Fundamentals of Software Project Management (FSPM)

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Week 5
Project Schedule

Project Schedule Management

Plan Schedule Management

Project Schedule Management

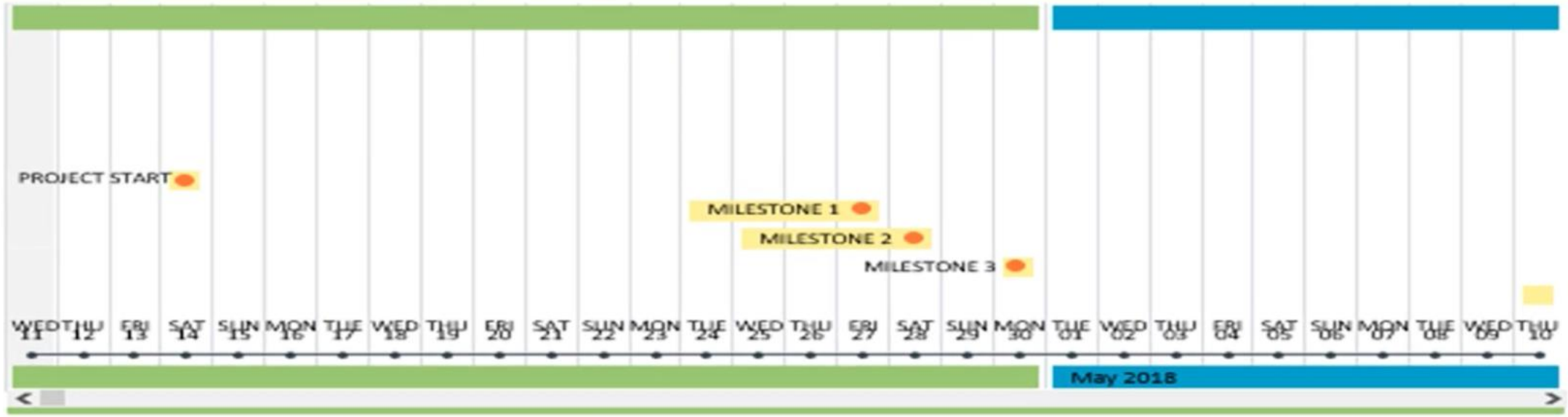
- Plan Schedule Management
- Define Activities
- Sequence Activities
- Estimate Activity Durations
- Develop Schedule
- Control Schedule

Project Schedule Management

Project scheduling provides a detailed plan that represent how and when the deliveries will happen.

PM team provides a scheduling method such as critical or agile method.

For smaller projects, multiple elements like defining activities, sequencing etc can happen as single process whereas for bigger projects they are treated as separate activities.



ENTER START DATE: **4/11/2018**

ACTIVITY	START	END	NOTES
Project Start	4/14/2018		
Milestone 1	4/24/2018	4/27/2018	
Milestone 2	4/25/2018	4/28/2018	
Milestone 3	4/30/2018		
Milestone 4	5/10/2018	5/12/2018	
Milestone 5	5/20/2018	5/22/2018	
Milestone 6	5/30/2018	6/1/2018	
Milestone 7	6/9/2018		
Milestone 8	6/19/2018	6/21/2018	
Milestone 9	6/29/2018	7/1/2018	
Milestone 10	7/9/2018	7/11/2018	

Factors for customization

- Life cycle approach
- Resource availability
- Project dimensions
- Technology support

Plan Schedule Management

- It is the process of establishing the policies, procedures & documentation for planning, developing, executing and controlling the project schedule.
- It provide guidance & direction on how project schedule will be managed.
- This is performed at predefined stages.

Input/Output Diagram

Input	Tools & Techniques	Outputs
• Project Charter • Project management plan 1. Scope management plan 2. Development approach • EEFs • OPAs	• Expert Judgement • Data analysis • Meetings	• Schedule Management Plan

Plan Schedule Management Applications

- Project management plan updates- schedule management plan

Define Activities

Define Activities

It is the process of identifying & documenting the specific actions to be performed to produce deliverables.

It breakdowns each task into smaller activity.

It helps in estimating, scheduling and overall planning.

It is performed throughout the project.

Define Activities Application

- Project document updates- activity list, activity attributes, milestone list
- Perform integrated change control
- Project management plan- schedule baseline, cost baseline

Sequence Activities

Input/Output Diagram

Input	Tools & Techniques	Outputs
• Project Management plan 1.Schedule management plan 2.Scope baseline • Project documents 1.Activity attributes 2.Activity list 3.Assumption log 4.Milestone list • EEFs • OPAs	• Precedence diagramming method • Dependency determination and integration • Leads and lags • Project management information system	• Project schedule network diagrams • Project documents updates 1.Activity attributes 2.Activity list 3.Assumption log 4.Milestone list

Precedence Diagramming Method(PDM)

- It’s a sequencing model like workflow which is used to show the relationships, order and links between various activities.
- Activities are represented by nodes.
- Predecessor activity is an activity which happens before & successor activity happens after a dependent activity.

Precedence Diagramming Method(PDM)

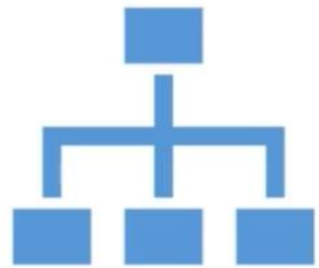
- Four types of relationships in PDM:
- Finish to start- a successor activity cannot start until it is finished. Example- fuel in the car, submit button is clicked to login in a system.
- Finish to finish- a successor activity cannot finish until it is finished. Example-database setup is complete to complete the user authentication process setup.
- Start to start- a successor activity cannot start until it is started. Example- server is started to host an application
- Start to finish- a successor activity cannot finish until it is started. Example- database verification of login credentials is finished before user can login (system will allow login process to start)

Dependency Determination

- There are four types of dependencies;

1. Mandatory dependencies
2. Discretionary dependencies
3. External dependencies
4. Internal dependencies

Sequence Activities Application



- Project documents;

1. Activity attributes
2. Activity list
3. Assumption log
4. Milestone list