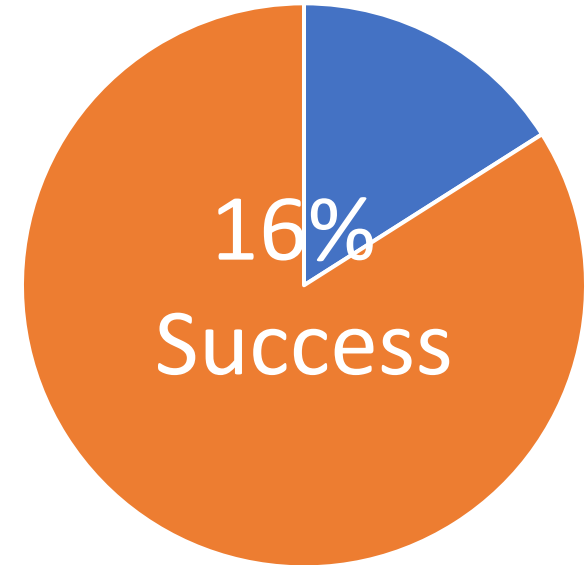"A temporary endeavor undertaken to accomplish a unique purpose"

Fact of Projects

31% Critical Failures

Not even completed

53% Challenged

Typically 189% over budget

16% Success

Bingo

Common characteristics

A target outcome	A defined life span	New or unique	Time, cost, performance requirements

Which can also be defined by what they are not

Explorations	Go on indefinitely	Creating the same thing multiple times	No constraints

Process Groups
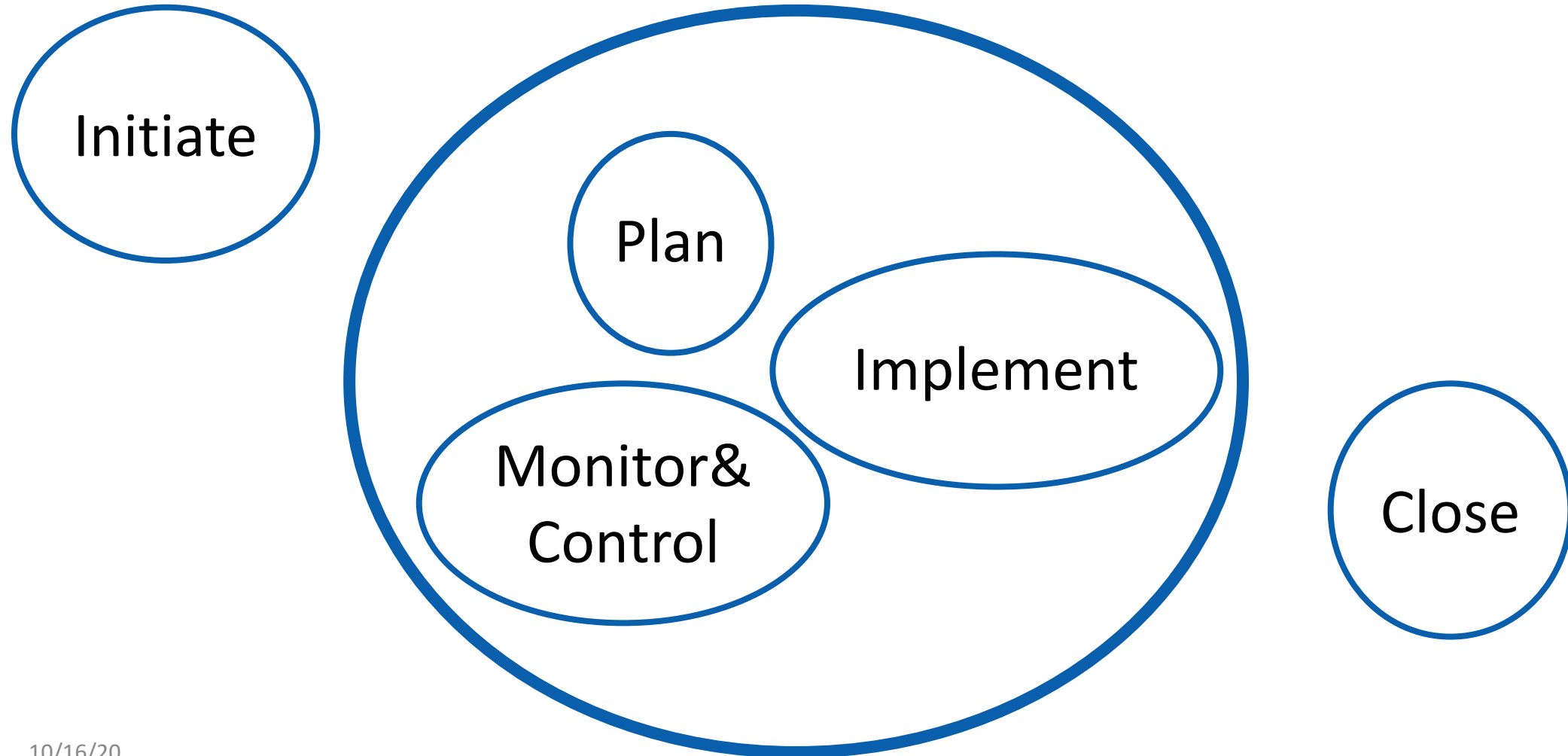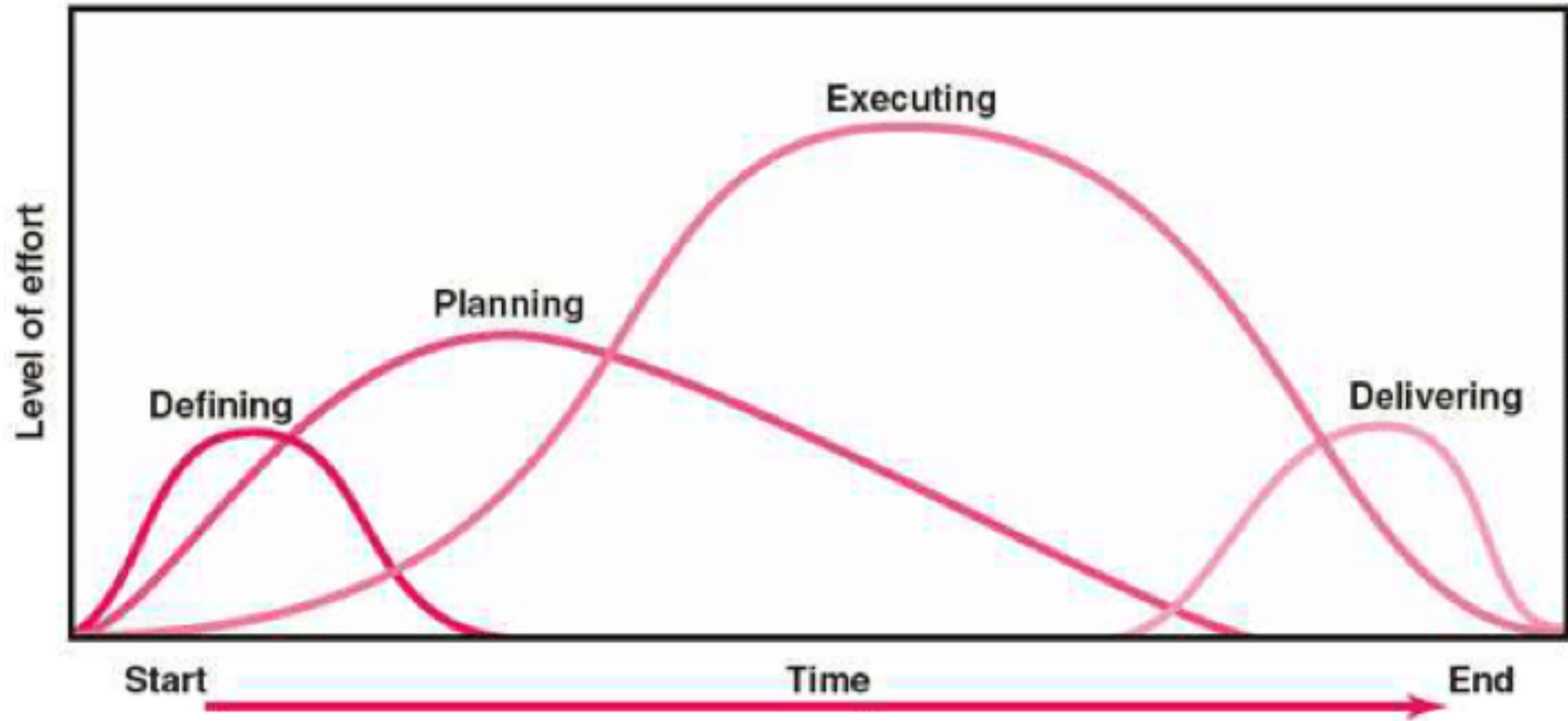
Defining	Planning	Executing	Delivering
1. Goals	1. Schedules	1. Status reports	1. Train customer
2. Specifications	2. Budgets	2. Changes	2. Transfer documents
3. Tasks	3. Resources	3. Quality	3. Release resources
4. Responsibilities	4. Risks	4. Forecasts	4. Release staff
	5. Staffing		5. Lessons learned

The Triple Constraint

Project Management Framework

Time Management	Cost Management	Scope Management
Quality Management	Integration Management	HR Management
Risk Management	Communication Management	Procurement Management
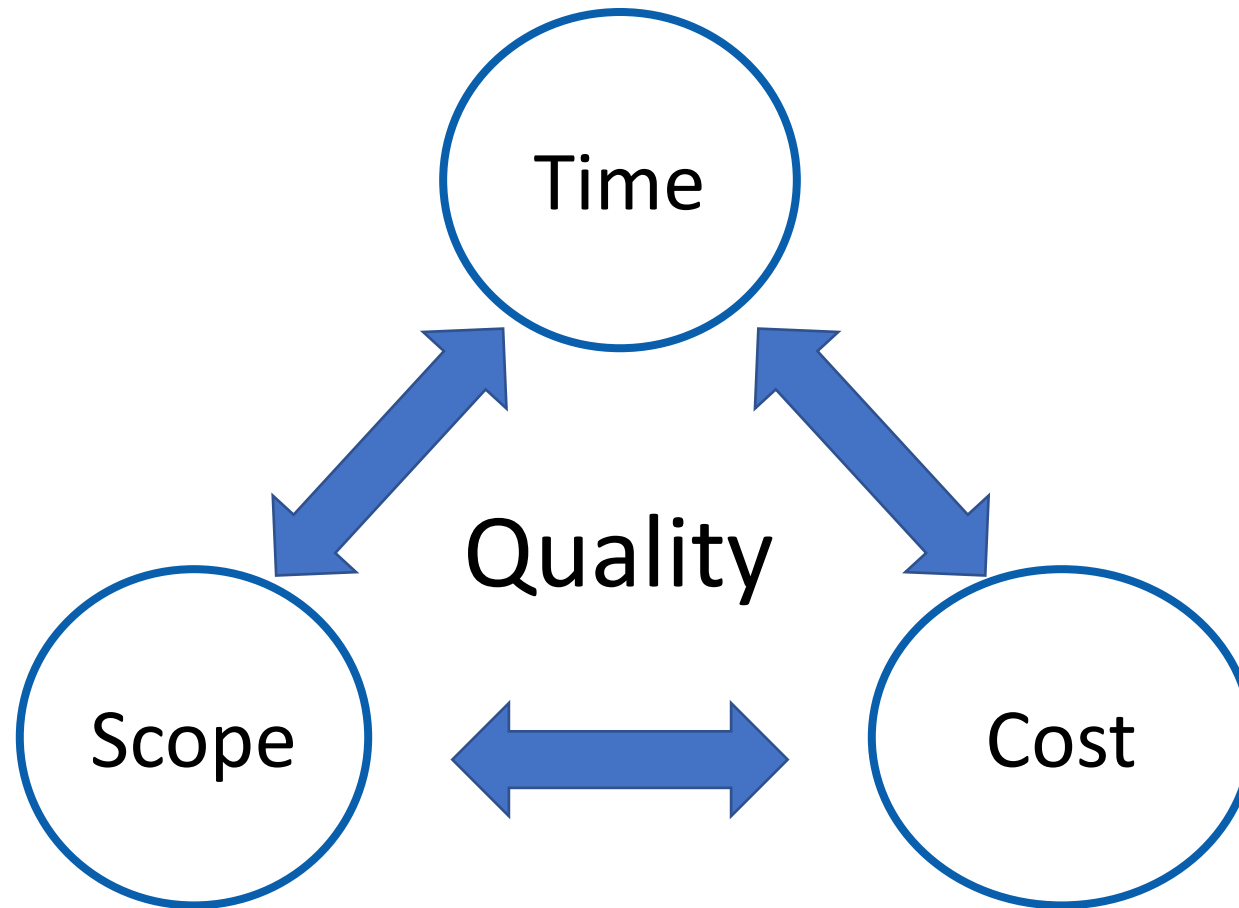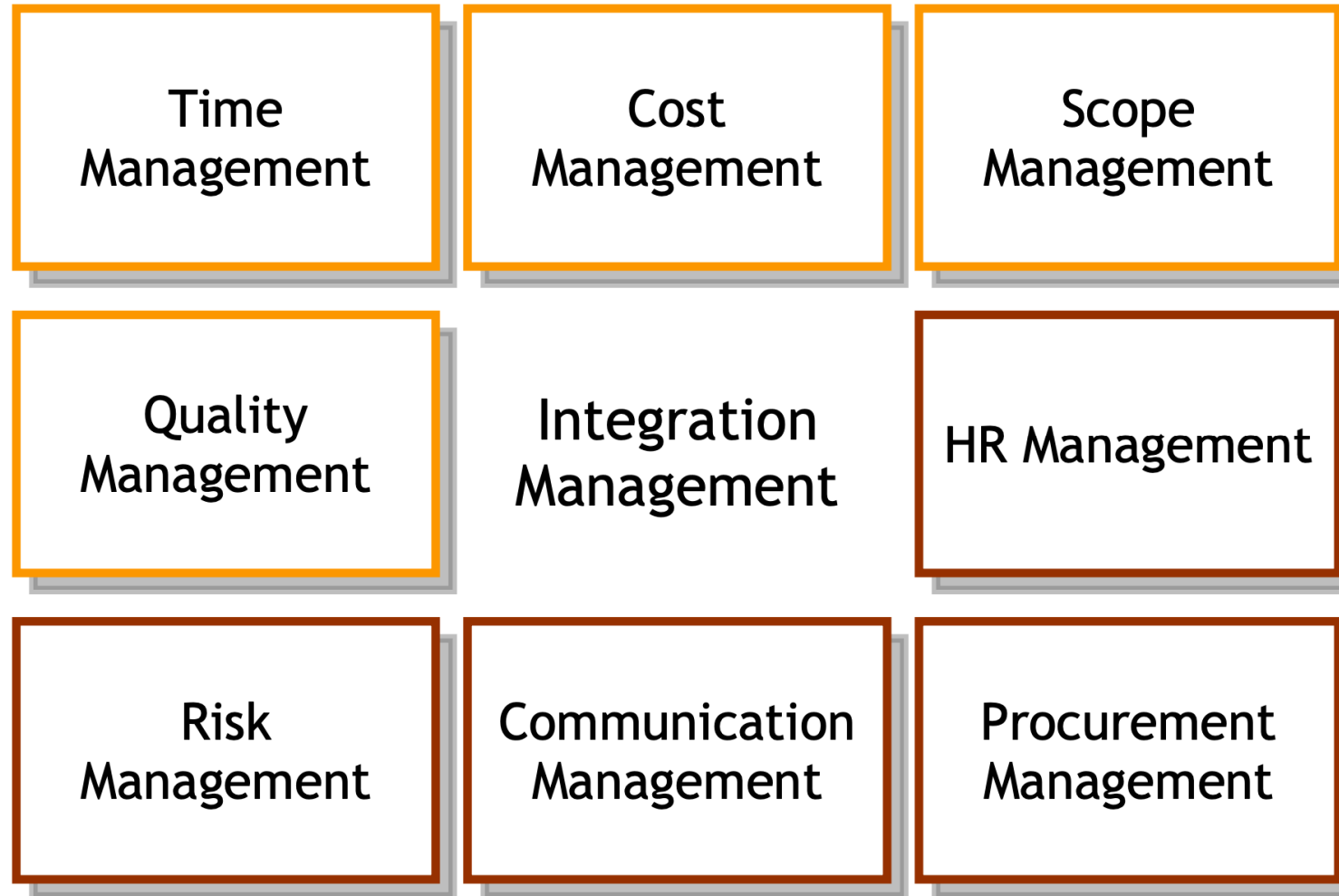
Project Schedule: Gantt

![GanttProject]

- A Gantt chart is a type of bar chart that illustrates a project schedule, named after its inventor, Henry Gantt.

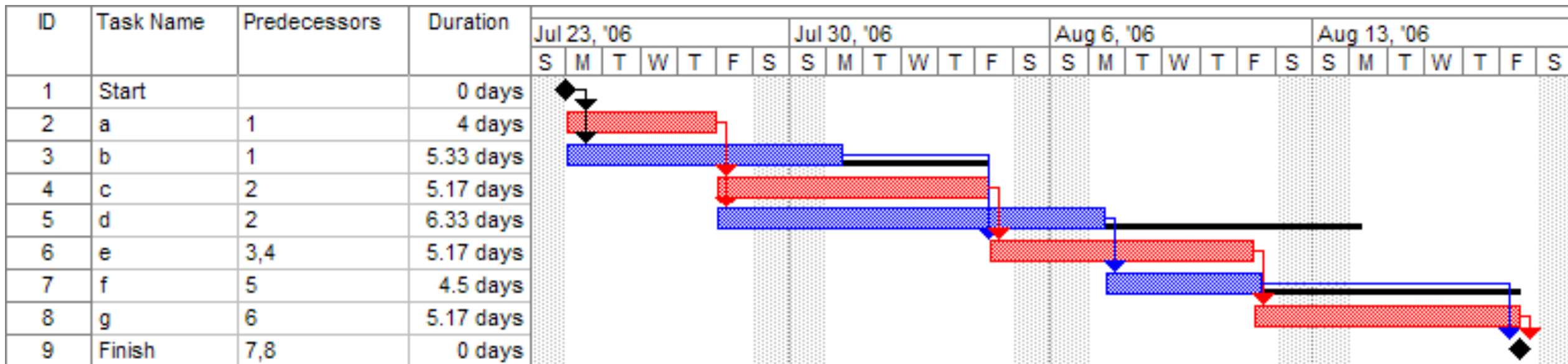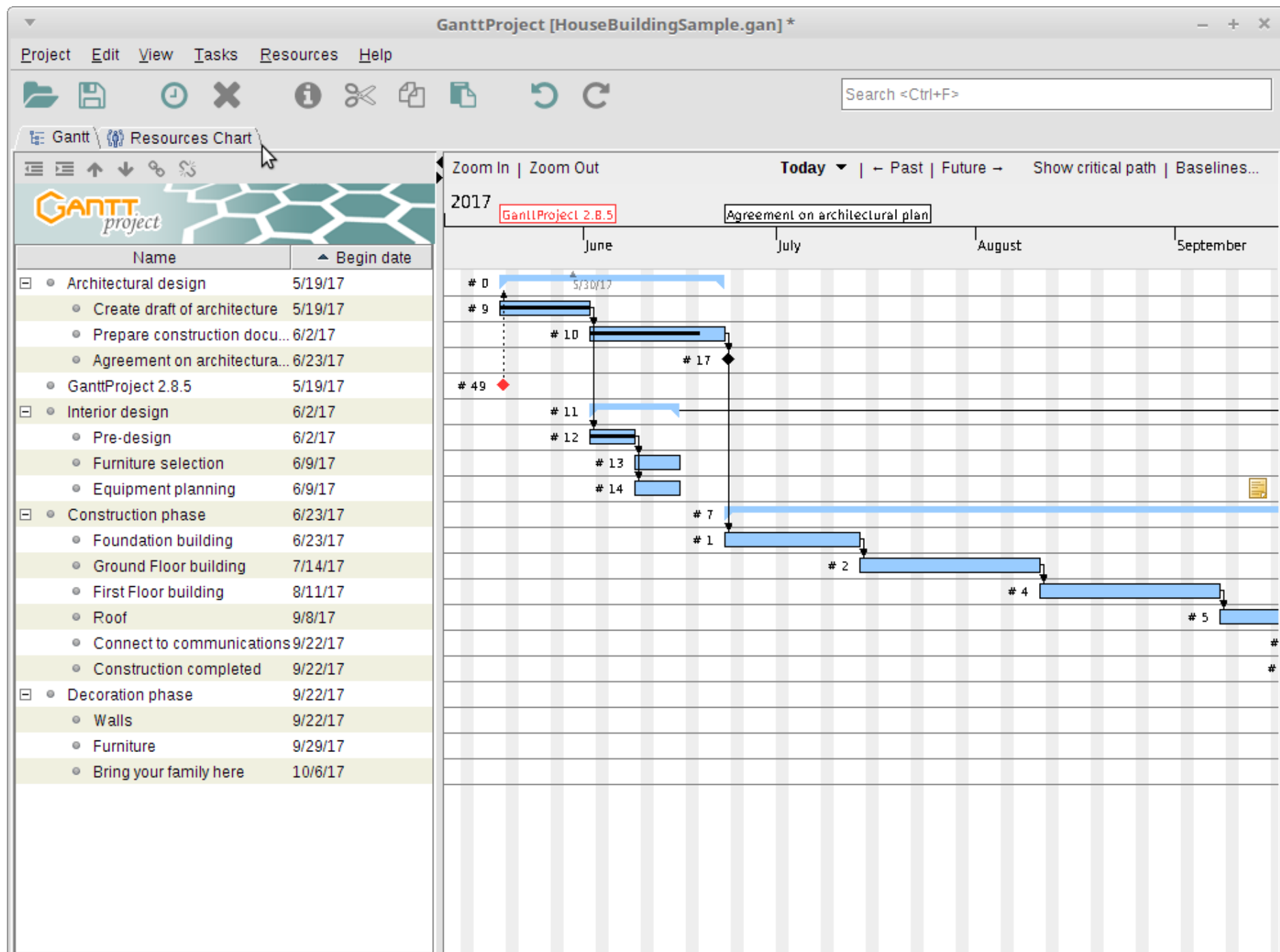| ID	Task Name	Predecessors	Duration	Jul 23, '06							Jul 30, '06							Aug 6, '06							Aug 13, '06						
				S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	Start		0 days																												
2	a	1	4 days																												
3	b	1	5.33 days																												
4	c	2	5.17 days																												
5	d	2	6.33 days																												
6	e	3,4	5.17 days																												
7	f	5	4.5 days																												
8	g	6	5.17 days																												
9	Finish	7,8	0 days																												

Demo

- Schedule of building a new house

Project Management Exercise

- Design and implement an online shopping website with 1 million RMB that satisfies 1 million monthly users.

Defining	Planning	Executing	Delivering
G1: Goal	G3: Schedule	G6: Status Reporting	G8: Delivering
G2: Task	G4: Budget	G7: Quality	
	G5: Risks		

Consistent !