

Friday - Network plannin

▼ Class	Eng 67
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🔗 Materials	
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▼ Type	Office Misc

Network diagrams

The steps required to plan a project:

1. Task Breakdown
2. Estimation
3. Logical dependencies
4. Network Diagram
5. Gantt Chart

3. Logical Dependencies Precedence Table

1. Task Breakdown
2. Estimation
3. **Logical Dependencies**
4. Network Diagram
5. Gantt Chart

Activity	Predecessor
A	
B	A
C	A
D	C
E	B
F	D/E

We know that each task has a dependency so we can start mapping it out in a table.
This creates an easy visual reference of activities that must finish before another can start.

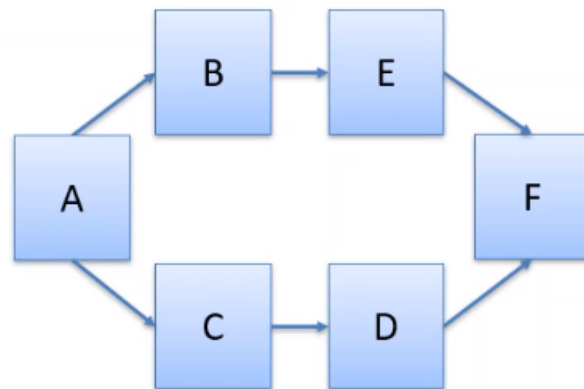
4. Network Diagram

1. Task Breakdown
2. Estimation
3. Logical Dependencies
4. **Network Diagram**
5. Gantt Chart

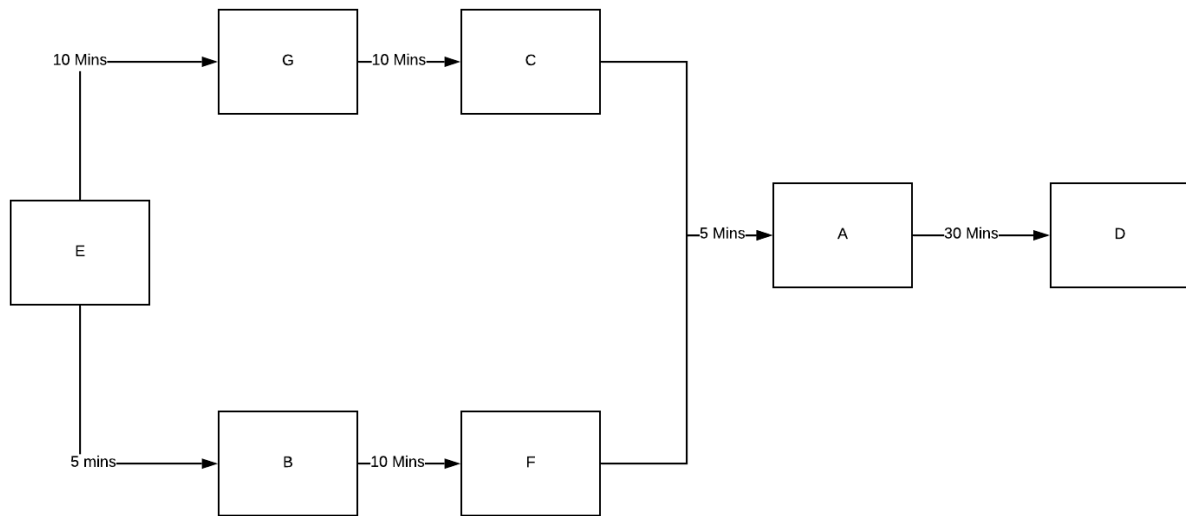
The Precedence table is converted into a simple diagram that illustrates what needs to be done in order.

Activity	Predecessor
A	
B	A
C	A
D	C
E	B
F	D/E

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IF THERE ARE TWO STARTING POINTS, THEN INCLUDE A ZEROETH NODE AS PREDECESSORS FOR THE START NODES



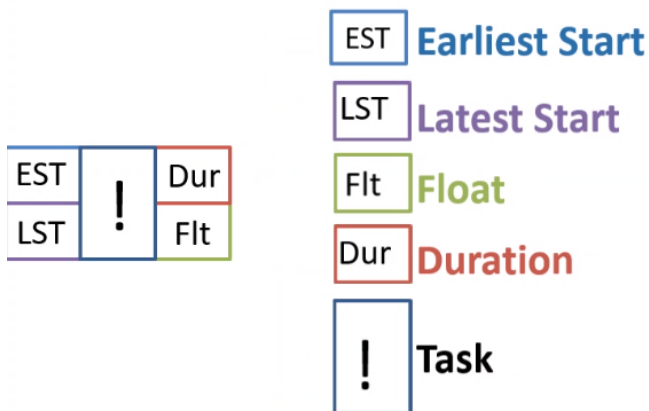
Activity	Predecessor	Duration
A	C, F	5 Mins
B	E	5 Mins
C	G	10 Mins
D	A	30 Mins
E	-	2 Mins
F	B	10 Mins
G	E	10 Mins

ACTIVITY ON NODE

AoN

1. Task Breakdown
2. Estimation
3. Logical Dependencies
4. **Network Diagram**
5. Gantt Chart

These make up the AoN,
they help estimate time



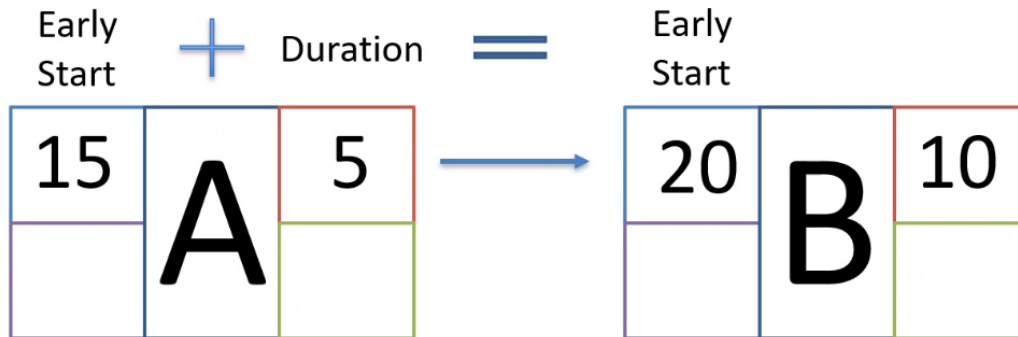
Float - the amount of time that a task can be delayed without causing a delay to subsequent task

Duration - How long it takes

$EST(A) + DUR(A) = EST(B)$ (GOES FROM LEFT TO RIGHT)

Calculating Earliest Start

EST	!	Dur
LST		Flt



Latest start(A) = Latest Start(B) - Duration(A)

for the last node, the earliest and last start

Calculating Latest Start

EST	!	Dur
LST		Flt

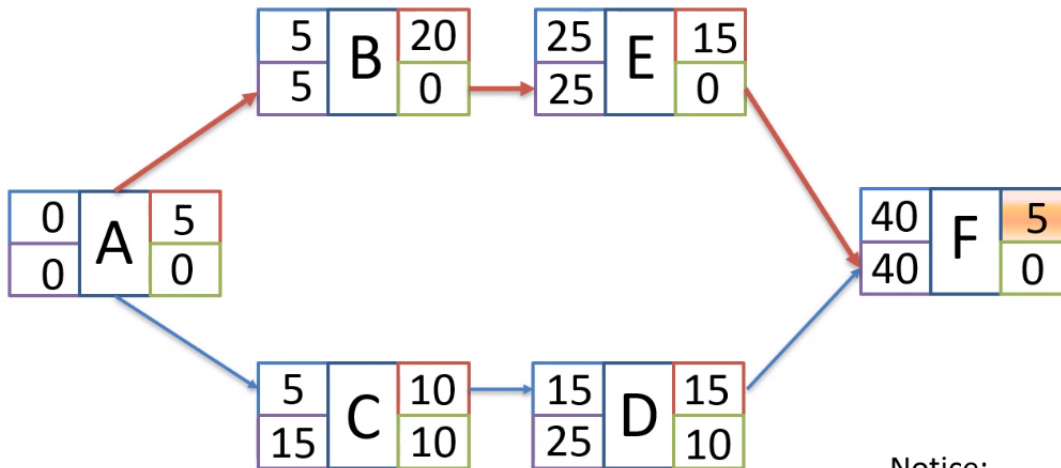


EST(A) - LST(A) = FLOAT(A)

Critical Path

LST	!	Flt
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It is the longest path through the network - gives you a logical estimate on project length.



Notice:

A critical path will be the one with zero free float



Rules

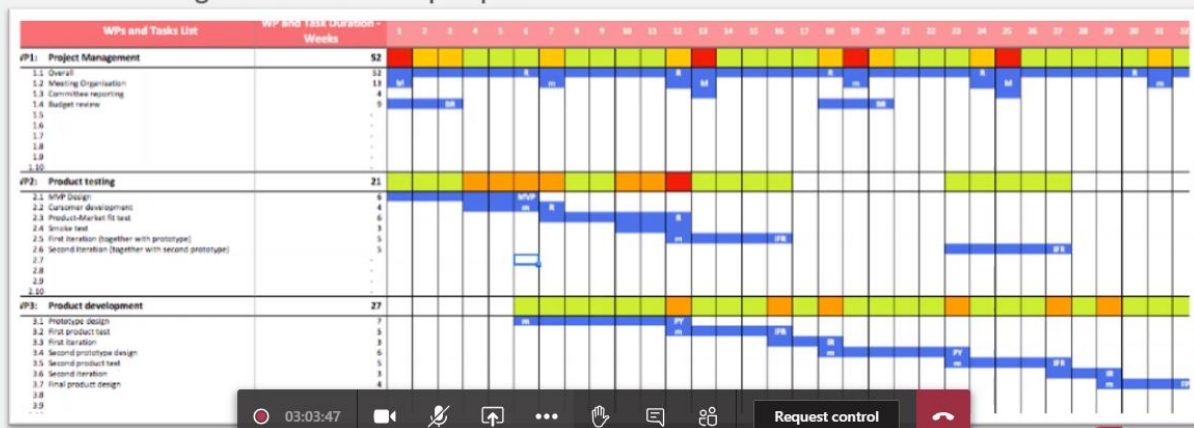
2.	Estimation
3.	Logical Dependencies
4.	Network Diagram
5.	Gantt Chart

- *Network Diagrams* flow from left to right
- Communication - It's important to make it easily readable – this is to prove your thought processes to other people.
- There can be more than one critical path
- Arrows *can* cross over each other without any impact
- Looping is not allowed
- Conditional statements are not allowed – the network diagram is NOT a decision tree
- *Activities* can only occur once on a Network Diagram
- **Earliest Start** of the last activity should **always equal** the **Latest Finish**
- When there are multiple starts, a common start node can be used to indicate a clear project beginning on the network. Similarly, a single project end node can be used to indicate a clear ending

5. Gantt Chart

1. Task Breakdown
2. Estimation
3. Logical
4. Dependencies
5. Network Diagram

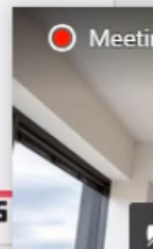
- The collected information can be inserted into a Gantt Chart enabling you to:
 - Understand and control project schedules
 - Communicate and present project information
 - Organise work and people



WORKING IN A TEAM - AFTERNOON SESSIONS

Attributes of Mature Teams

- Co-Located
- Cross Functional Roles
- Self-Organising
- Accountable and Empowered
- Test and Learn Feedback Loops

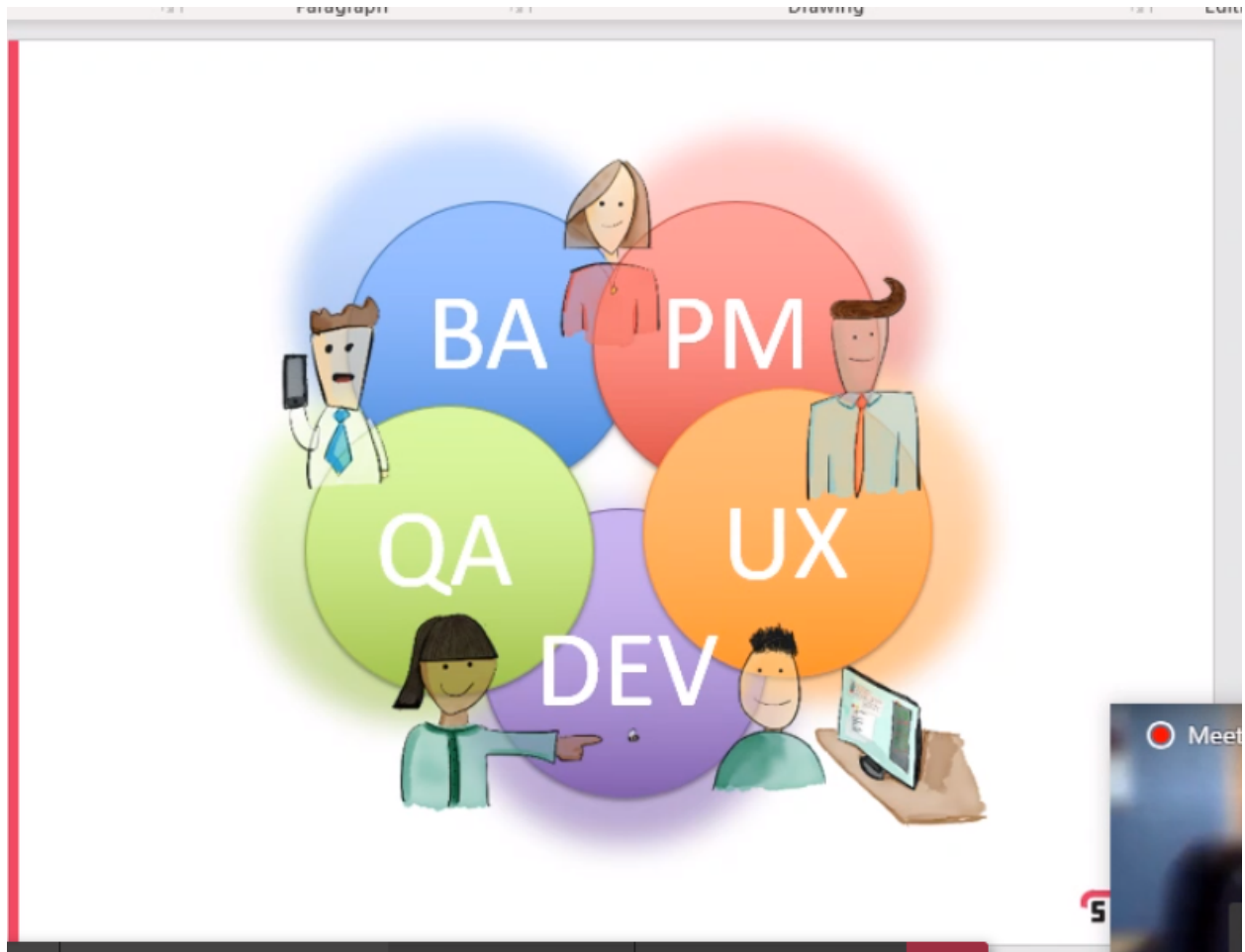


DEVOPS IS THE BRIDGE BETWEEN DEVELOPMENT AND OPERATIONS TEAMS

WE ARE CROSS FUNCTIONAL

Self organising - product backlog is given, then the team can decide without a line manager telling people what to do

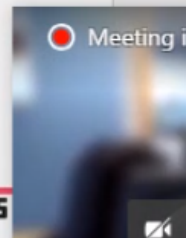
test and learn - agile, therefore an iterative approach. The event linked to this is the scrum recap(paraphrased)



- BA - Business Analyst
- PM - Project Manager
- UX - User experience - maybe building interface for front end
- DEV - Developers
- QA - Quality Assurance

Projects are difficult

- Create a **POSITIVE** atmosphere
- Manage conflict **INTELLIGENTLY**
- Have open and clear **COMMUNICATION**
- **RESPECT** all of your peers
- Become **TRUSTWORTHY**





A justification for the proposed project needed to obtain authorisation from the Board.

Examples of Techniques for Analysis

- MOST
- Boston Box
- Porters Five Forces
- PESTLE
- SWOT
- Workshops
- Interviews
- Questionnaires



Business Studies

Risk:

Risk Identification Tools

Type	Strength	Weakness
Brainstorming	Aids communication Promotes Originality/creativity Introduces the Unexpected Uses the Whole Team	Hard to get the right people together Needs strong facilitator Easily Side-tracked Poor Risk Description
Prompt List	Captures Experience Ensures Complete Coverage Generates focused controlled responses	Limits creativity/excludes original thought Can become long and unwieldy Can miss project specific risks
Delphi	Harnesses expertise of experts Can be done remotely Produces Consensus	Depends on identifying appropriate experts Can take a lot of time Requires firm facilitation
SWOT	More focus on both opportunity and threat Includes positive aspects to motivate team	Time consuming Strength/weakness not always to risk process Needs a good facilitator
Previous Experience	Specific experience Actual Events Simple	Individual Can be subjective Might miss generic risks



A stakeholder can be anyone that could have an impact on the project

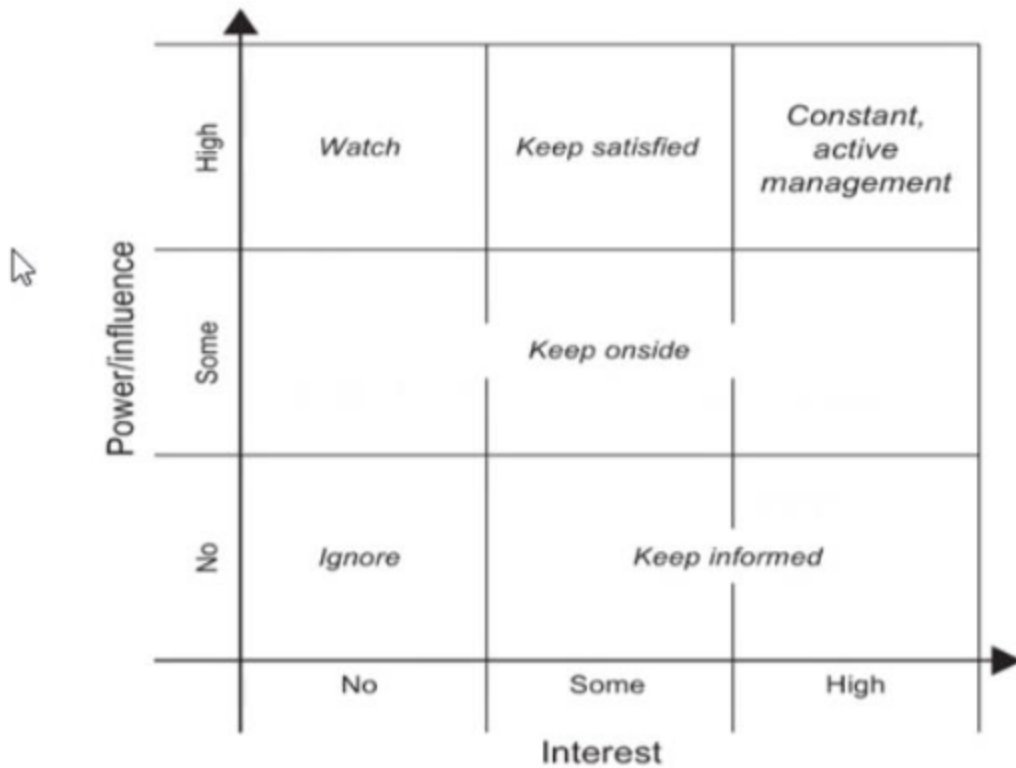
Stakeholder Attitudes

- Champion
- Supporter
- Neutral
- Critic
- Opponent
- Blocker

Meeting in "Enginee... 07:27:12

07:27:24 Request control 07:27:24

Power / Interest Grid



Planning involves setting out the roadmap for the project by creating the following plans:

- Project plan
- Resource plan
- Financial plan
- Quality plan
- Acceptance plan
- Communications plan

Meeting in "

Definition of done - acceptance criteria