Exercise – Determining the Critical Path Accurately

- 1. Open a Chrome or Edge browser and enter the following: https://training3.playbookteam.com
- 2. Sign into Playbook as Ken. Username = Ken, password = PlayBook2021
- 3. Load project **XP 2000**.
- 4. Switch to **Game Plan** and ensure project **XP 2000** is displayed.
- 5. Find tasks. In the **Find & Filter** window type the word *complete*. Note: searches are not case sensitive.



6. The Game Plan automatically shows only two tasks with the keyword *complete* in their titles. It also shows the summary tasks they are in.

Gan	ne Plan 🔽	Huddle	My Playbo	ok			С	ust	or	Vie	N			C	ash	bo	arc	k		W	/orl	king	g D	ay	s	
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Proje	Project Name: XP 2000 [Mary M]																									
				J	an 24	4													Feb	24						
WBS	WBS Title		Owner	3			eek 4		Week			Week 6				Week 7			Week 8							
				19	22	23	24 25	26	29	30 31	01	02	05	06 07	08	09	12	13 1	4 15	16	19	20	21	22	23	26
1	 Prototype E 	Build]				
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1.3.9	Proto	type Build Complete	•												Proto	type	Bui	ld Co	mple	te	\diamond					
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2.3.8	Engin	eering Build Comple	ete																							

7. In the task grid, click **Prototype Build Complete** (WBS 1.3.9). The Game Plan navigates to the milestone and highlights it in cyan. What type of milestone is it, Normal or Major?

Proje	Project Name: XP 2000															
												Se	o 22			
WBS	Title	Weel	: 35		W	eek :	36			W	eek	37			N	/eek 3
		01	02	05	06	07	80	09	12	13	14	15	16	19	20	21
1	 Prototype Build (Bob) 		_													
1.3	 Prototype Build - Enclosure (Mary) 				_											
1.3.9	Prototype Build Complete				Pr	otot	уре	Buil	d Co	ompl	ete		0			
2 Engineering Build (EB)							E	ngin	eerir	ng B	uild	(EB)	▼.		
2.3	 EB Enclosure (Mary) 									EB B	Encl	osui	re (N	lary)	▼
2.3.8	Engineering Build Complete															

8. In the Find & Filter window, clear the search by clicking the X. Note: The Game Plan unfilters the rest of the tasks and keeps the highlighted one visible on your screen.



9. Since it is a Major Milestone, the criticality of all upstream tasks linked to it, directly or indirectly, is calculated by Playbook. Scroll left then up to the top of the plan to view its predecessors and notice some are pink, orange, and others are yellow.

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G	ame Plan Huddle		My Playbook Dashboar	1							
+ Add	🔻 ∓ 🟦 🖪 Project 🝸 Lifec	ycles 🗸	T Criticality 🖌 ··· 🕫 Reapply T Rese					Find tasks by title	Go to Today	Q X -	+
Proj	ect Name: XP 2000										
WBS	TASK TITLE	START	SEP 21 WEEK 38 WEEK 39 WEEK 40 21 22 23 24 27 28 29 30 01 04 05 06 07 0	OCT 21 WEEK 41 3 11 12 13 14 15 18	WEEK 42 WEEK 43 19 20 21 22 25 26 27 28 25	WEEK 44 01 02 03 04 05 08	NOV 21 WEEK 45 WEEK 8 09 10 11 12 15 16 17	46 WEEK 47 18 19 22 23 24 25 2	WEEK 48 16 29 30 01 02 0	WEEK 49	W 9 10 13 14
1	 Prototype Build (Bob) 	Sep 17,									^
1.1	Prototype Backpanel PCB	Sep 27,	PCBA (Bob)								
1.1.1	Design Prototype Backpan	Sep 27,	PCBA (Bob)								
1.1.2	Layout Prototype Backpane	Sep 29,	ckpanel PCBA (Bob)								
1.1.3	Review/approve Backpanel	Oct 4, 2	CBA Schematic [Mary,Bob,John]								
1.1.4	Get Quotes Prototype Back	Oct 5, 2	es Prototype Backpanel PCBA [Ken]								
1.1.5	Incorporate layout changes,	Oct 5, 2	s, export/verify file for supplier [Bob]								
1.1.6	Order Prototype Backpanel	Oct 8, 2	Order Prototype Backpanel PCB [Ken]	.h.							
1.1.7	Fab/receive Prototype Back	Oct 11, 2	 Fab/receive Prototype Backpanel PCB [Bob] 	[
1.1.8	Acquire components, kit, se	Sep 29,	ier: Backpanel (Bob)								
1.1.9	Assemble, ship/receive fro	Nov 10,		0.	Assemble, ship/receive from suppli	er: Backpanel PCBA [Bol	oj (
1.1.10	Bench test/inspect Backpan	Nov 17,				Bench test/inspect B	Backpanel PCBA [Bob]				
1.1.11	Prototype Ready for Build:	Nov 17,				Prototype Ready for Bui	ild: Backpanel PCBA 🛛 📲				
1.2	Prototype Pwr Board PCB	Sep 17,									
1.2.1	Design Prototype PCBA: P	Sep 17,									
1.2.2	Layout Prototype Pwr Boar	Sep 24,	A [John]								
1.2.3	Review/approve Pwr Board	Sep 29,	atic [Mary,Bob,John]								
1.2.4	Incorporate changes, expor	Sep 30,	ify file for supplier [John]								
1.2.5	Get Quotes Prototype Pwr	Sep 30,	Pwr Board PCBA [Ken]								
1.2.6	Order Pwr Board PCB	Oct 5, 2	Order Pwr Board PCB [Ken]								
1.2.7	Fab/receive Prototype Pwr	Oct 6, 2	> Fab/receive Prototype Pwr PCB [John]								×
1.2.8	Acquire parts, kit, send to s	Sep 24,	d [John]								bac
1.2.9	Assemble, ship/receive fro	Nov 5, 2		Assemble, sh	ip/receive from supplier: Pwr Board	PCBA [John]					eed
1.2.10	Bench test/inspect: Pwr Bo	Nov 12,			Bench tes	t/inspect: Pwr Board PC	BA (John)	-			Ľ.
1.2.11	Prototype Ready for Build:	Nov 12,			Prototype R	eady for Build: Pwr Boar	rd PCBA				
1.3	Prototype Build - Enclosu	Sep 20,									
1.3.1		Sep 20,									
1.3.1.1	Develop FEA model	Sep 20,									,0

10. Change the milestone from Major to Normal. Right-click on the milestone, **Prototype Build Complete** then click **Task Properties**.



11. Change Task Type to **Milestone** then click **Ok**.

Title*	Prototype Build Complete						
Type*	♦	Major Milestone 🔺					
Resources	սե	Work					
	٥	Monitor					
Duration*	<	Meeting					
weekudys	R	Time Off					
Work*		Summary					
Per resource	٠	Milestone					
		Major Milestone					

12. Scroll left then up to the top of the plan again to view its predecessors. Since these tasks are no longer linked to a Major Milestone, their criticality is not calculated and their slack is unknown, therefore they are brown.

Game Plan Huddle My Playbook Dashboard	
+ Add 🔻 🔹 🖹 Project 🝸 Lifecycles 🗸 T Criticality Z 🚥 C Reapply T Reset	QX- +
Project Name: XP 2000	
MBS ASX TITLE SPP 21 OCT 21 NVEX 42 NEEX 43 NEEX 44 NEEX 45 NEEX 45 NEEX 46 NEEX 47 NEEX 45 NEEX 45 NEEX 46 NEEX 47 NEEX 46 NEEX 47 NEEX 46 NEEX 47 NEX 47 NEEX 47 NEX	WEEK 49 W 03 06 07 08 09 10 13 14
1 v Prototype Build (Bob) Sep 17.	A
1.1 v Prototype Backpanel PCB Sep 27, PCBA(Bob)	
1.1.1 Design Prototype Backpan	
1.1.2 Layout Prototype Backpane Sep 29, ckpanel PCBA (Bob)	
1.1.3 Review/approve Backpanel Oct 4, 2(CBA Schematic [Mary Bob_John)	
1.1.4 Get Quotes Prototype Back Oct 5, 2(es Prototype Backpanel RCBA (Ken)	
1.1.5 Incorporate layout changes, Oct 5, 2(x), exportivently file for subplier (Bob)	
1.1.6 Order Prototype Backpanel Oct 8, 20 Order (Prototype Backpanel PCB [Ken]	
1.1.7 Fabireceve Prototype Back Oct 11, 2 • Fabireceve Prototype Backpanel PCB (Boo)	
1.1.8 Acquire components, kit, se Sep 29, ler: Backpanel (Bob)	
1.1.9 Assemble, ship/receive from supplier: Backpanel PCBA (Bob)	
1.1.10 Bench test/inspect Backpanel PCBA (Bob)	
1.1.11 Prototype Ready for Build: Nov 17, Prototype Ready for Build: Backpanel PCBA	
12 v Prototype Pwr Board PCB Sep 17,	
1.2.1 Design Prototype PCBA: P Sep 17,	
12.2 Layout Prototype Pwr Boar Sep 24, A (John)	
12.3 Review/approve Pwr Board Sep 29, atic (Mary Boq. John)	
12.4 Incorporate changes, expor Sep 30. ify file for supplier [John]	
1.2.5 Get Quotes Prototype Pwr Sep 30, 1 Pwr Board PCBA (Ken)	
1.2.6 Order Pwr Board PCB Oct 5, 20 Order Pwr Board PCB (Ken)	
12.7 Fabirecelve Prototype Pwr Oct 6.2() Fabirecelve Prototype Pwr PCB (John)	
12.8 Acquire parts, kit, send to s Sep 24, d (John)	ac
12.9 Assemble, ship/receive from supplier: Pur Board PCBA [John]	eed
12.10 Bench testimpect: Pwr Bo Nov 12, Bench testimspect: Pwr Board PCBA (John)	Ľ.
1.2.11 Prototype Ready for Build Nov 12. Prototype Ready for Build Nov 12.	
1.3 V Prototype Build - Enclosu Sep 20.	
1.3.1 v Injection Molded Face Sop 20.	
1.3.1.1 Develop FEA model Sep 20,	

 Convert the milestone back to a Major Milestone. Right-click on the milestone, click Task Properties. Change the Task Type from Milestone to Major Milestone then click Ok. (Or Undo).

Title*	Prototype Build Complete							
Туре*	Major Milestone 👻							
Resources								
Duration* weekdays		0						
Work* Per resource	Per day	0:00						
	Total	0:00						

- 14. Since the upstream tasks are once again linked to a Major Milestone, their slack and criticality are calculated and they are displayed in pink, orange, and yellow.
- 15. Delete the Major Milestone's predecessors. Hover over the link until you see it highlight in **bold** and **From/To** message appear.



16. Right-click then click **Delete Link**.



17. Click Yes.



18. Since the upstream tasks are no longer linked to a Major Milestone, their slack and criticality are unknown, therefore they are displayed in brown.



- 19. Click **Undo** or **Ctrl-Z** to revert the milestone to a Major Milestone and watch the criticalities update.
- 20. In the Search window, enter the keyword mechanicals.



21. Select the milestone Mechanicals Ready for Build (WBS 1.3.5) then *clear the search*.

22. This is an interim milestone, not a Major Milestone, and the upstream tasks are yellow because they are linked to a Major Milestone and their slack and criticality are calculated.

Show the slack in the Game Plan. Click the Criticality filter to open the filters pane then click **Other.** Check **Slack** then click **Ok**.

Game Plan View Settings X									
Calendar 🗌	G	ame Plan Res Load	Automatically save settings						
Project		_							
Resources	~								
Lifecycles	~	Resource Names	Slack update control - 🗂						
Criticality	~	Owner Names							
Task Type	<u>_</u>	Milestone Priority							
		Slack							
Summary	~	Weekends							
Linked Tasks	~	Milestone Status							
Date Range	~								
Other	~								
Warnings List	~								

23. Notice these mechanical related tasks all have 20+ days of slack.



24. Right-click on milestone **Mechanicals Ready for Build** and change the Type to a **Major Milestone** then click **Ok**.

Task Properties	Title*	Mechanicals Ready for Build
Basic	Туре*	💊 Major Milestone 👻
Summary & Status	Resources	
Links		
Change log	Duration* weekdavs	0

- 25. Now notice that some of the mechanical related tasks have turned pink (critical path) and the tasks have much less slack. *This is an inappropriate use of a Major Milestone which results in an inaccurate critical path.*
- 26. Click **Undo** or **Ctrl-Z** to revert the Major Milestone back to a regular, Normal Milestone. The original plan had only one Major Milestone, **Prototype Build Complete**, at a single point of convergence of all upstream work packages. The slack and critical path are now accurate, and everyone can effectively prioritize their tasks towards this common, high-level project goal.
- 27. Sign Ken out of Playbook.

This completes this exercise.