





























ID	Assignment Owner		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Ma S
1		✓		Start	0 days	Wed 1/8/20	Wed 1/8/20		Eric,Juan,Oscar	
2		✓		Introductory meeting with faculty advisor	0 days	Sun 1/12/20	Sun 1/12/20	1	Eric,Juan,Oscar	
3		✓		Research	20 days	Wed 1/15/20	Tue 2/11/20	2		
4		✓		Read and take notes on article 1	2 days	Wed 1/15/20	Thu 1/16/20	2	Eric	
5		✓		Read and take notes on article 2	2 days	Wed 1/15/20	Thu 1/16/20	2	Juan	
6		✓		Read and take notes on article 3	2 days	Wed 1/15/20	Thu 1/16/20	2	Oscar	
7		✓		Hold team meeting(s) to discuss	3 days	Mon 1/20/20	Wed 1/22/20	4,5,6	Eric,Juan,Oscar	
8		✓		Compile Research Documentation	6 days	Wed 1/22/20	Wed 1/29/20	7	Eric,Juan,Oscar	
9		✓		Introductory Meeting with industry sponsors	0 days	Wed 1/29/20	Wed 1/29/20	8		
10		✓		Refine PDS/Requirements Documentation	3 days	Wed 2/5/20	Fri 2/7/20	7	Juan	
11				Revise Schedule	3 days	Thu 1/23/20	Mon 1/27/20	7	Eric	
12		✓		Prepare Faculty Advisors Progress Update	1 day	Thu 1/23/20	Thu 1/23/20	7	Oscar	
13		✓		Prepare proposal presentation for industry sponsors	10 days	Wed 1/29/20	Tue 2/11/20	9	Eric,Juan,Oscar	
14		✓		End of Prelim Research phase	0 days	Tue 2/11/20	Tue 2/11/20	13		
15				Model/Simulate	14 days	Wed 2/12/20	Mon 3/2/20	14		
16		✓		Find Varactor options in digikey	3 days	Wed 2/12/20	Fri 2/14/20	14	Eric	
17		✓		Find/create Varactor spice model or ADS model	2 days	Wed 2/12/20	Thu 2/13/20	14	Juan,Eric	
18				Simulate using ADS	7 days	Fri 2/14/20	Mon 2/24/20	17	Juan	
19				Simulate using MATLAB	7 days	Fri 2/14/20	Mon 2/24/20	17	Eric	
20				Compile Simulation documentation	5 days	Tue 2/25/20	Mon 3/2/20	16,17,18,19	Eric,Juan,Oscar	
21		✓		Create/Update BOM rough draft	3 days	Tue 2/25/20	Thu 2/27/20	18	Eric	
22		✓		Refine PDS/Requirements Documentation	3 days	Tue 2/25/20	Thu 2/27/20	18	Juan	
23				Revise Schedule	3 days	Tue 2/25/20	Thu 2/27/20	18	Eric	
24		✓		Prepare Faculty Advisors Progress Update	3 days	Wed 2/12/20	Fri 2/14/20		Eric	

Project: msproj11
Date: Wed 4/22/20

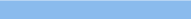


















Task		Inactive Task		Start-only	
Split		Inactive Milestone		Finish-only	
Milestone		Inactive Summary		Deadline	
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Project Summary		Duration-only		Manual Progress	
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External Milestone		Manual Summary			










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25		✓		Prepare Progress Update Presentation for Industry Sponsors	10 days	Wed 2/12/20	Tue 2/25/20		Eric,Juan,Oscar	
26		✓		End of Prelim Model and Simulation phase	0 days	Thu 2/27/20	Thu 2/27/20	23		
27		✓		Research Board design for other Varactor loaded TX Lines	12 days	Fri 2/28/20	Mon 3/16/20	26		
28		✓		Read and take notes on article (S-parameter De-embedding)	2 days	Fri 2/28/20	Mon 3/2/20	26	Oscar	
29		✓		Read and take notes on article (Measuring Board Characteristics)	2 days	Fri 2/28/20	Mon 3/2/20	26	Juan	
30		✓		Read and take notes on article (High Frequency PCB Design)	2 days	Fri 2/28/20	Mon 3/2/20	26	Eric	
31		✓		Hold team meeting to discuss	7 days	Tue 3/3/20	Wed 3/11/20	28,29,30	Oscar,Juan,Eric	
32		✓		Refine PDS/Requirements Documentation	3 days	Thu 3/12/20	Mon 3/16/20	31	Eric	
33		✓		Revise Schedule	3 days	Thu 3/12/20	Mon 3/16/20	31	Juan	
34		✓		Prepare Progress Update Presentation for Industry Sponsors	10 days	Fri 2/28/20	Thu 3/12/20		Eric,Juan,Oscar	
35		✓		Prepare Faculty Advisors Progress Update	3 days	Fri 2/28/20	Tue 3/3/20		Eric	
36		✓		End of Low Frequency Research	0 days	Mon 3/16/20	Mon 3/16/20	33		
37				Initial Prototype (144Mhz)	57 days?	Tue 3/17/20	Tue 6/2/20	36		
38		✓		Design 144MHZ PCB in Altium	5 days	Tue 3/17/20	Mon 3/23/20		Eric	
39		✓		Final board check before submission to Board House	1 day	Tue 3/24/20	Tue 3/24/20		Eric,Oscar,Juan	
40		✓		Place OSHPark Order	0 days	Wed 3/25/20	Wed 3/25/20		Eric	
41		✓		Receive boards from OSHPark	0 days	Sat 4/4/20	Sat 4/4/20			
42		✓		Assemble Board	1 day	Mon 4/6/20	Mon 4/6/20	40	Eric	

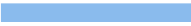


















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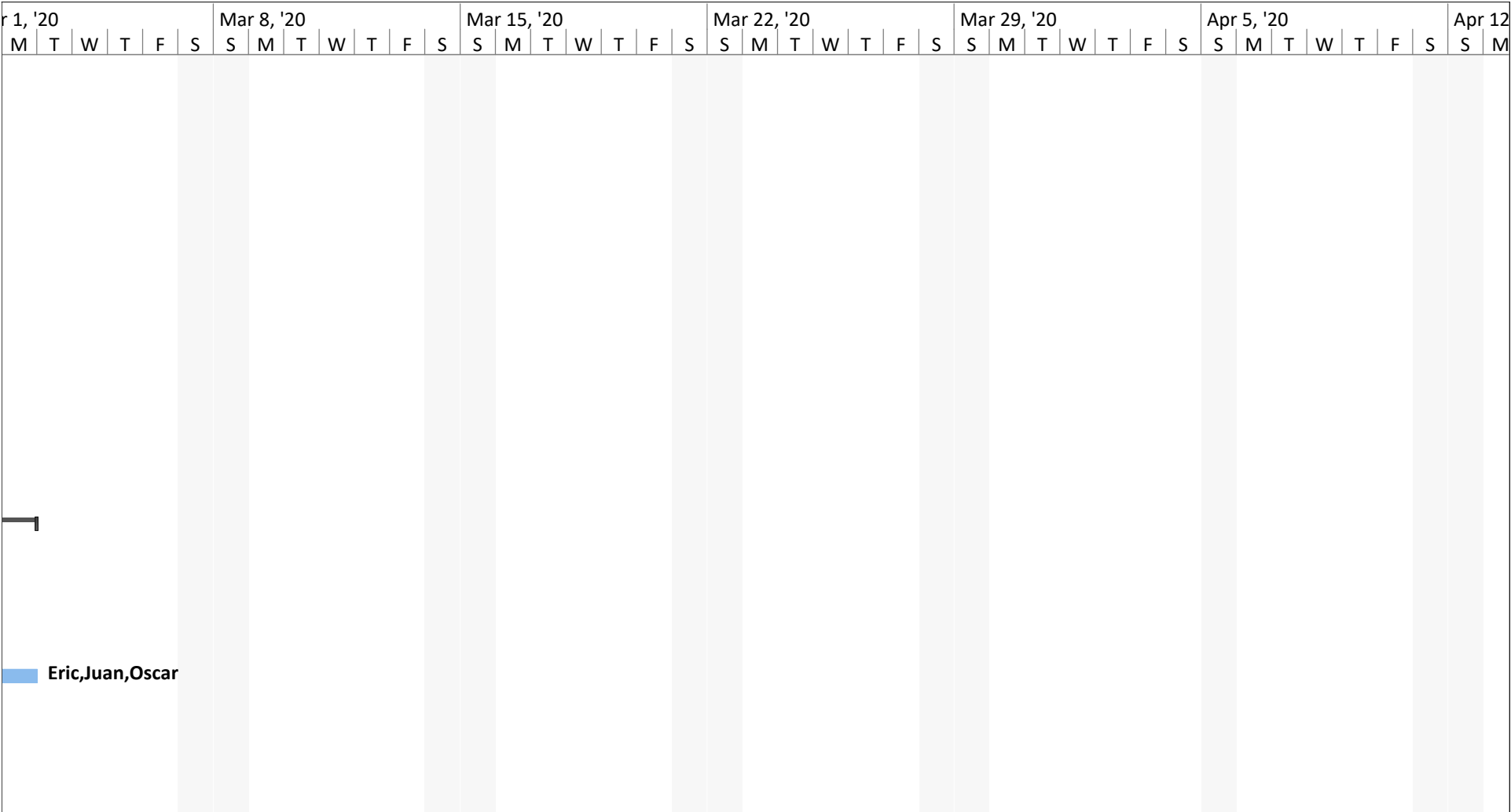
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43				Refine PDS/Requirements Documentation	2 days	Thu 4/9/20	Fri 4/10/20		Eric	
44				Board Continuity/Assembly Check	0 days	Sat 4/11/20	Sat 4/11/20		Eric	
45				Transient Simulations	26.75 days	Tue 3/17/20	Tue 4/21/20			
46				Find values for modeling component parasitics	5 days	Tue 3/17/20	Mon 3/30/20	40	Eric	
47				Simulate Rise Time Vs. Tx Line Length	17 days	Tue 3/17/20	Tue 4/21/20	46	Eric	
48				Simulate Rise Time Vs. DC Bias	17 days	Tue 3/17/20	Tue 4/21/20	46	Eric	
49				Frequency Domain Simulations	7 days	Tue 4/21/20	Thu 4/30/20	48	Eric	
50				Measurements	34 days	Tue 3/17/20	Thu 4/30/20			
51				Time Domain Rise time Measurements vs DC Bias	7 days	Tue 3/17/20	Wed 3/25/20		Eric	
52				Frequency Domain Measurements (NanoVNA)	11 days	Tue 4/7/20	Tue 4/21/20	42	Eric	
53				Compile/Analyze 144Mhz Measurement Result	7 days	Wed 4/22/20	Thu 4/30/20	52		
54				End of Initial Prototype phase	0 days	Sat 4/11/20	Sat 4/11/20	44		
55				6Ghz Model Research/Design	42 days?	Mon 4/6/20	Tue 6/2/20			
56				Transient Simulations	12 days	Mon 4/6/20	Fri 5/15/20	53		
57				S-Param Simulations	12 days	Fri 5/1/20	Mon 5/18/20	53		
58				EM Simulations	12 days	Fri 5/1/20	Mon 5/18/20	53		
59				Drafting of White Paper	11 days?	Tue 5/19/20	Tue 6/2/20			
60				First Draft Creation	1 day?	Tue 5/19/20	Tue 5/19/20	58		
61				First Draft Submitted to Sponsors	0 days	Tue 5/19/20	Tue 5/19/20			
62				Review Revisions	5 days	Wed 5/20/20	Tue 5/26/20	61		
63				Second Draft Creation	5 days	Wed 5/27/20	Tue 6/2/20	62		
64				Second Draft Submittal	0 days	Tue 6/2/20	Tue 6/2/20	63		
65				Presentation/Project Wrap up	33 days?	Wed 4/22/20	Sun 6/7/20	52		
66				Compile all documentation	14 days	Wed 4/22/20	Mon 5/11/20	26		

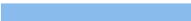
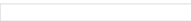

















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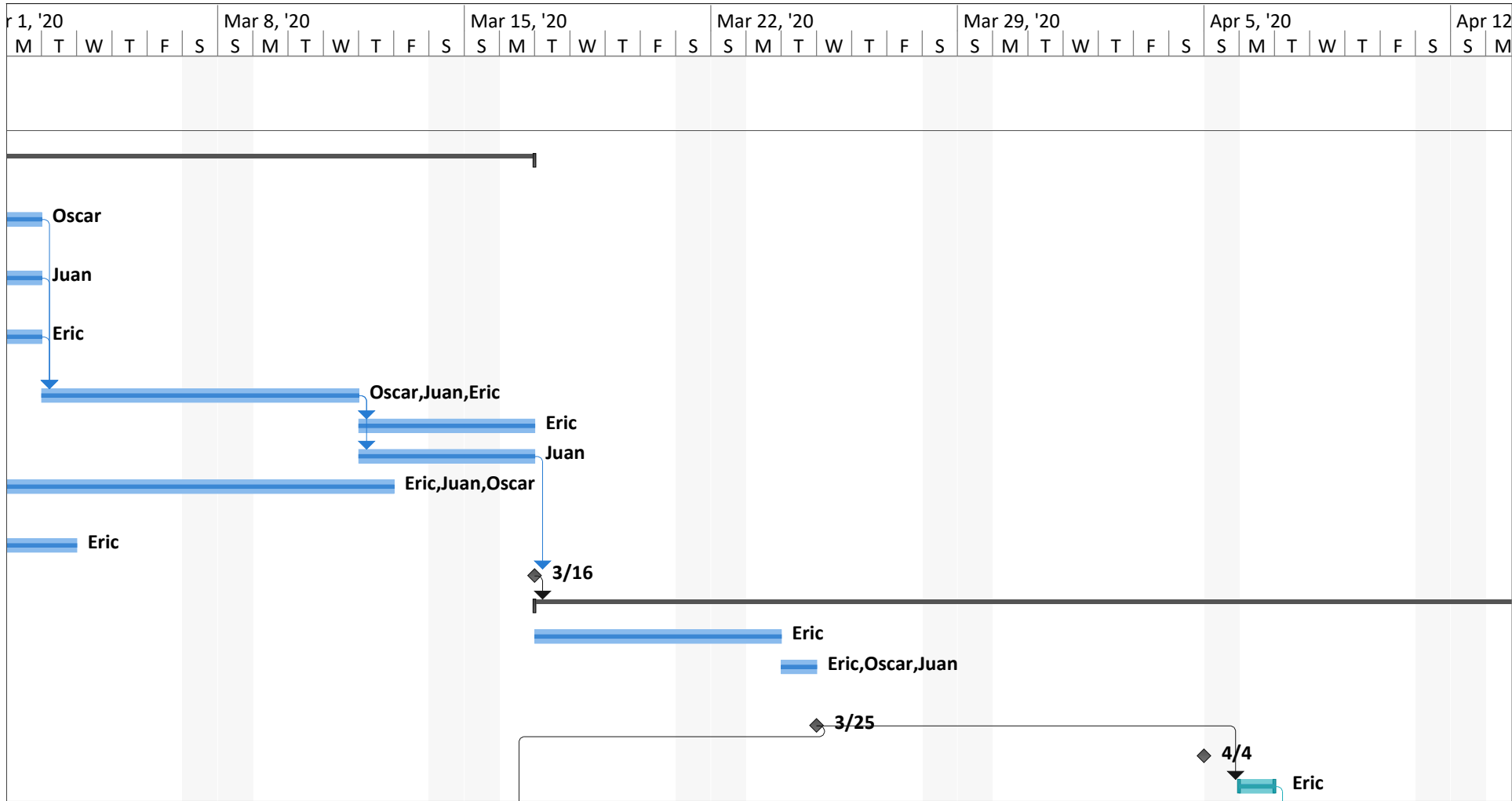
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67				Present Results to Industry Sponsors	7 days	Tue 5/12/20	Wed 5/20/20	66		
68				Technical Work Stops (Official)	0 days	Mon 6/1/20	Mon 6/1/20			
69				Prepare for presentation speaking roles	2 days?	Mon 6/1/20	Tue 6/2/20			
70				Poster Board Creation	5 days	Mon 6/1/20	Fri 6/5/20			
71				Poster due for Poster Session	0 days	Sun 6/7/20	Sun 6/7/20			

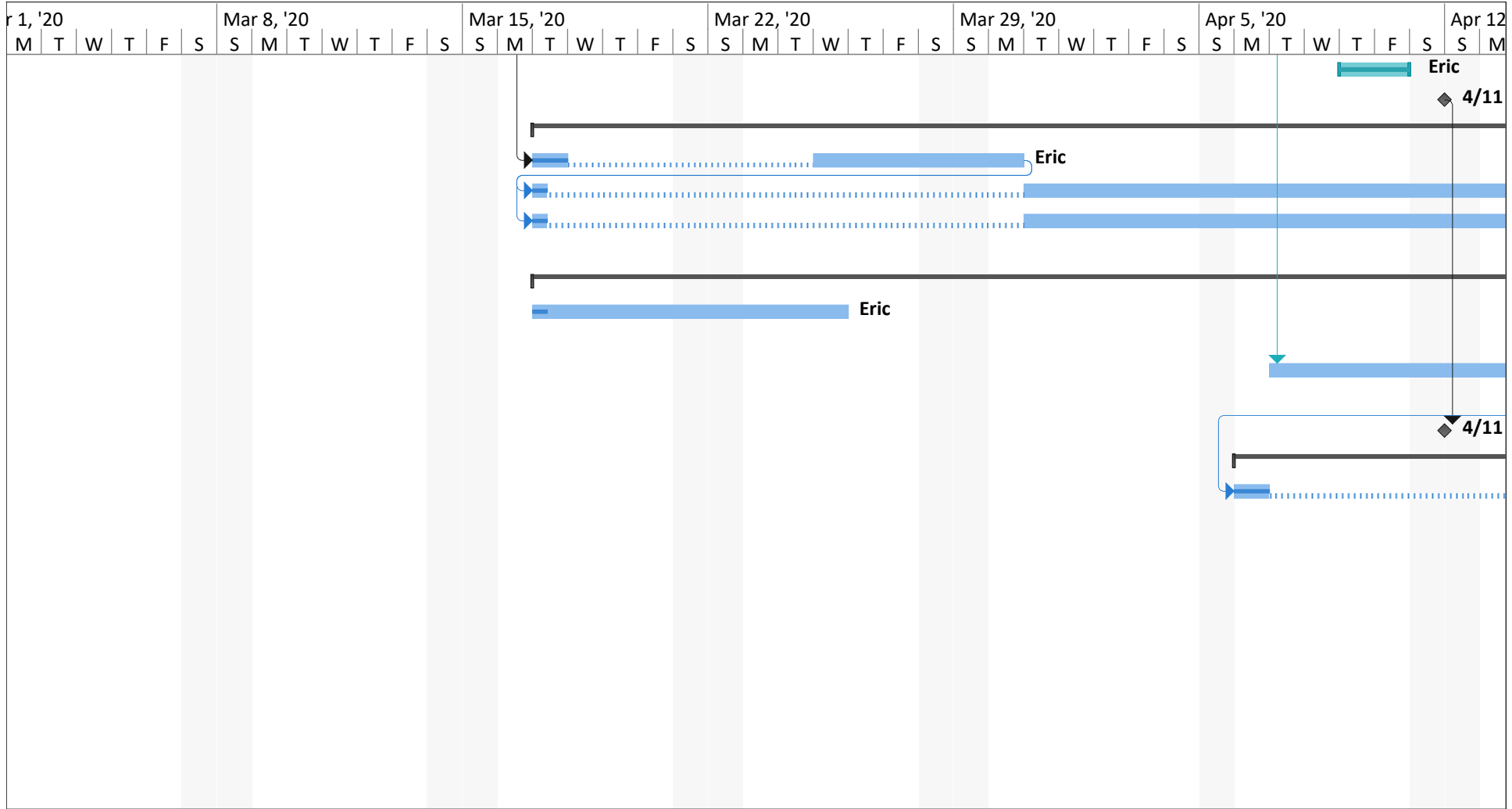
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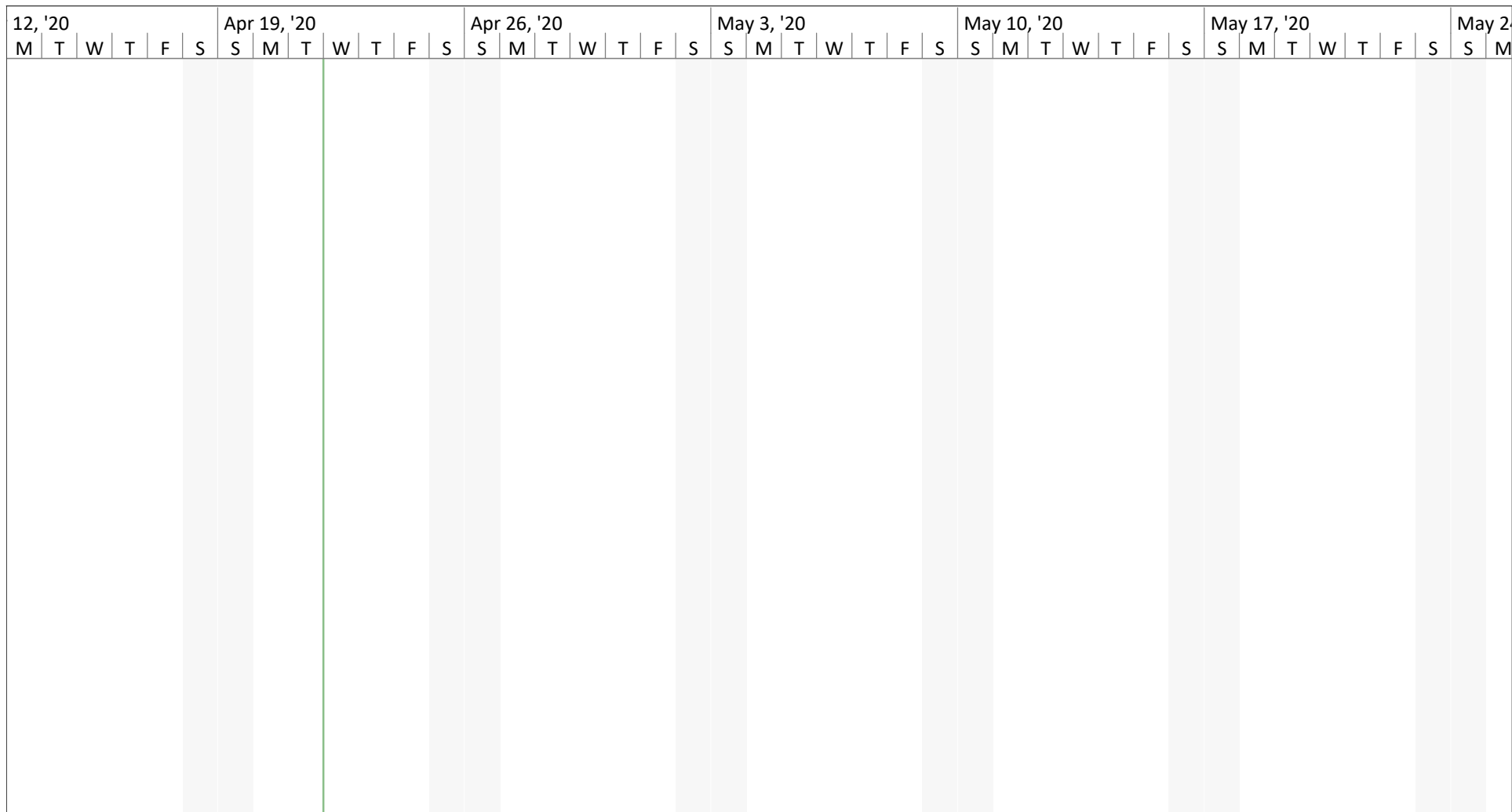


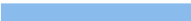
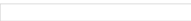





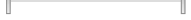











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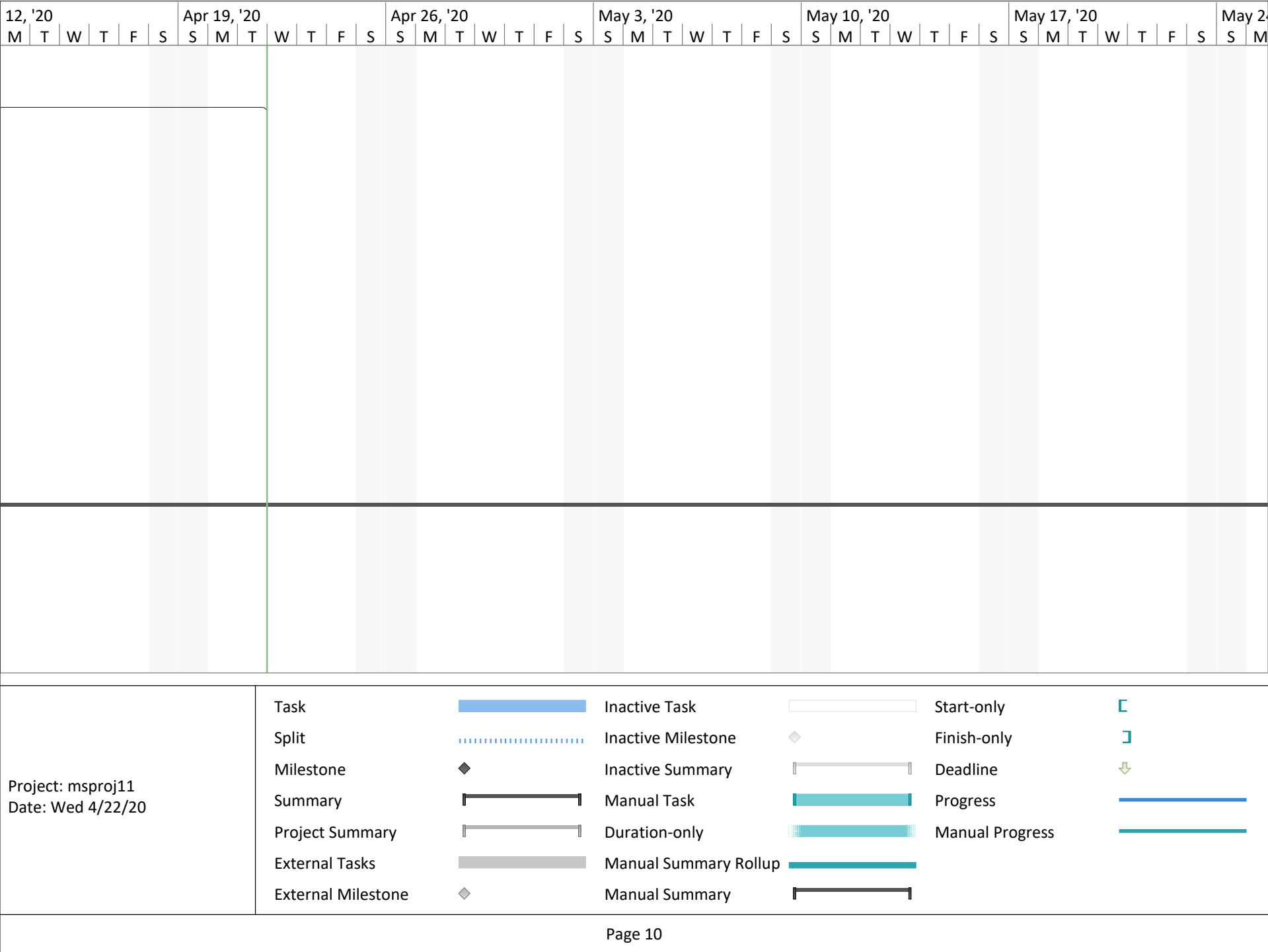
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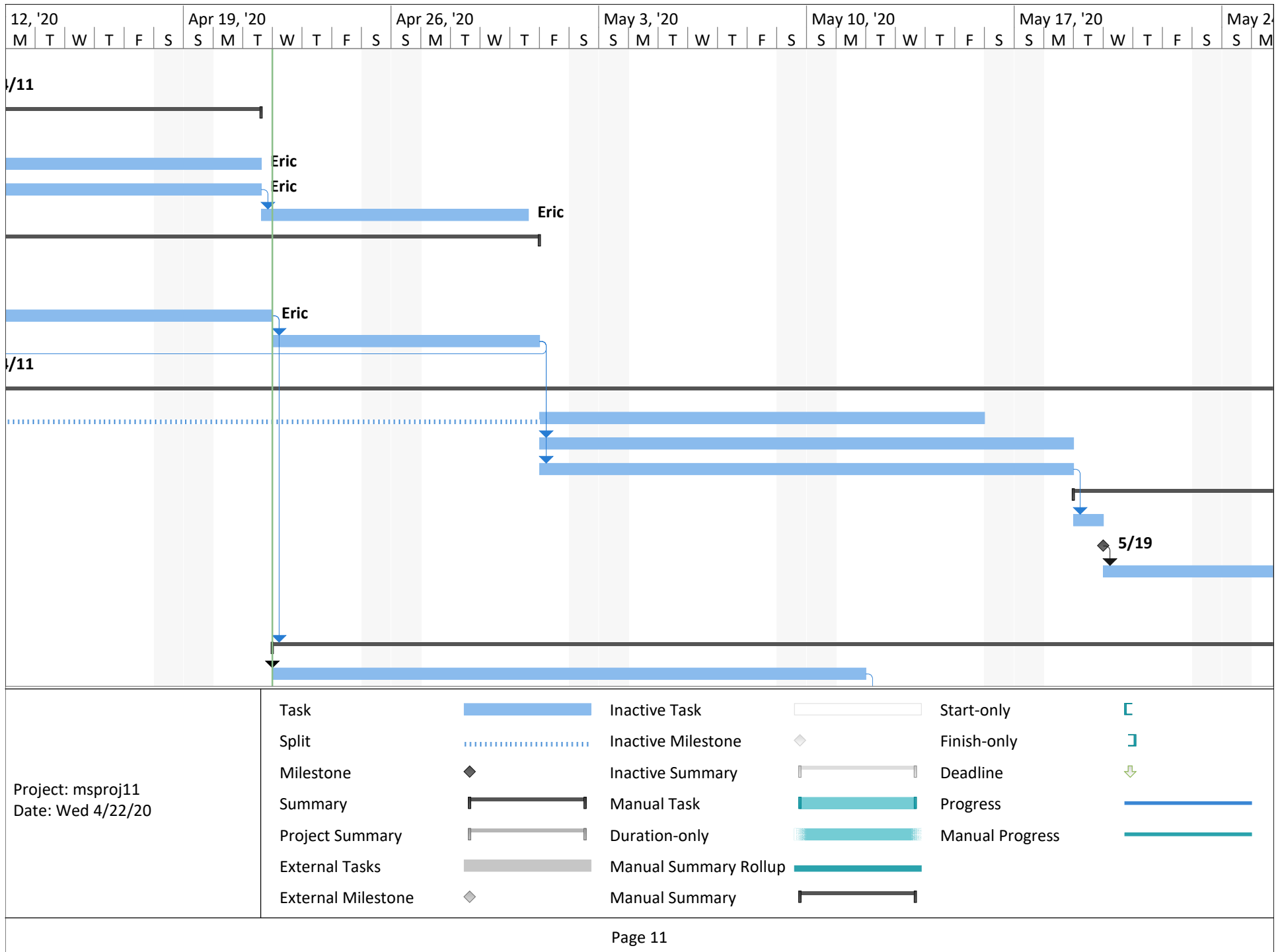


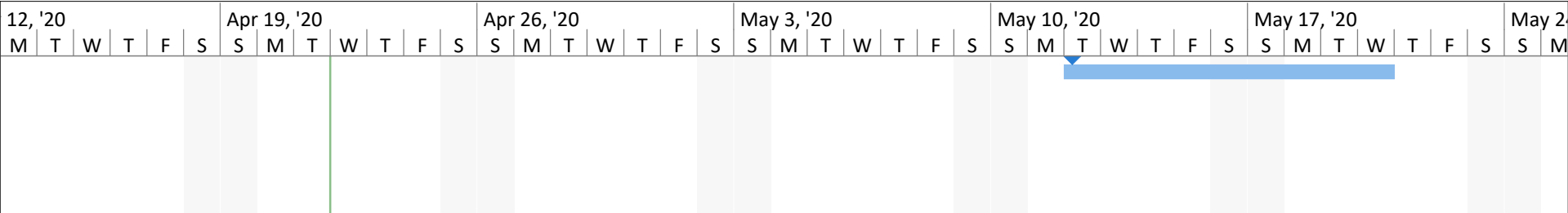
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