

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Sep 9, '12												
							T	F	S	S	M	T	W						
1	Introduction to the project	2 days	Fri 9/7/12	Sat 9/8/12															100%
2	Understand PRP	1 day	Fri 9/7/12	Fri 9/7/12		Team													100%
3	Develop team chemistry	1 day	Fri 9/7/12	Fri 9/7/12		Team													100%
4	Develop Team Norms & Values	2 days	Fri 9/7/12	Sat 9/8/12		Team													100%
5	Develop Team Roles	1 day	Fri 9/7/12	Fri 9/7/12		Team													100%
6	Determine Team Rules	1 day	Fri 9/7/12	Fri 9/7/12		Team													100%
7	Develop Customer Needs & Project	6 days	Fri 9/14/12	Fri 9/21/12															
8	Interview Customer/Stakeholder	1 day	Fri 9/14/12	Fri 9/14/12		Team													
9	Introduction of New Team Member	1 day	Fri 9/14/12	Fri 9/14/12		Team													
10	Analyze and Organize Customer Needs	6 days	Fri 9/14/12	Fri 9/21/12	8SF	Team													
11	Develop functional Decomposition	6 days	Fri 9/14/12	Fri 9/21/12		Team													
12	Test Current BWM Design	3 days	Fri 9/14/12	Tue 9/18/12		Emily,Trang,Diane, Ni													
13	Develop Concept & Specifications	4 days	Mon 9/24/12	Thu 9/27/12															
14	Determine Specifications and Metrics	3 days	Mon 9/24/12	Wed 9/26/12	7	Nick,Emily,Jordan,Tr													
15	Complete Functional Decomposition	1 day	Wed 9/26/12	Wed 9/26/12		Diane,Kreag													
16	Develop Work Breakdown Structure	2 days	Wed 9/26/12	Thu 9/27/12		Kreag,Nick													
17	Create Preliminary Project Plan	2 days	Wed 9/26/12	Thu 9/27/12		Diane,Kreag													
18	System Design Review	12 days	Fri 9/28/12	Thu 10/11/12															
19	Generate Preliminary Design Concepts	3 days	Fri 9/28/12	Mon 10/1/12		Team													
20	Rank Concepts	2 days	Tue 10/2/12	Wed 10/3/12	19	Team													
21	Perform Theoretical Analysis for Concepts	2 days	Thu 10/4/12	Fri 10/5/12	20	Nick,Emily													
22	Gather Ergonomic Data for Concepts	2 days	Thu 10/4/12	Fri 10/5/12	20	Kreag,Diane													
23	Choose Leading Concept	1 day	Sun 10/7/12	Sun 10/7/12	22,21	Team													
24	Hold System Desgin Review	1 day	Mon 10/8/12	Mon 10/8/12	23	Team													
25	Meet with Guides for Direction	1 day	Tue 10/9/12	Tue 10/9/12	24	Team													
26	Explore Minor Improvement Ideas	1 day	Wed 10/10/12	Wed 10/10/12	25	Nick,Emily,Trang,Jor													
27	Prepare for Follow up with Stakeholders	1 day	Wed 10/10/12	Wed 10/10/12	25	Team													
28	Meet with Stakeholders	1 day	Thu 10/11/12	Thu 10/11/12	27	Team													
29	Detailed Design Review	23 days?	Fri 10/12/12	Wed 11/7/12															
30	Develop Detailed Project Plan	3 days	Mon 10/15/12	Wed 10/17/12		Kreag,Diane													
31	Calculate possible gear ratios of interest	9 days	Fri 10/12/12	Tue 10/23/12															

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32	Analyze Optimal Gear Ratio levels for Ergonomics	3 days	Fri 10/12/12	Tue 10/16/12										
33	Obtain correct gear teeth/gear diameter relationship	5 days	Wed 10/17/12	Mon 10/22/12										
34	Choose ideal ratio to build and test	1 day	Tue 10/23/12	Tue 10/23/12										
35	Motor/Generator Substitute Research	19 days?	Thu 10/18/12	Wed 11/7/12										
36	Meeting with Motor expert	1 day	Fri 10/19/12	Fri 10/19/12										
37	Research effects of Motor/Generator Combinations	3 days	Sun 10/21/12	Tue 10/23/12	36									
38	Obtain desired pinion RPM's	8 days?	Sun 10/21/12	Mon 10/29/12										
39	Calculate Pinion RPM's using ideal crank RPM relationshi	5 days	Sun 10/21/12	Thu 10/25/12										
40	Pick Motor/Generator based on Ideal RPM's	1 day?	Fri 10/26/12	Fri 10/26/12	39									
41	Evaluate Motor/Generator choice	2 days	Sat 10/27/12	Mon 10/29/12	40									
42	Design Modified Seat Positioning	13 days	Thu 10/18/12	Thu 11/1/12										
43	Generate Concepts	3 days	Thu 10/18/12	Sun 10/21/12										
44	Select Concept	2 days	Mon 10/22/12	Tue 10/23/12	43									
45	Calculate "generator post" stresses/deformation	5 days	Wed 10/24/12	Mon 10/29/12	44									
46	Design ANSYS Model	5 days	Thu 10/25/12	Tue 10/30/12										
47	Complete FEA testing	2 days	Wed 10/31/12	Thu 11/1/12	46									
48	Choose Gear Material	9 days	Wed 10/24/12	Fri 11/2/12										
49	Research different materials	2 days	Wed 10/24/12	Thu 10/25/12										
50	Design a friction test for different materials	1 day	Fri 10/26/12	Fri 10/26/12	49									
51	Test friction between different materials	2 days	Sat 10/27/12	Mon 10/29/12	50									
52	Choose best material/combination of materials	1 day	Tue 10/30/12	Tue 10/30/12	51									
53	Order Parts	3 days	Wed 10/31/12	Fri 11/2/12	52									
54	Stress Analysis	6 days	Fri 11/2/12	Wed 11/7/12										
55	Calculate System Stresses (Gear & Crank arms)	3 days	Fri 11/2/12	Sun 11/4/12										
56	Generate ANSYS model for FEA of System	3 days	Mon 11/5/12	Wed 11/7/12	55									
57	Create CAD model of Gear System	3 days	Mon 11/5/12	Wed 11/7/12										
58	MSDII	58 days?	Mon 11/26/12	Wed 2/13/13										
59	Build Engineering Model	1 day	Mon 11/26/12	Mon 11/26/12										
60	Define Engineering Model	1 day	Mon 11/26/12	Mon 11/26/12										
61	Order Parts	30 days	Mon 12/3/12	Fri 1/11/13										
62	Order Motors	4 days	Tue 1/8/13	Fri 1/11/13										

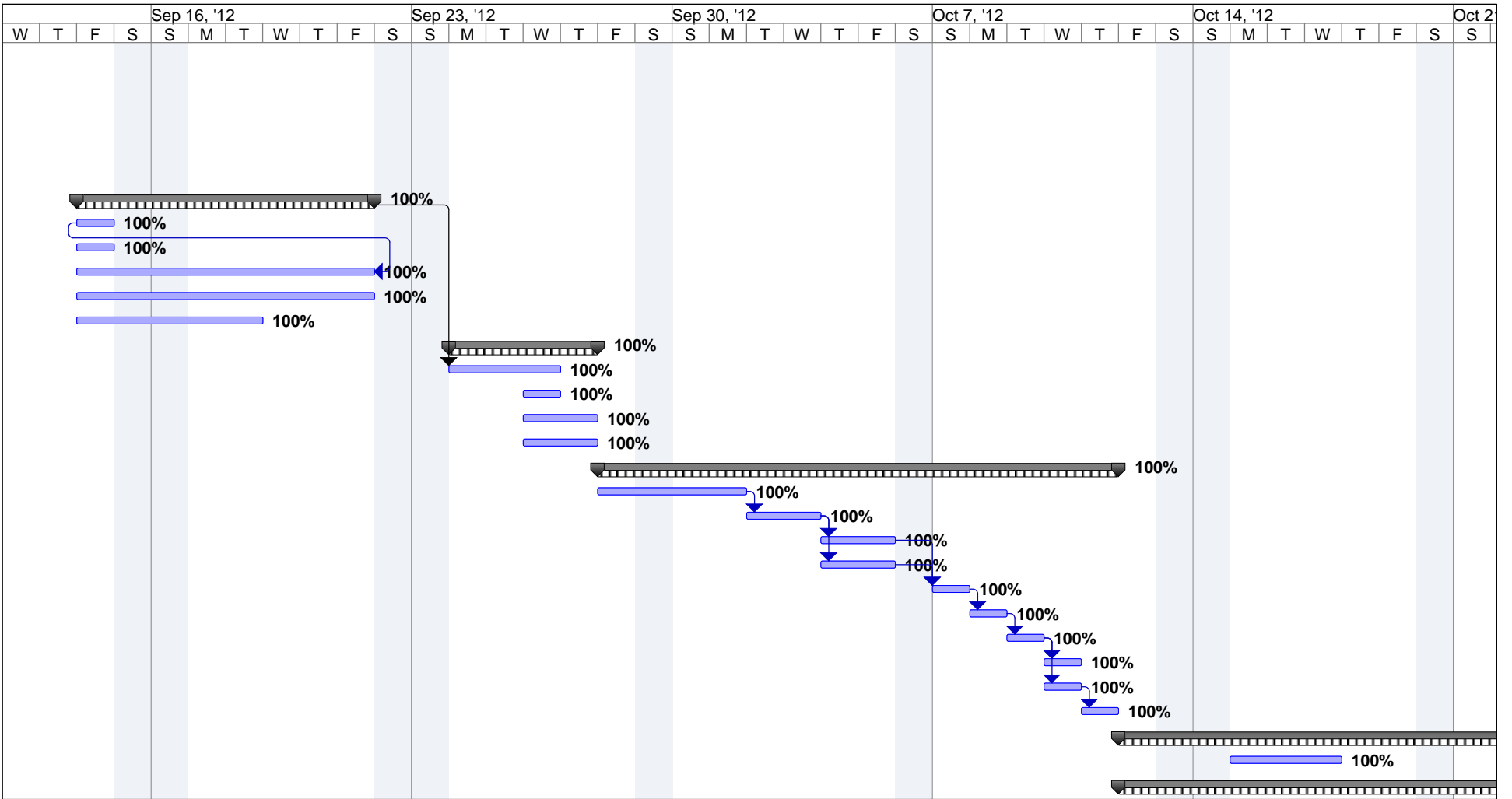
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63	Order Wood Parts	5 days	Mon 12/3/12	Fri 12/7/12										
64	Order electronics	10 days	Mon 12/3/12	Fri 12/14/12										
65	Order remaining parts (ie. Pedals, Hardware)	5 days	Mon 12/3/12	Fri 12/7/12										
66	Project Paper	45 days	Mon 12/3/12	Fri 2/1/13										
67	Finish Outline	10 days	Mon 12/3/12	Fri 12/14/12										
68	Finish 75% of paper	35 days	Mon 12/3/12	Fri 1/18/13										
69	Complete Paper	45 days	Mon 12/3/12	Fri 2/1/13										
70	Build Seating Options	34 days?	Mon 12/3/12	Thu 1/17/13										
71	Create CAD model of Options	12 days	Mon 12/3/12	Tue 12/18/12										
72	Build Seating Arrangements	16 days	Wed 12/19/12	Wed 1/9/13	71									
73	Schedule VO2 Testing	1 day	Thu 1/10/13	Thu 1/10/13	72									
74	Write Assembly Procedure	1 day?	Fri 1/11/13	Fri 1/11/13	73									
75	Write Test Procedure	5 days	Fri 1/11/13	Thu 1/17/13										
76	Engineering Model Testing	11 days	Thu 1/10/13	Thu 1/24/13										
77	Test Basic Functionality	2 days	Thu 1/10/13	Fri 1/11/13										
78	Test VO2 consumption	10 days	Fri 1/11/13	Thu 1/24/13										
79	Document Findings	3 days	Fri 1/18/13	Tue 1/22/13										
80	Motor Life Testing	13 days	Thu 1/10/13	Mon 1/28/13										
81	Schedule Test	3 days	Thu 1/10/13	Mon 1/14/13										
82	Execute testing	10 days	Tue 1/15/13	Mon 1/28/13	81									
83	Generate Working Circuit Schematics	49 days	Mon 12/3/12	Thu 2/7/13										
84	Create working simulations	15 days	Mon 12/3/12	Fri 12/21/12										
85	Generate board layout with improvements	10 days	Mon 1/7/13	Fri 1/18/13										
86	Create board prototype	4 days	Mon 1/21/13	Thu 1/24/13	85									
87	Test board prototype	3 days	Fri 1/25/13	Tue 1/29/13	86									
88	Document test, and Refine	7 days	Wed 1/30/13	Thu 2/7/13	87									
89	Assemble Project Binder	53 days	Mon 12/3/12	Wed 2/13/13										
90	Create Project Poster	4 days	Fri 2/8/13	Wed 2/13/13										
91	Develop Mistake Proofing Options	18 days	Tue 1/8/13	Thu 1/31/13										
92	Develop Cost/Worth Charts	19 days	Fri 12/21/12	Wed 1/16/13										

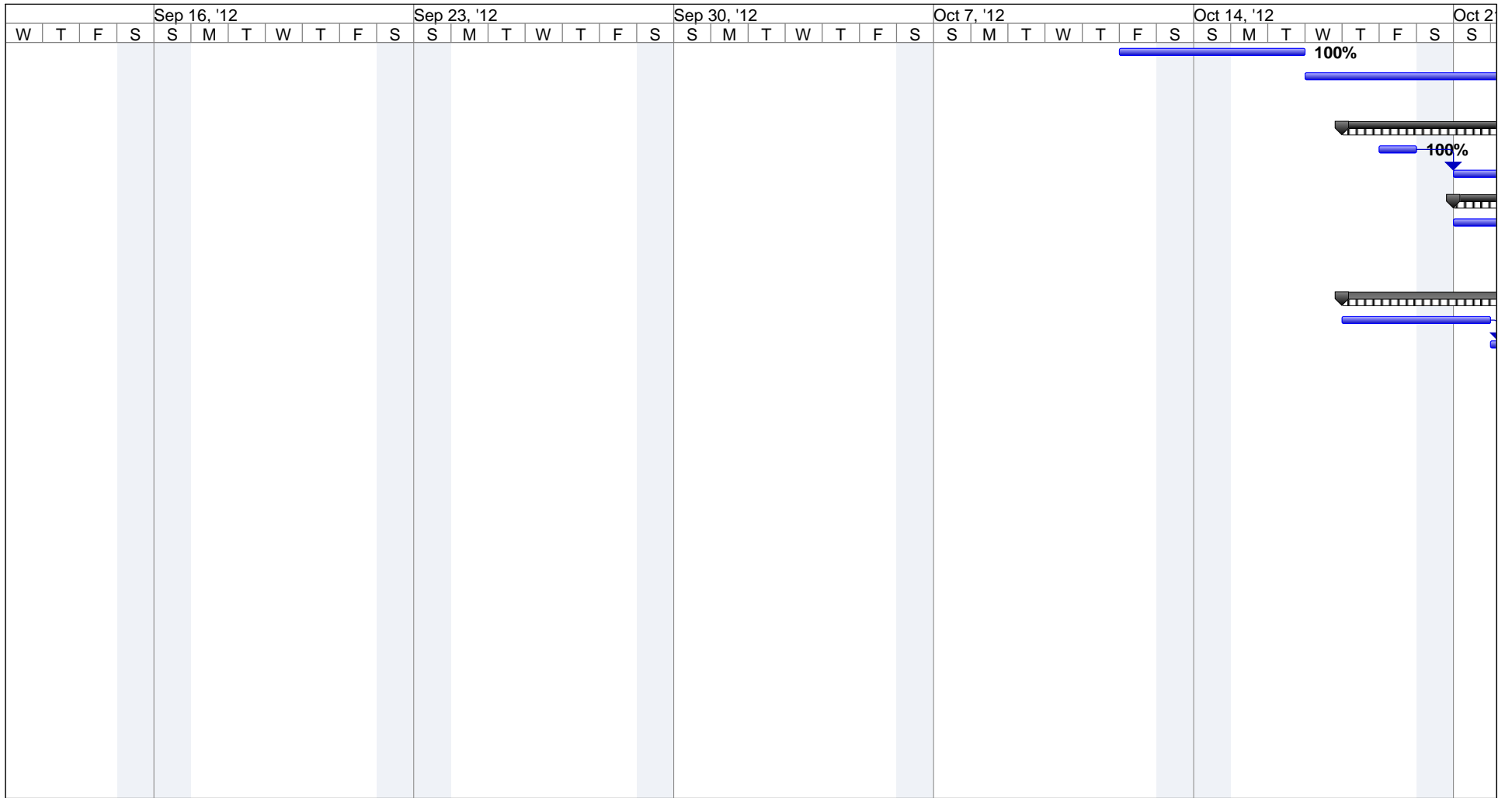
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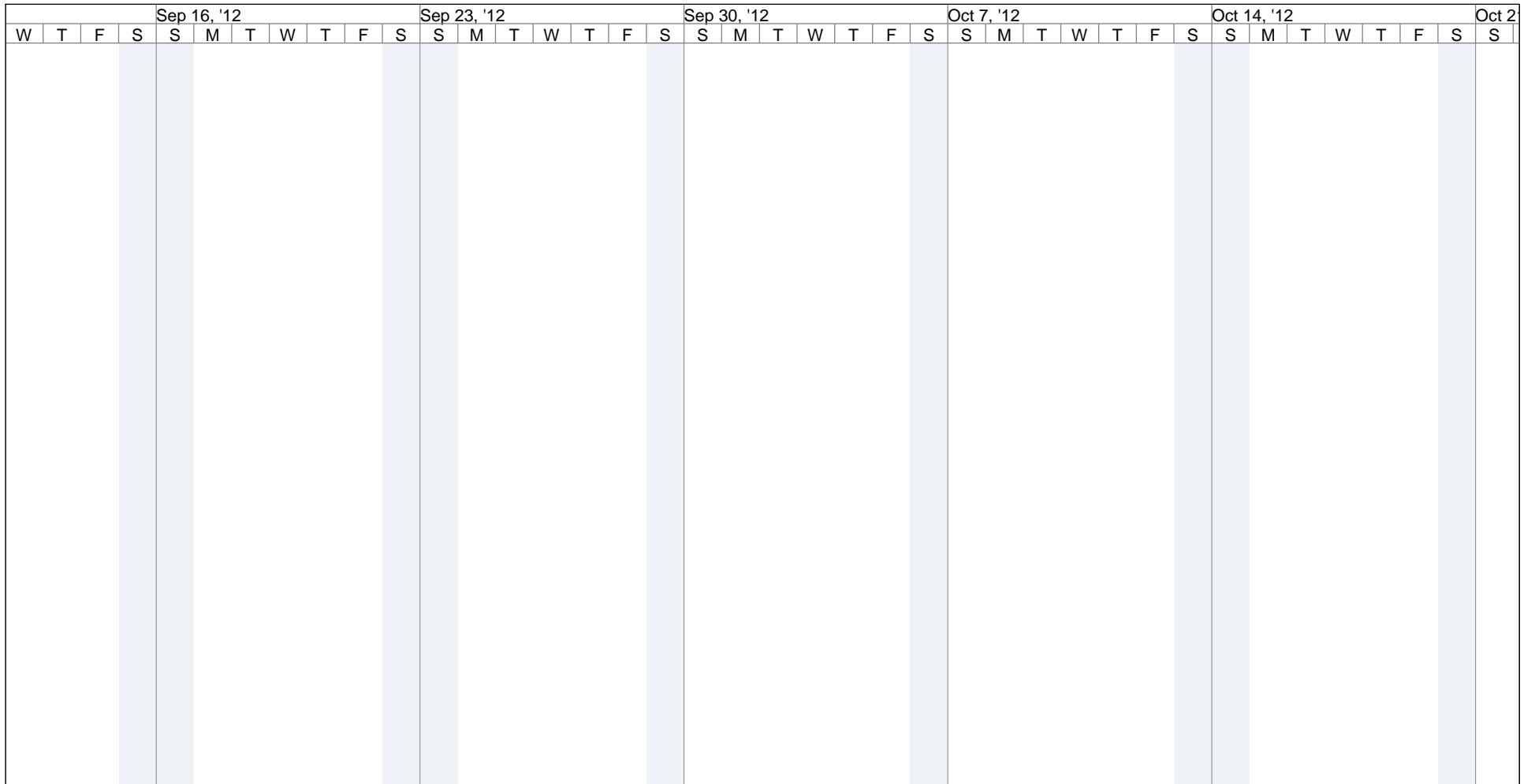
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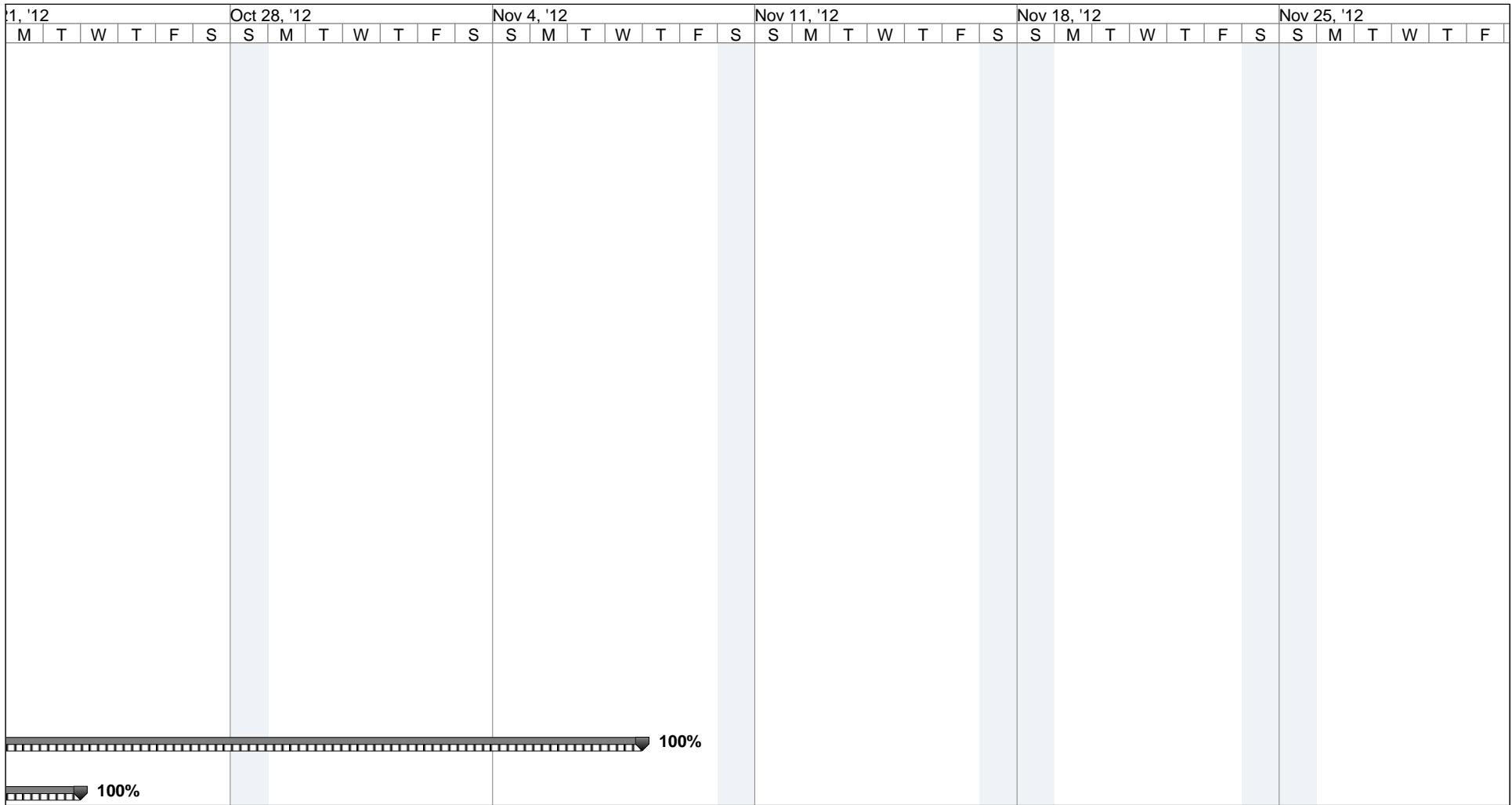
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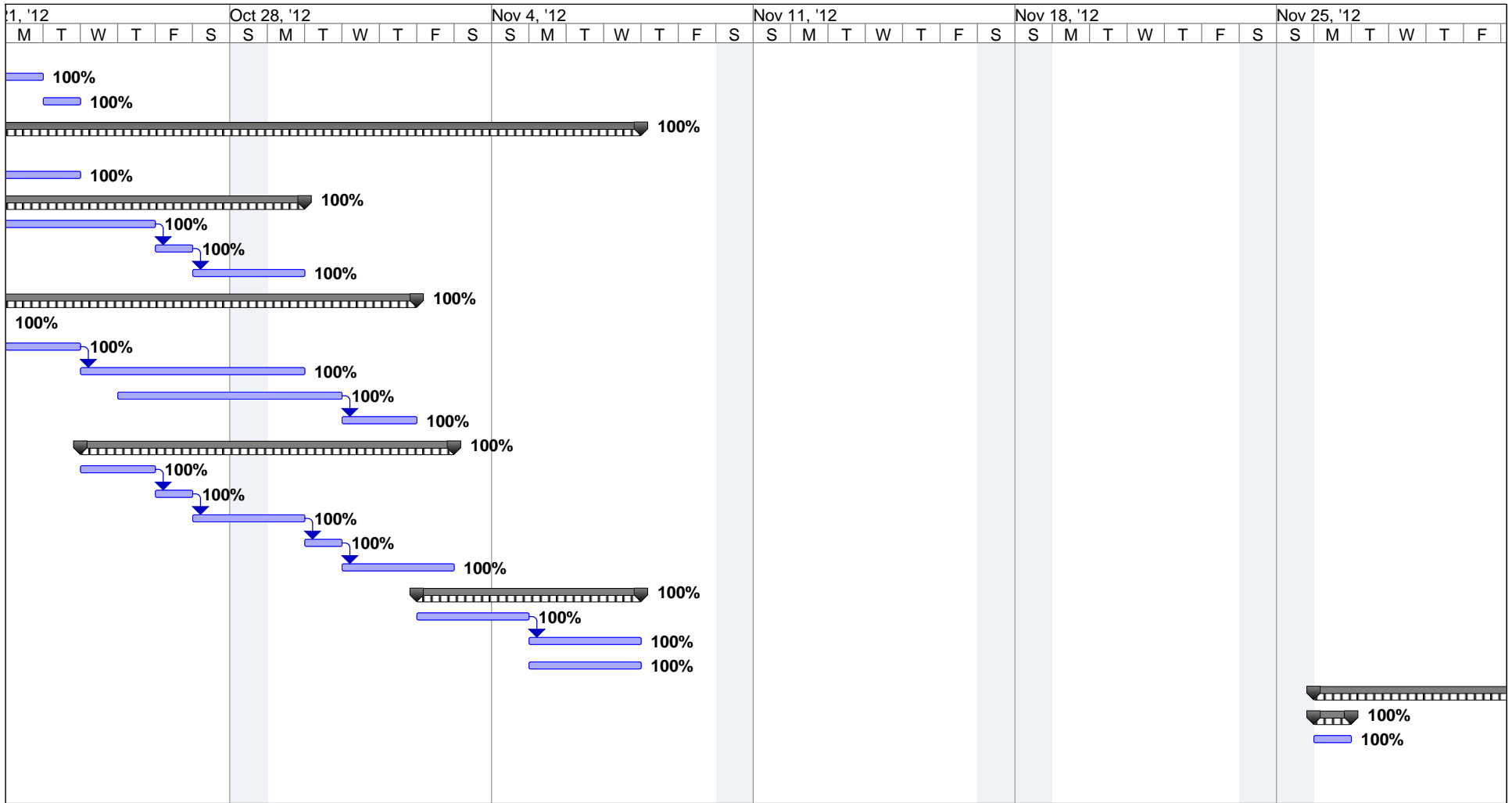


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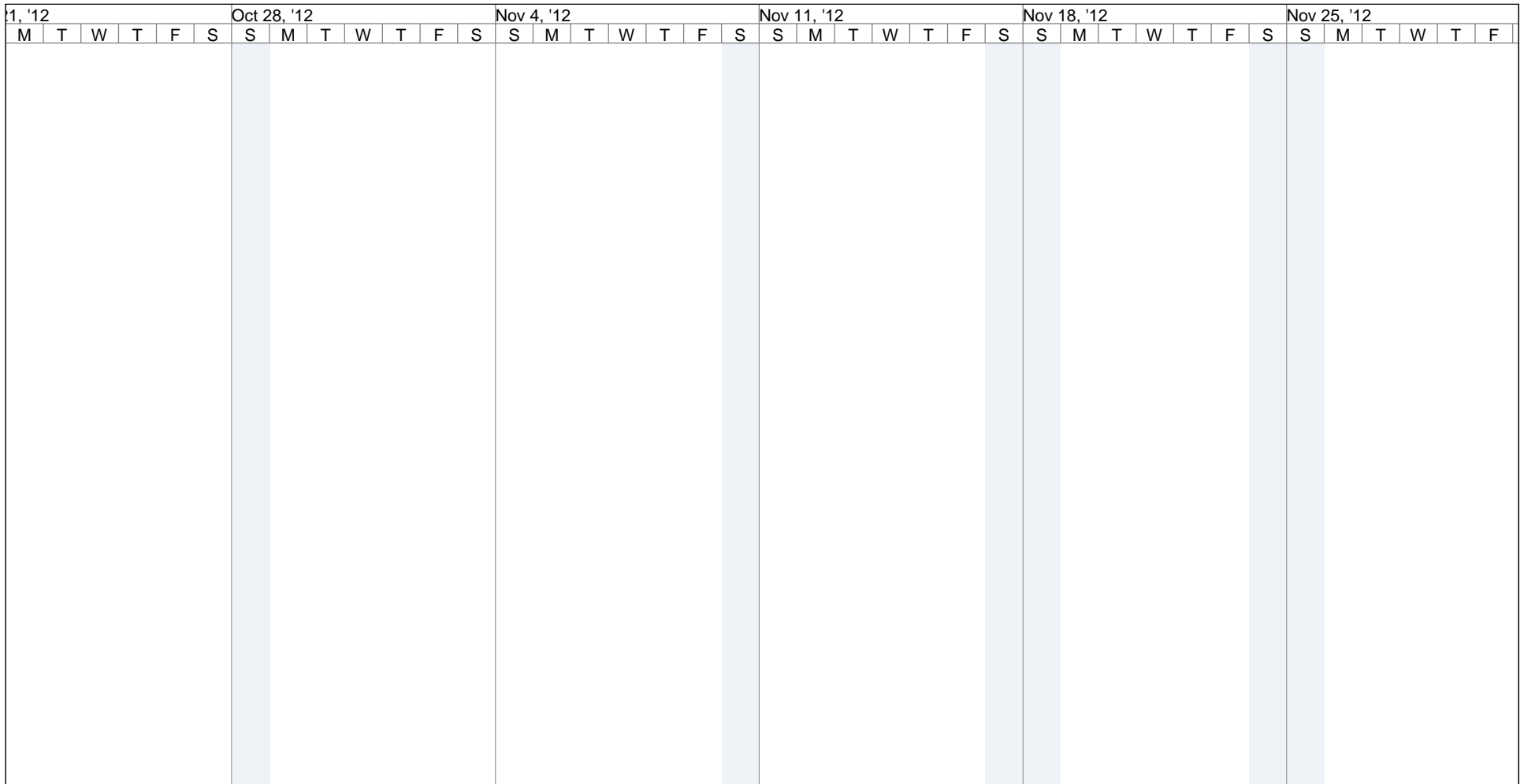
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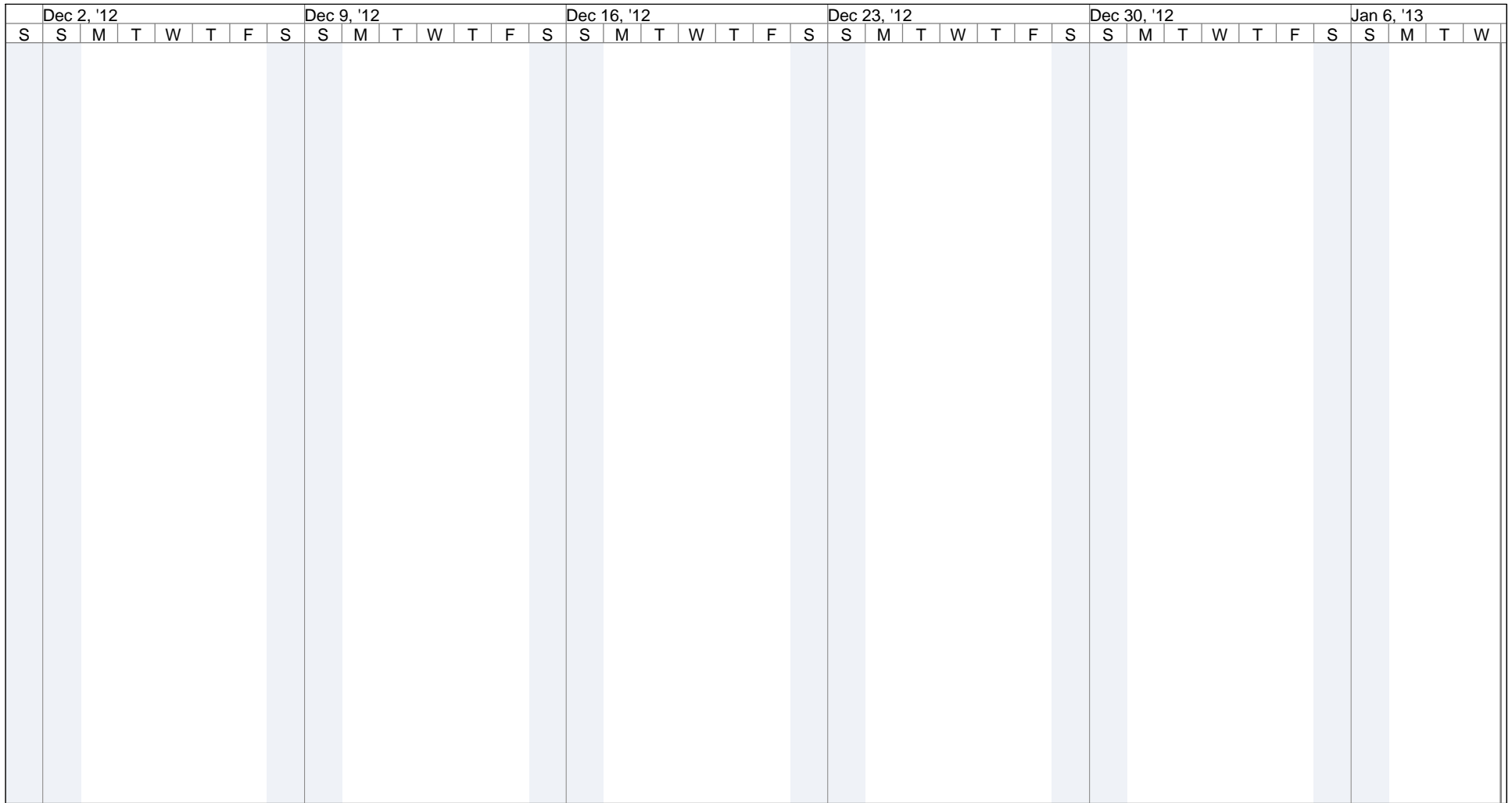
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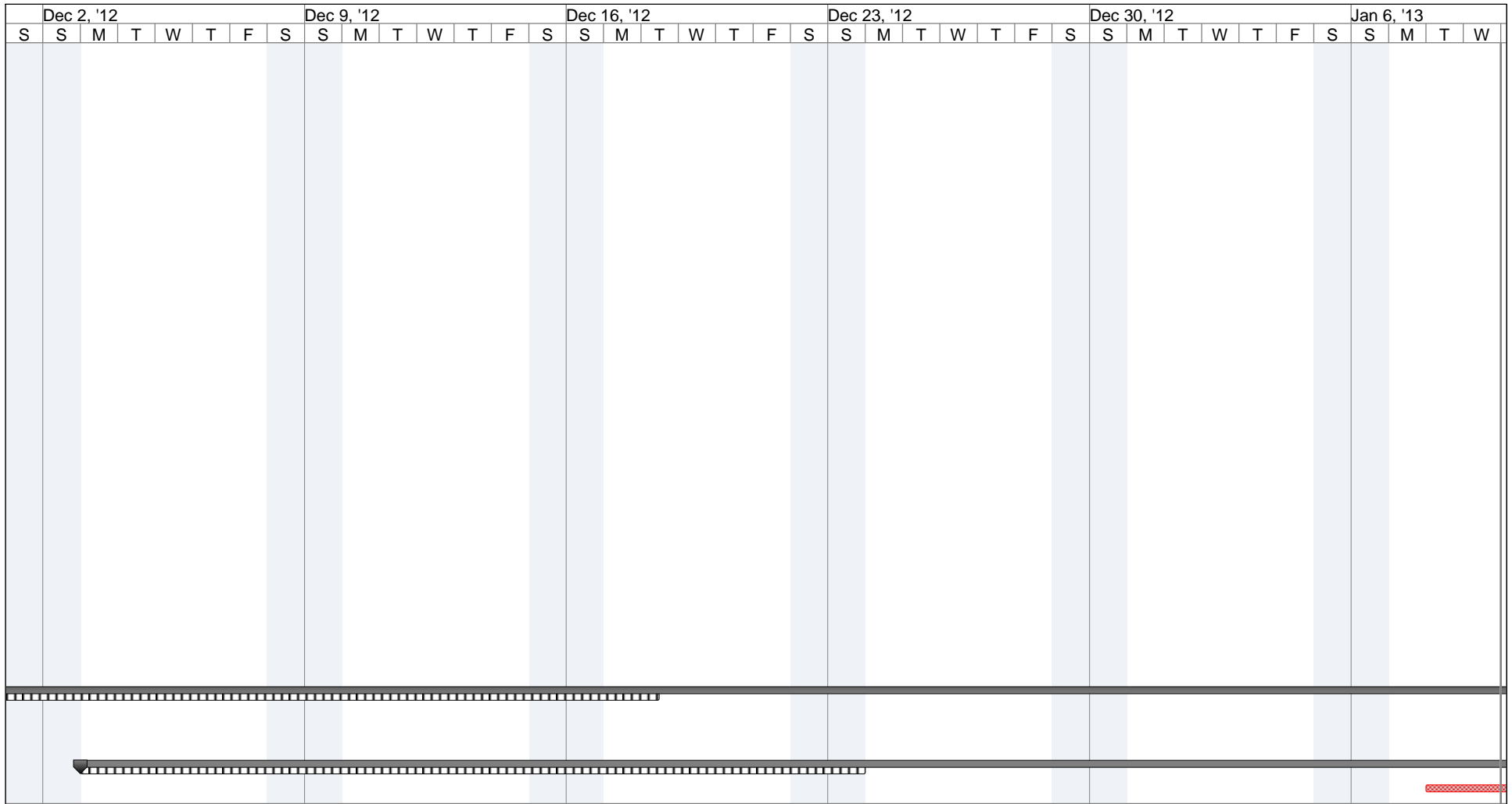
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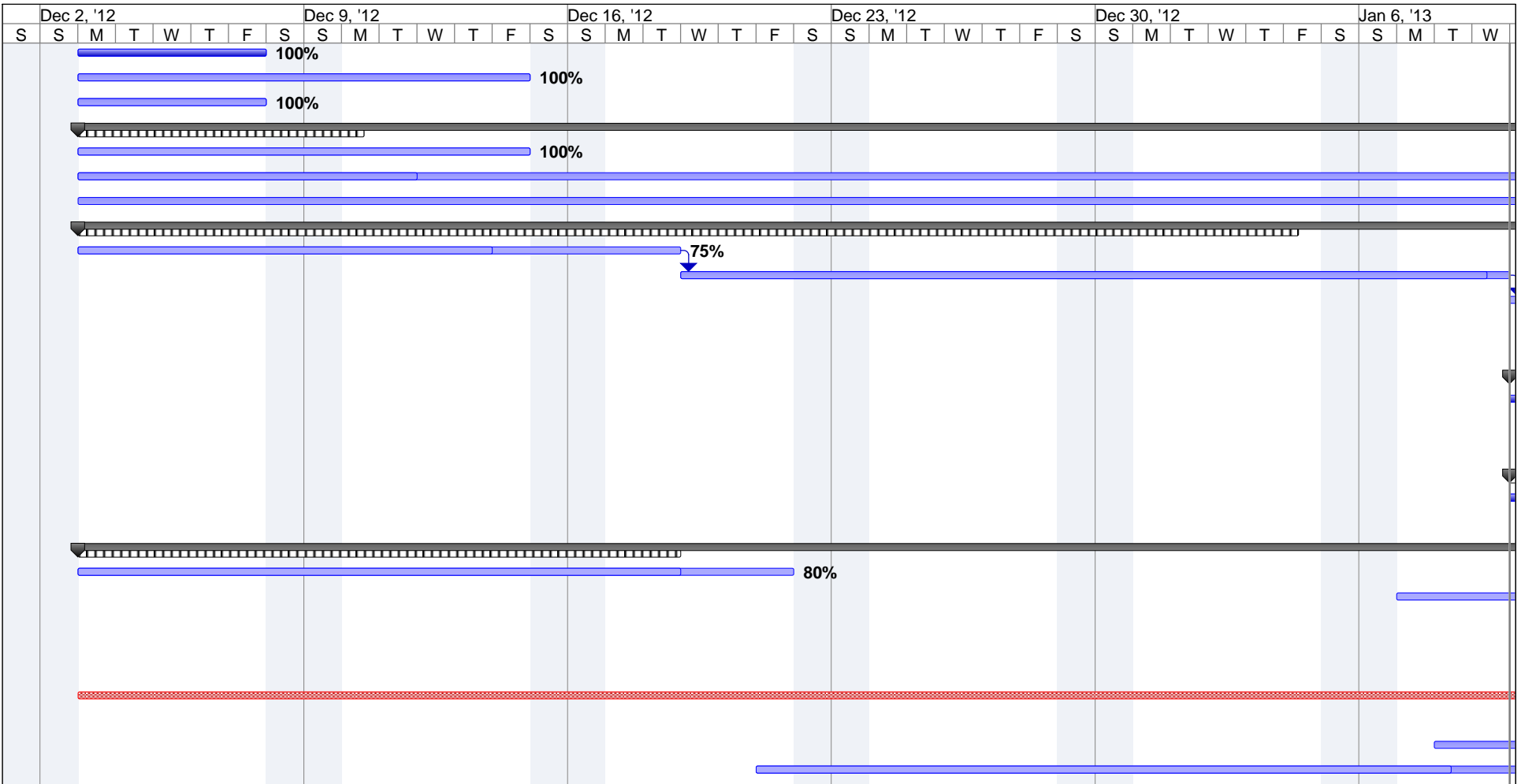
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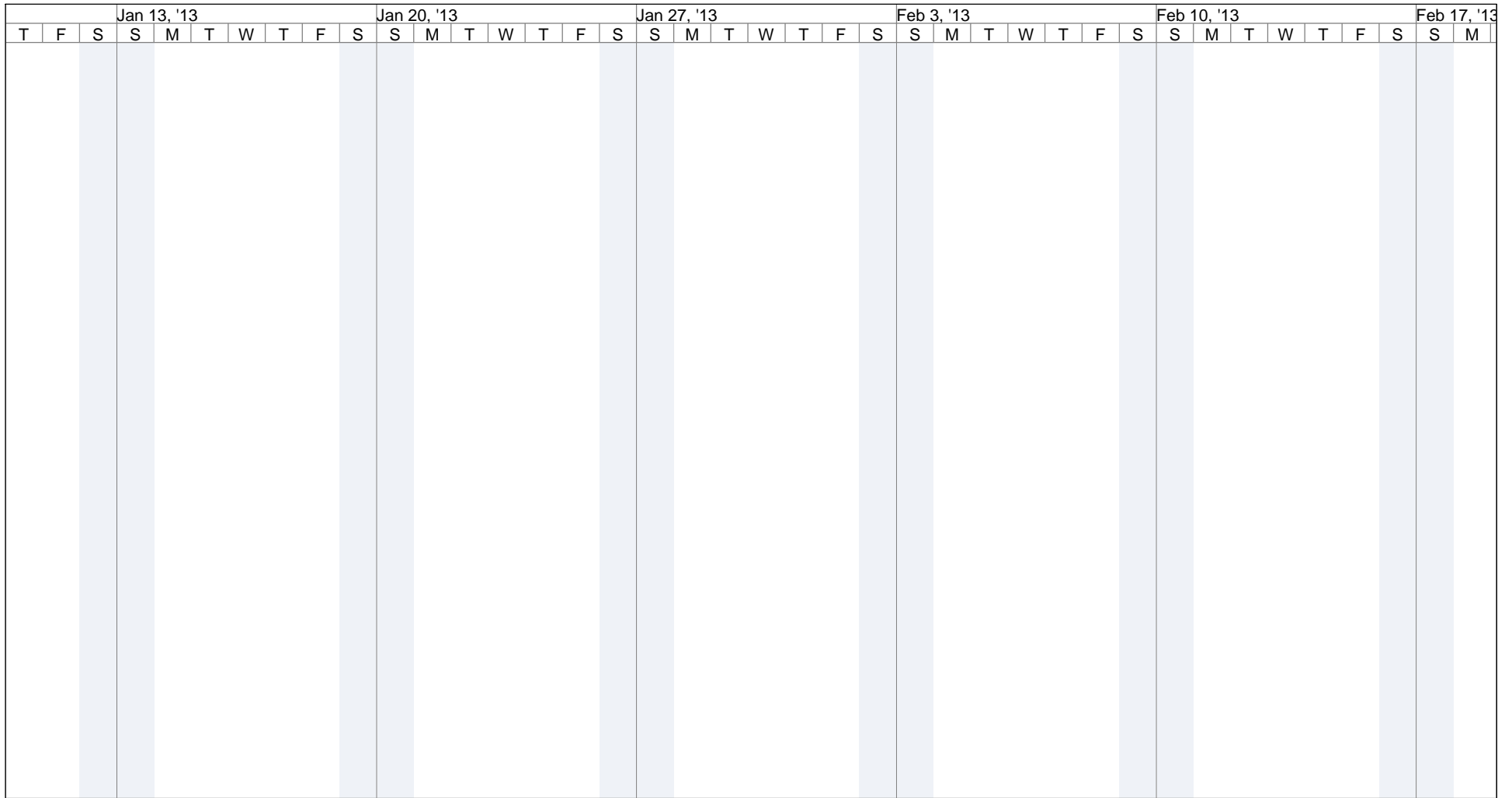
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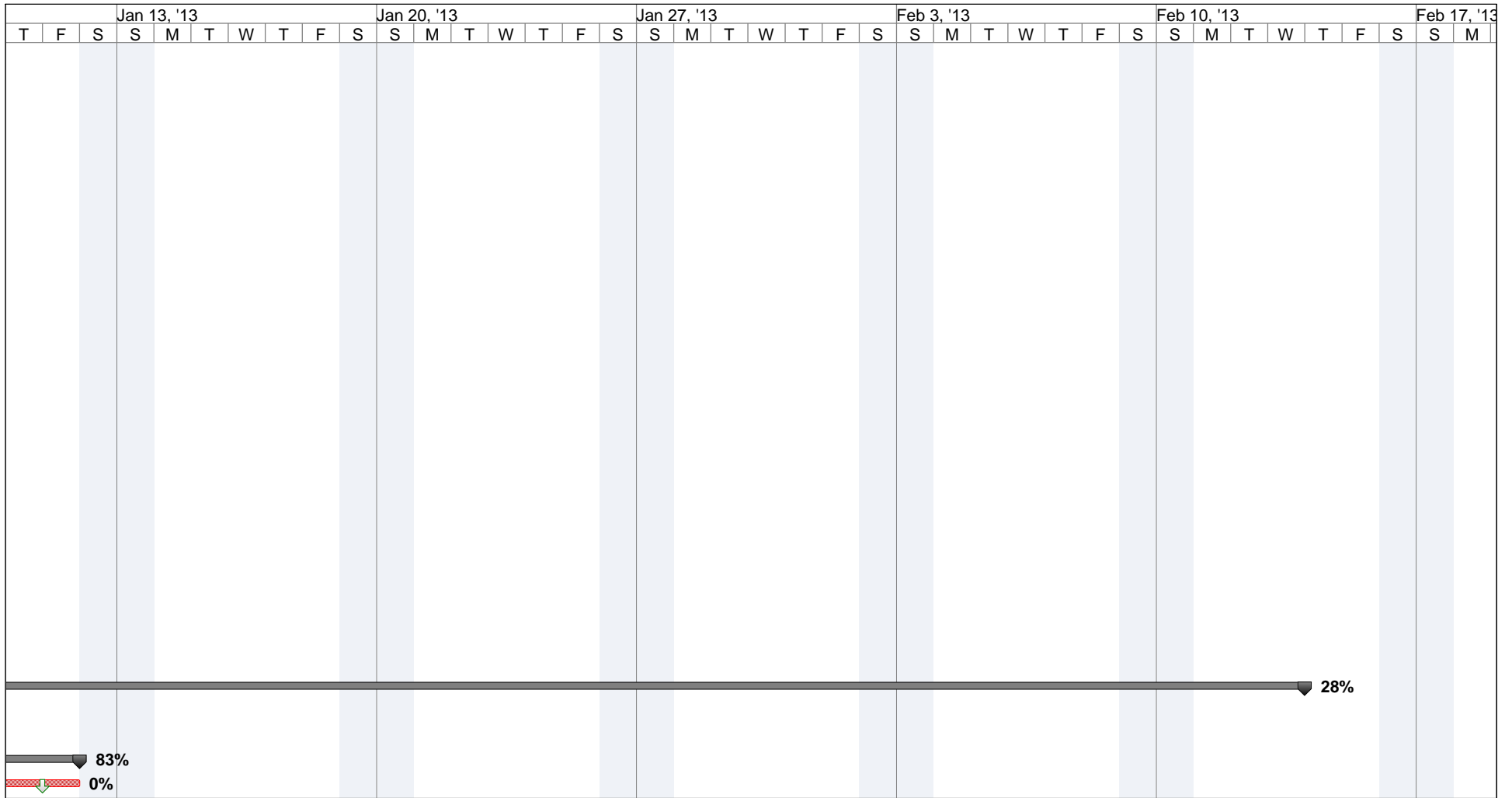
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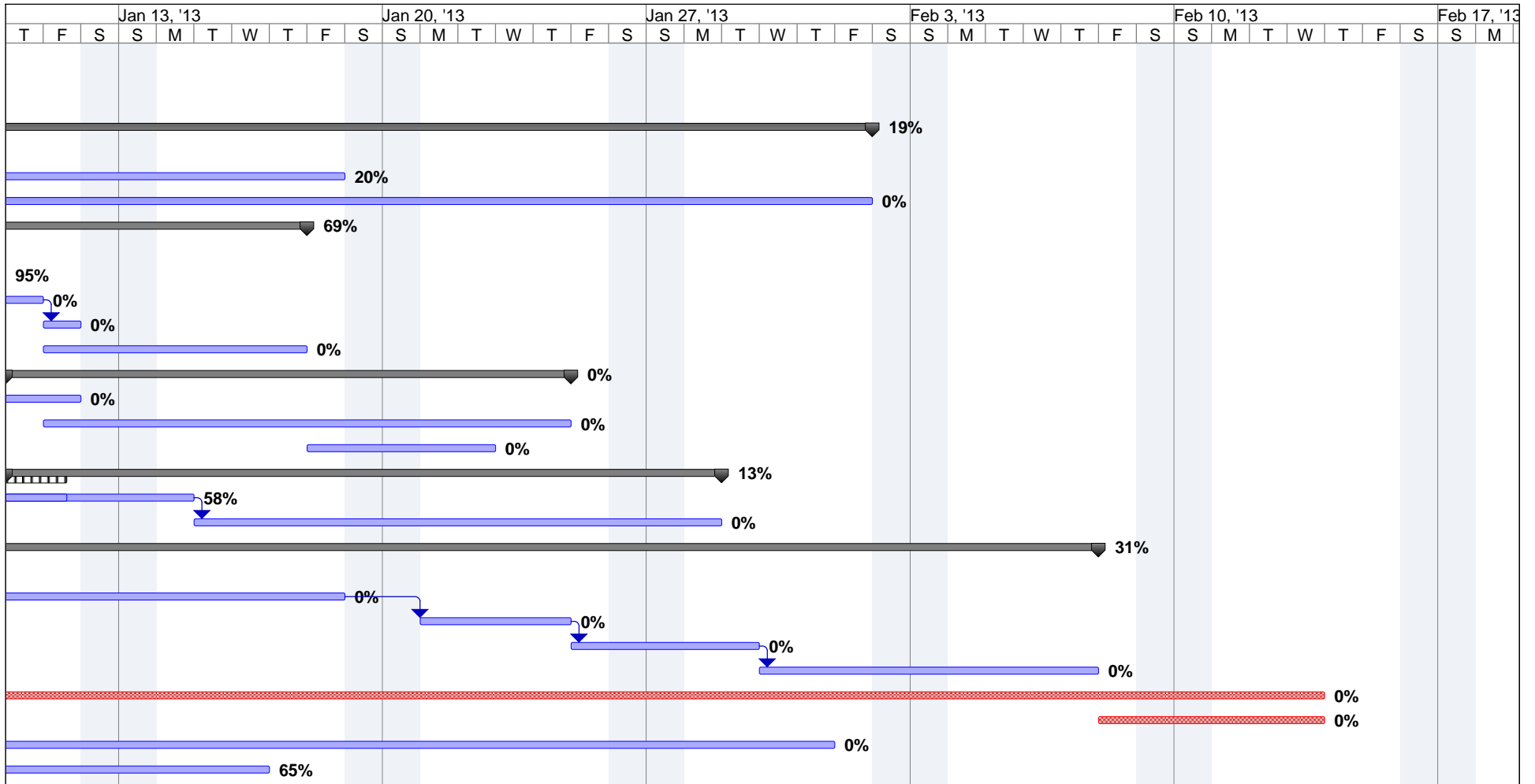
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