INF 151: Schedule Management

Week 4: Thursday

Today's Agenda

Announcements:

- Work on Assignment 5 (Due 10/27)
- Midterm: **Thursday 11/03**

Today:

- Midterm Overview
- Project Schedule Management
- Quiz 4
- Group Activity

Midterm

Midterm

How to Study

1. READINGS. There will be questions from the Schwalbe text to Week 5. So chapters 1-7. (8-10 will be covered by final)
2. Review chapter summaries and take the quizzes at the end of each chapter.
3. The important parts of each chapter are covered in slides. So review slides and lectures.
4. Socrative quiz questions will be reused/repurposed. Review and understand not just the question answer, but concepts related to the question.
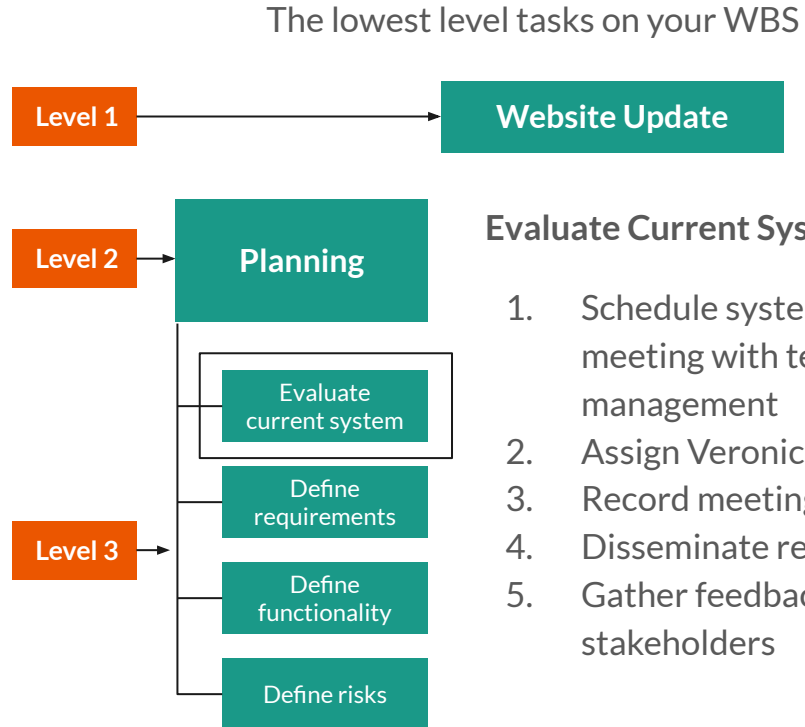
Midterm

Exam Structure

Exam will have three parts:

1. True/false questions
2. Multiple choice
3. Term fill-ins
4. 1 essay format

Project Schedule Management

Schedule Management

WBS Example

The lowest level tasks on your WBS

| Level 1 | → | **Website Update** |

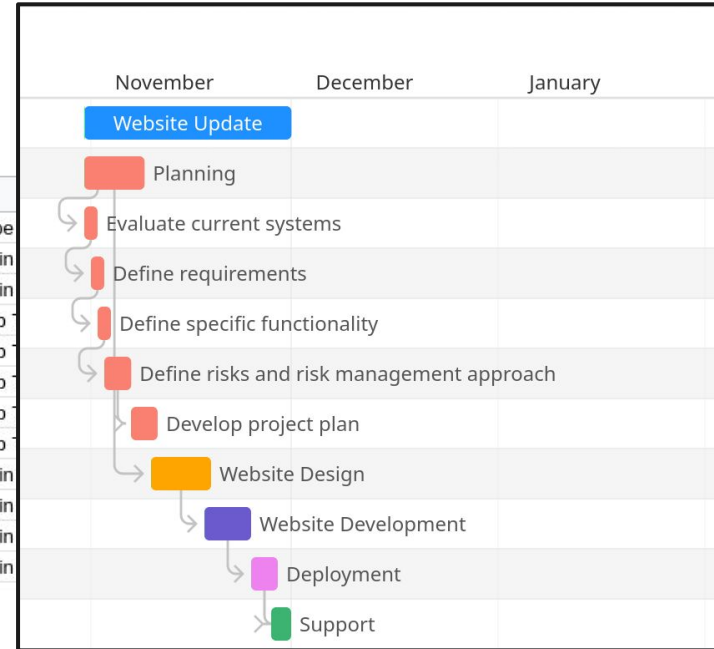| Level 2 | → | **Planning** |

Evaluate Current System

1. Schedule system walkthrough meeting with team and management
2. Assign Veronica to lead
3. Record meeting using X system
4. Disseminate results on Intranet
5. Gather feedback from stakeholders

Level 3

- Evaluate current system
- Define requirements
- Define functionality
- Define risks

Schedule Management

Transition to Gantt

	A	B	C	D	E	F	
1	ID	Activities	Dependency	Start Date	Scheduled End	Completion	Type
2	Task 1	Website Update		11/1/2022	12/1/2022	0%	Main
3	Task 1.1	Planning		11/1/2022	11/9/2022	31%	Main
4	Task 1.1.1	Evaluate current	Task 1.1	11/1/2022	11/2/2022		Sub
5	Task 1.1.2	Define requireme	Task 1.1.1	11/2/2022	11/3/2022		Sub
6	Task 1.1.3	Define specific f	Task 1.1.2	11/3/2022	11/4/2022		Sub
7	Task 1.1.4	Define risks and	Task 1.1.3	11/4/2022	11/7/2022		Sub
8	Task 1.1.5	Develop project	Task 1.1.4	11/7/2022	11/9/2022		Sub
9	Task 1.2	Website Design	Task 1.1	11/10/2022	11/18/2022		Main
10	Task 1.3	Website Develop	Task 1.2	11/18/2022	11/24/2022		Main
11	Task 1.4	Deployment	Task 1.3	11/25/2022	11/28/2022		Main
12	Task 1.5	Support	Task 1.4	11/28/2022	11/30/2022		Main
13							

	November	December	January
Website Update			
Planning			
Evaluate current systems			
Define requirements			
Define specific functionality			
Define risks and risk management approach			
Develop project plan			
Website Design			
Website Development			
Deployment			
Support			

Schedule Management

Defining Tasks / Activities

Scope and WBS provide a clear and concise overview of project requirements
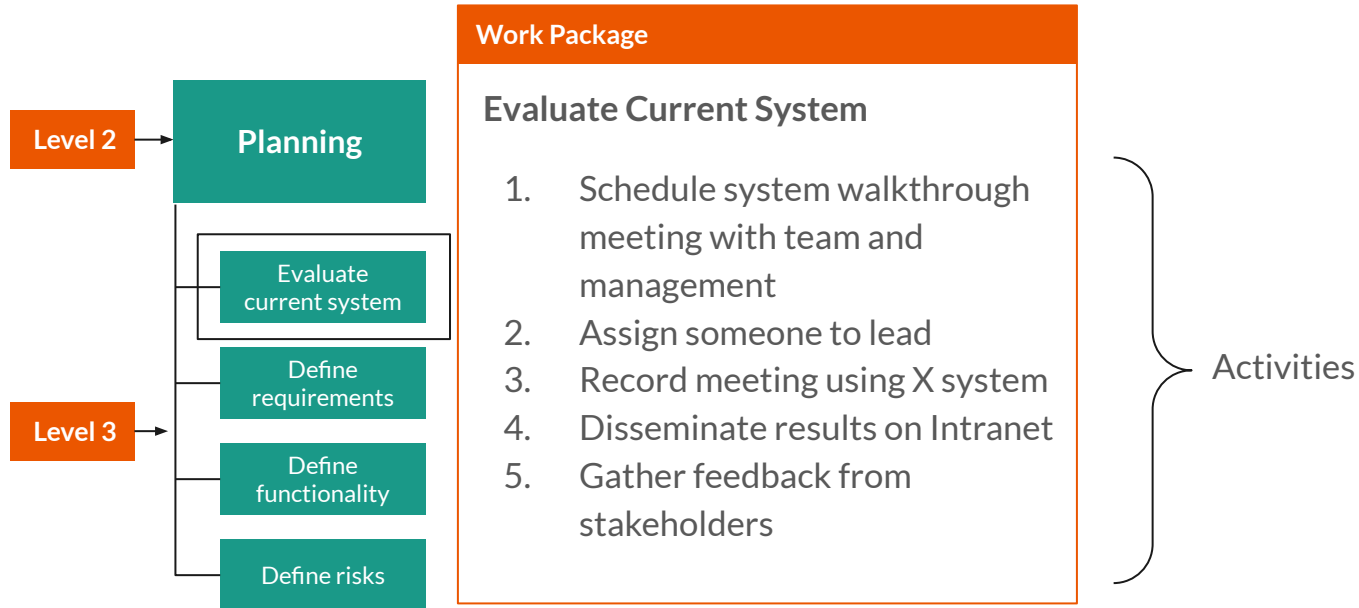
The **work package** details what is required to complete a WBS item. It can be owned and completed by a single person.

Activities describe how the work outlined in the **work package** should be completed. Activities can be owned and completed by multiple people.

Just as a work package is created by decomposing WBS items, activities are created by decomposing a work package

Schedule Management

Work Package

Evaluate Current System

1. Schedule system walkthrough meeting with team and management
2. Assign someone to lead
3. Record meeting using X system
4. Disseminate results on Intranet
5. Gather feedback from stakeholders

Activities

Level 2

Planning

Evaluate current system

Define requirements

Define functionality

Define risks

Level 3

Schedule Management

Defining Tasks / Activities

Activity information informs how work is carried out, how long it will take, and how to control the schedule

Defining activities makes it possible to create more accurate time and resource estimates

Work package == scope

Activity == time

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Activity List

(table layout not important)

Attributes include schedule related information

Activity ID	1.1.1-a
Activity Name	System walkthrough
Description	Schedule a team meeting for two hours to review current website. Outcomes should include list of items to be included in website redesign.
Attributes	Reserve room 101 Successor: 1.1.1-b Do not schedule: 10/20-10/22

The goal of defining activities is to ensure that the project team completely understands all the work it must do as part of the project scope so they can start scheduling the work.

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Sequencing Activities

Sequencing is the process of identifying relationships between activities, *e.g.*, activity B cannot start until activity A is complete.

Relationships, or dependencies, can be **mandatory, discretionary, external, or internal**

Often visualized through a network diagram

Only needs to include activities with dependencies (not all activities)
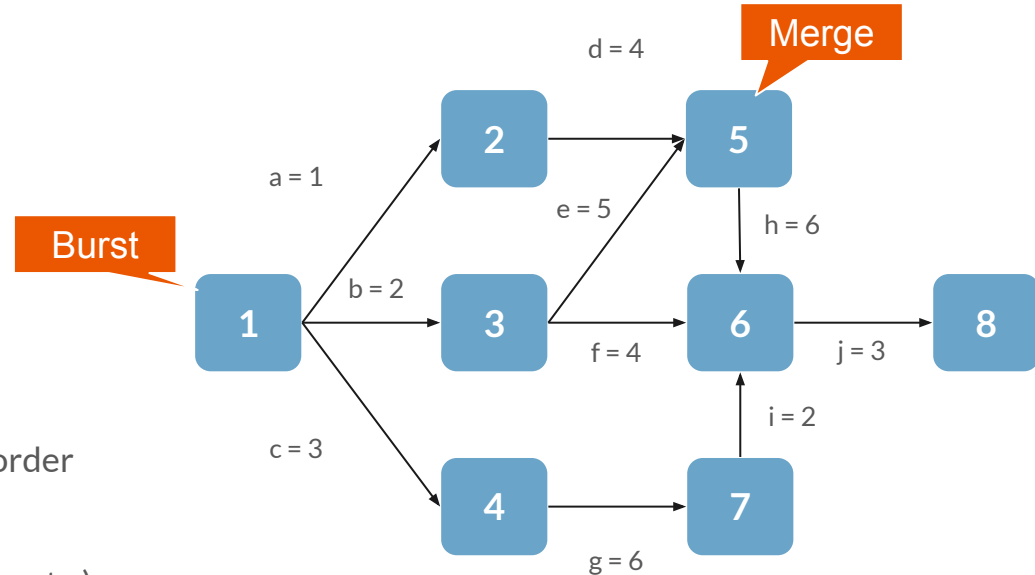
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Network Diagram for Sample Project Activities

Sequencing Diagram:

Activity on Arrow (AOA)/Arrow Diagramming

| n | = Sequence or activity completion order |

X = n = Activity and duration (days, weeks, etc.)

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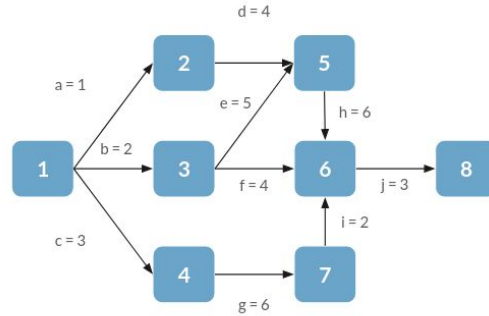
Sequencing Diagram:

     Precedence diagramming (PDM)

More common in practice vs. AOA

More expressive

VS.

A	ID: 1
Start: 10/23/22	
Finish: 10/24/22	
Resources	Duration: 1 day

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Scheduling Estimates

Activity estimate are based on duration, **not** effort

1.1.2 = 40 hours to complete

4 developers work on 1.1.2 for 7 hours a day

Work estimate = 40/(4*7) = ~1.5 days

1.1.2 Work estimate = 2 days

Schedule Management

Evaluate Current System

~ 2 hours
1. Schedule system walkthrough meeting with team and management
2. …

Noun - Verb

Task ID	Task Name	Start	Finish	Late Start	Late Finish	Free Slack	Total Slack
1.1.1-a	System walkthrough	10/23/2022	10/23/2022	10/24/2022	10/25/2022	0	2

Time an activity can be delayed w/o delaying start

Time an activity can be delayed w/o delaying finish

Quiz

Quiz for today will be a group activity. Yay!

Group Activity

Next Class

Group Activity

1. Open the slide deck for today's lecture in a browser.
2. Create a new slide by copy pasting the template.
3. Add your team name to the heading for the slide.
4. Notify your team, if absent, to join you on your slide.
5. Work together to populate the slide with a single Level 3 item from your project WBS.
6. Populate the RTM, Activity List, and Sequence Diagram for your item to best of your ability.

Team Name

Req. No.	Name	Category	Source	Status
A unique identifier to represent the requirement	A short description of the requirement (1-3 words)	The category the requirement belongs to	Location of original input that generated the requirement	Up-to-date status of requirement (in-progress, complete, on-hold, etc.)

Activity ID	1.1.1-a	
Activity Name	System walkthrough	
Description	Schedule a team meeting for two hours to review current website. Outcomes should include list of items to be included in website redesign.	
Attributes	Reserve room 101 Successor: 1.1.1-b Do not schedule: 10/20-10/22	

n

$$X = n$$

Tuesday 10/25

- Quiz 4
- Read chapters 7 & 8

Time and Cost Management

Group Slides