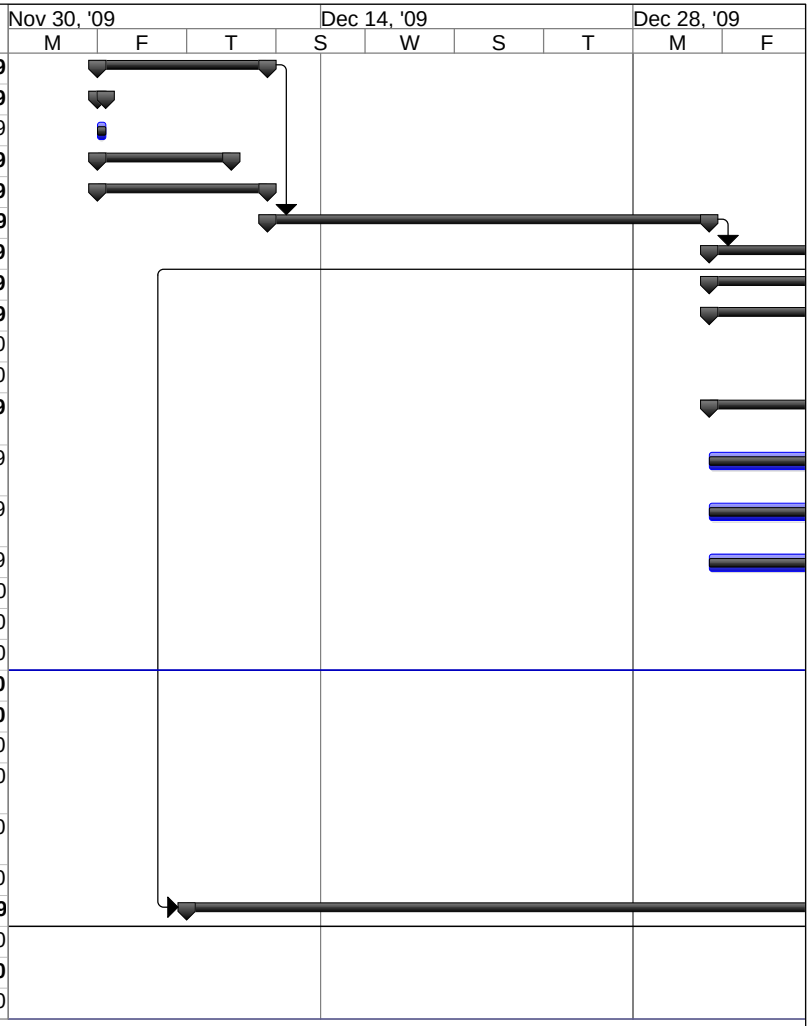
ID	Task Name	Duration	Start
1	**Planning Phase**	**5.75 days**	**Fri 12/4/09**
2	**Week 1 Activities**	**0.13 days**	**Fri 12/4/09**
3	Formulate group norms based on personal ideas	1 hr	Fri 12/4/09
4	**Needs**	**4 days**	**Fri 12/4/09**
11	**Project Planning and Execution**	**5.75 days**	**Fri 12/4/09**
25	**Concept Development**	**13.5 days**	**Fri 12/11/09**
41	**System Level Design**	**16 days?**	**Thu 12/31/09**
42	**System Analysis**	**10 days**	**Thu 12/31/09**
46	**Engineering Specs**	**13 days?**	**Thu 12/31/09**
47	List of measurable outcomes (including ethical outcomes)	2 days	Thu 1/14/10
48	Mapping of needs to quantitative specs	1 day?	Mon 1/18/10
49	**Find benchmarking solutions for pre-existing products.**	**3 days**	**Thu 12/31/09**
50	ME: Weight, Dimensions, Locations Sustainable, Strength of Enclosure	3 days	Thu 12/31/09
51	EE: Final Accuracy, Life Between Recharging, Measurement Capability	3 days	Thu 12/31/09
52	CE: Sampling Rate, Efficiency, Data Storage	3 days	Thu 12/31/09
53	Benchmarking	3 days	Tue 1/5/10
54	Narrow down specs to reasonable limitation	3 days	Fri 1/8/10
55	Publish final engineering spec list	1 day	Wed 1/13/10
56	**Detailed Architecture Design**	**6 days**	**Thu 1/14/10**
57	**Propose system Arch option for presentation**	**6 days**	**Thu 1/14/10**
58	Decompose system into a system architecture	1 day	Thu 1/14/10
59	Represent all functions consistently with selected concept(s);	1 day	Fri 1/15/10
60	Create representations (flow charts, block diagrams, math models)	4 days	Mon 1/18/10
61	Clearly Define Interfaces	4 days	Mon 1/18/10
62	**Detailed Design**	**56 days?**	**Tue 12/8/09**
63	Bill of Materials	0.63 days	Fri 1/22/10
64	**Drawings/ Schematics**	**6 days**	**Fri 1/22/10**
65	Create drawings for all parts to be manufactured	2 days	Fri 1/22/10



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Date: Sun 2/21/10

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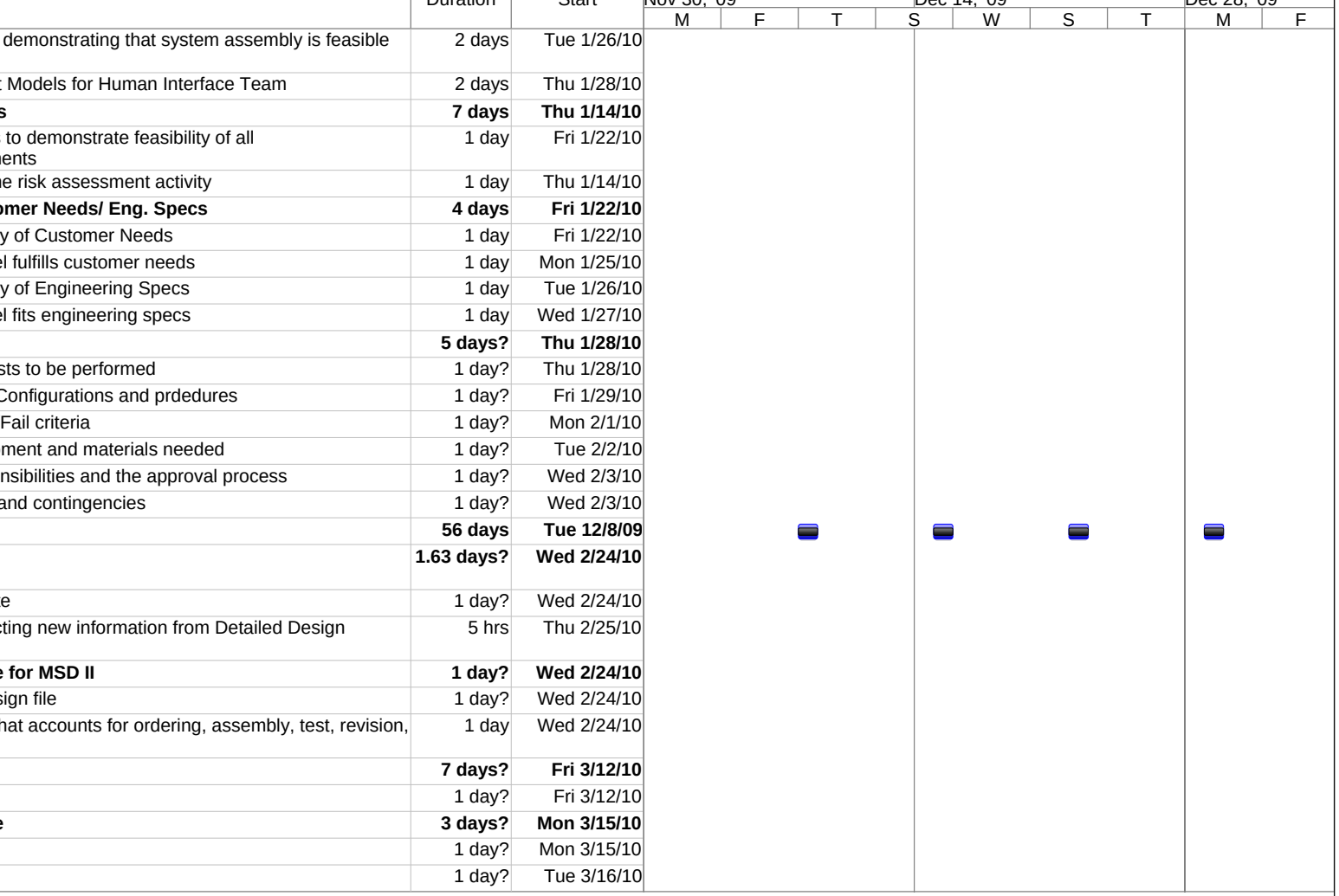
ID	Task Name	Duration	Start
66	Create drawings demonstrating that system assembly is feasible	2 days	Tue 1/26/10
67	Create CAD Part Models for Human Interface Team	2 days	Thu 1/28/10
68	**Feasibility Analysis**	**7 days**	**Thu 1/14/10**
69	Perform analysis to demonstrate feasibility of all systems/components	1 day	Fri 1/22/10
70	Create links to the risk assessment activity	1 day	Thu 1/14/10
71	**Plan to meet Customer Needs/ Eng. Specs**	**4 days**	**Fri 1/22/10**
72	Confirm Accuracy of Customer Needs	1 day	Fri 1/22/10
73	Check that model fulfills customer needs	1 day	Mon 1/25/10
74	Confirm Accuracy of Engineering Specs	1 day	Tue 1/26/10
75	Check that model fits engineering specs	1 day	Wed 1/27/10
76	**Test Plan**	**5 days?**	**Thu 1/28/10**
77	Description of tests to be performed	1 day?	Thu 1/28/10
78	Determine Test Configurations and prdedures	1 day?	Fri 1/29/10
79	Determine Pass/Fail criteria	1 day?	Mon 2/1/10
80	Determine Equipment and materials needed	1 day?	Tue 2/2/10
81	Determine responsibilities and the approval process	1 day?	Wed 2/3/10
82	Determine risks and contingencies	1 day?	Wed 2/3/10
83	**Risk Assesment**	**56 days**	**Tue 12/8/09**
96	**Project Review**	**1.63 days?**	**Wed 2/24/10**
97	Project status update	1 day?	Wed 2/24/10
98	Update Risks, reflecting new information from Detailed Design Review	5 hrs	Thu 2/25/10
99	**Finalize and Schedule for MSD II**	**1 day?**	**Wed 2/24/10**
100	Create a project design file	1 day?	Wed 2/24/10
101	Create a schedule that accounts for ordering, assembly, test, revision, and documentation	1 day	Wed 2/24/10
102	**Test Plan MSD II**	**7 days?**	**Fri 3/12/10**
103	Device Acquisition	1 day?	Fri 3/12/10
104	**Component/Device**	**3 days?**	**Mon 3/15/10**
105	Test Fixtures	1 day?	Mon 3/15/10
106	Sensors	1 day?	Tue 3/16/10



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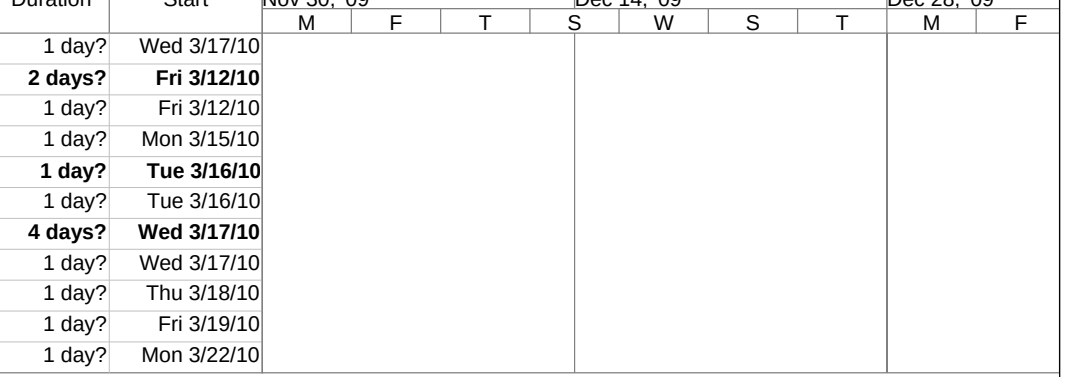
107	Microcontrollers	1 day?	Wed 3/17/10
108	**Integration**	**2 days?**	**Fri 3/12/10**
109	Test Fixture	1 day?	Fri 3/12/10
110	System	1 day?	Mon 3/15/10
111	**System Performance**	**1 day?**	**Tue 3/16/10**
112	System	1 day?	Tue 3/16/10
113	**Final Evaluation**	**4 days?**	**Wed 3/17/10**
114	Redo any erroneous tests	1 day?	Wed 3/17/10
115	Visit Nazareth for Spine Fixture testing	1 day?	Thu 3/18/10
116	Complete Final Publication	1 day?	Fri 3/19/10
117	Complete Final Spreadsheet with technical information	1 day?	Mon 3/22/10



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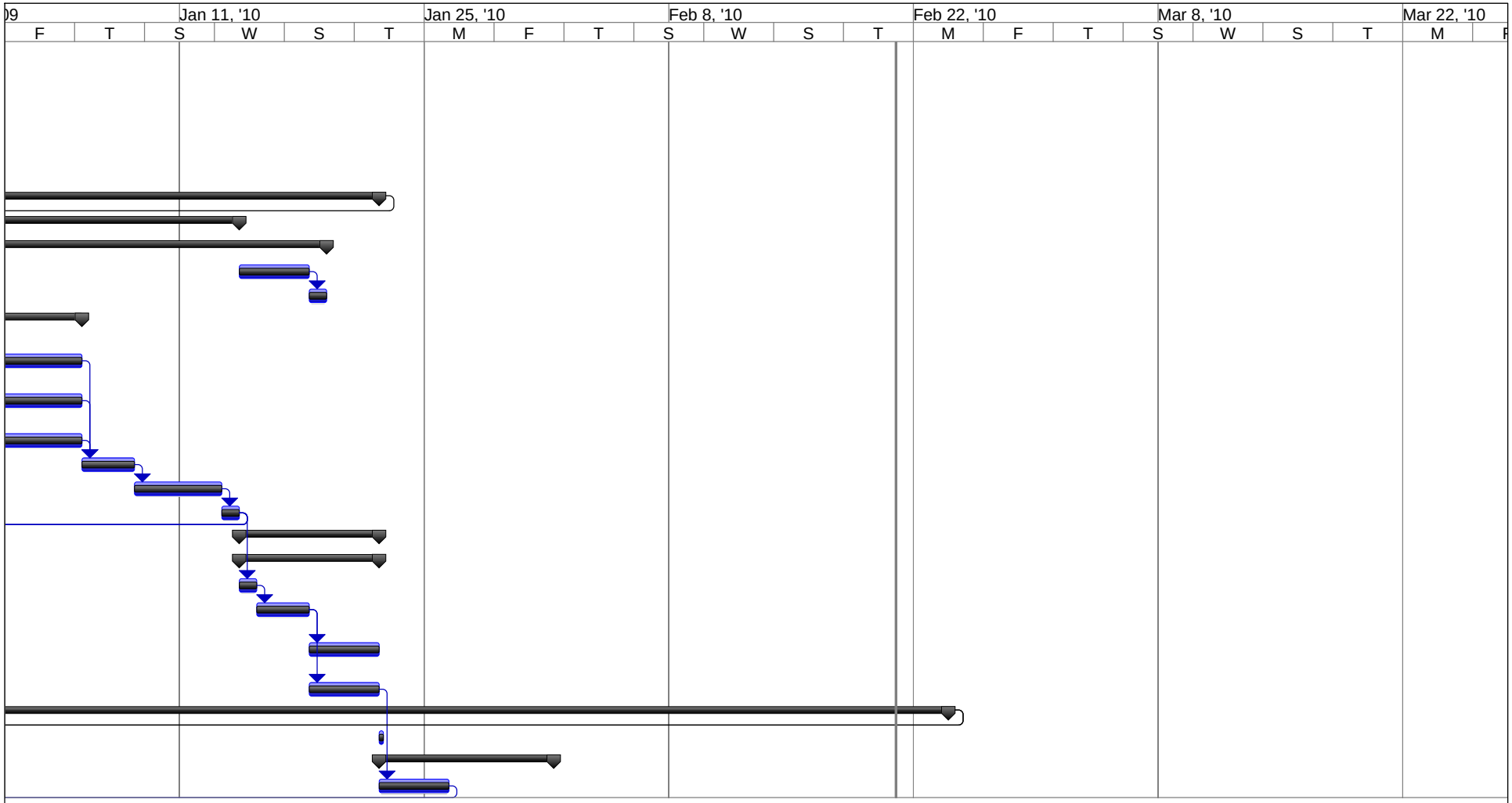

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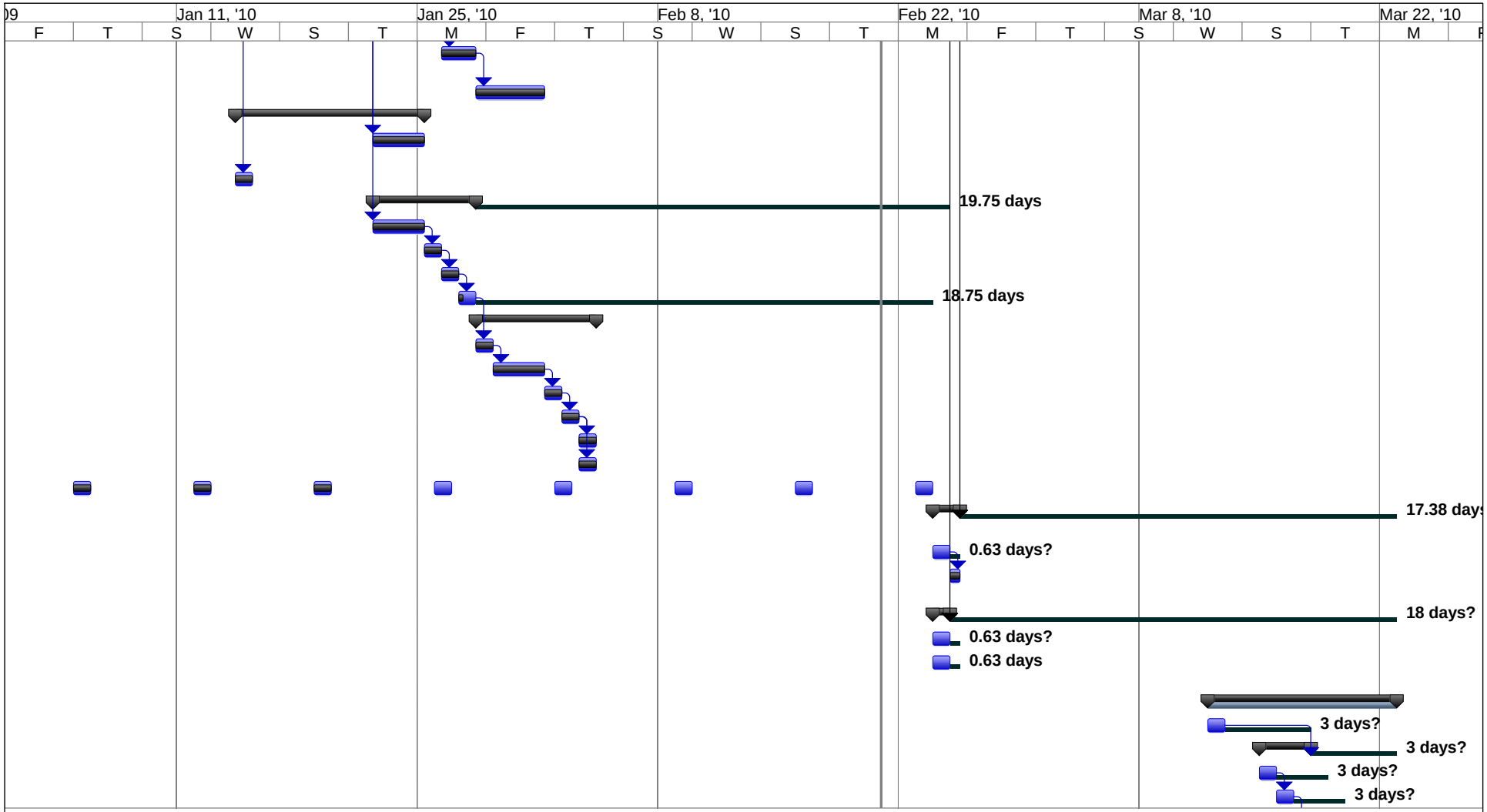

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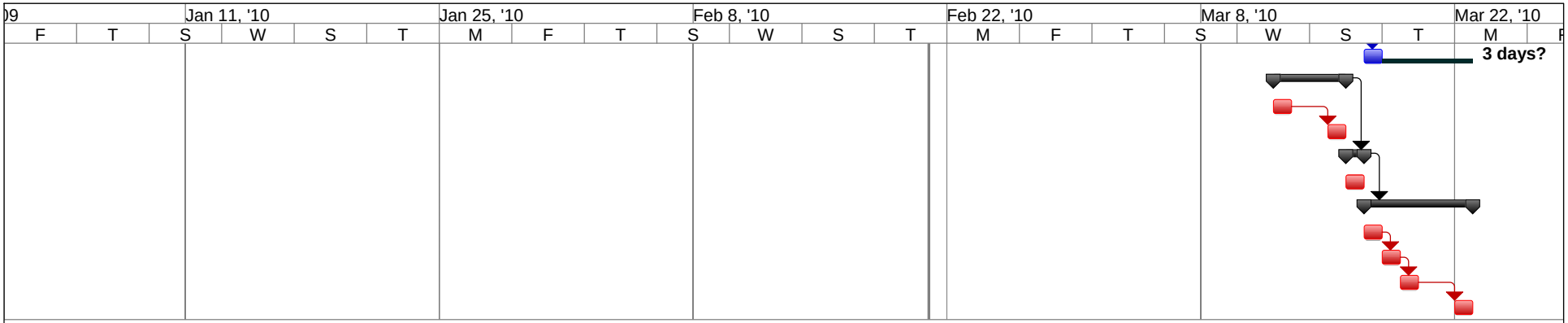

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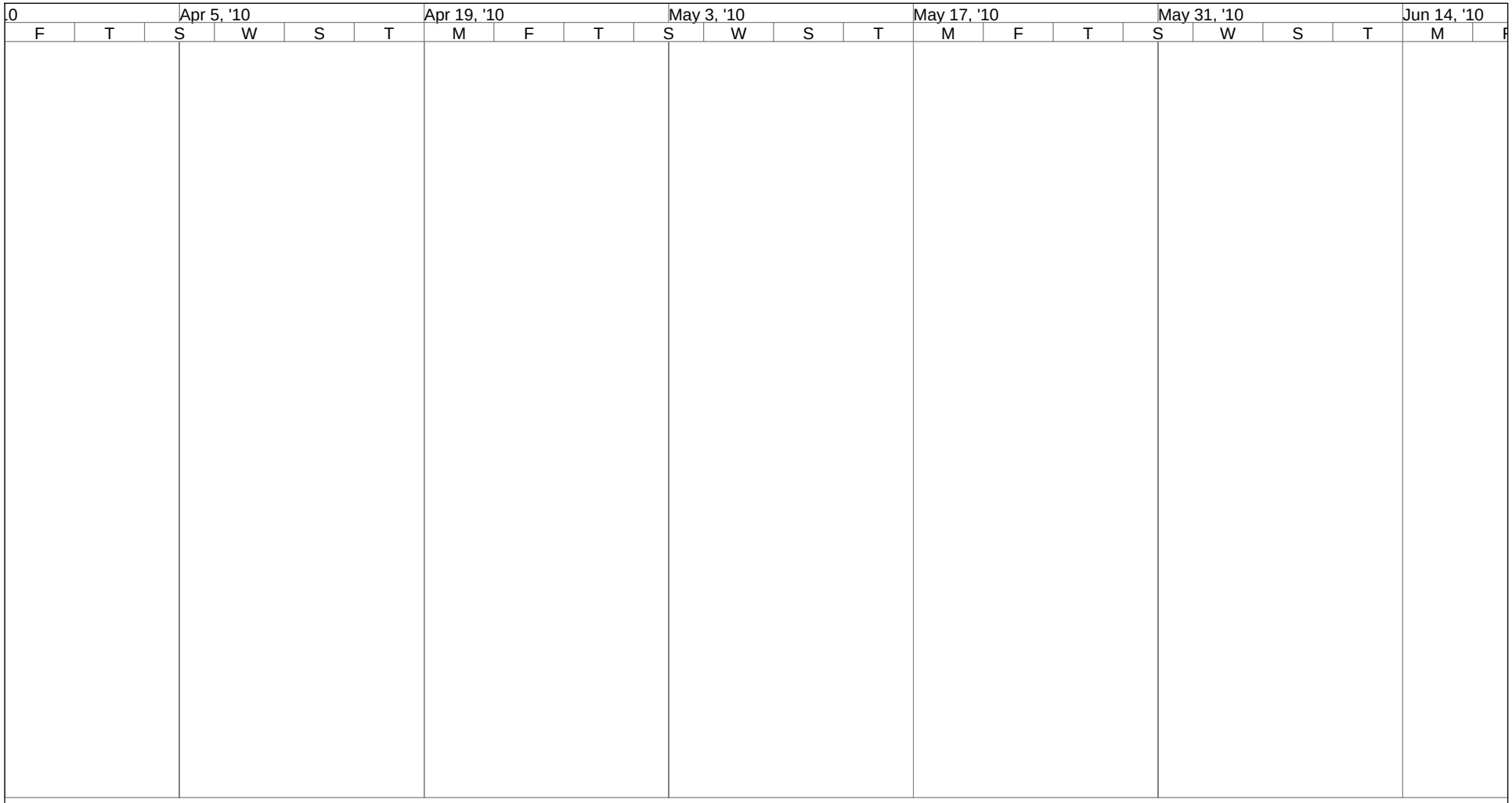

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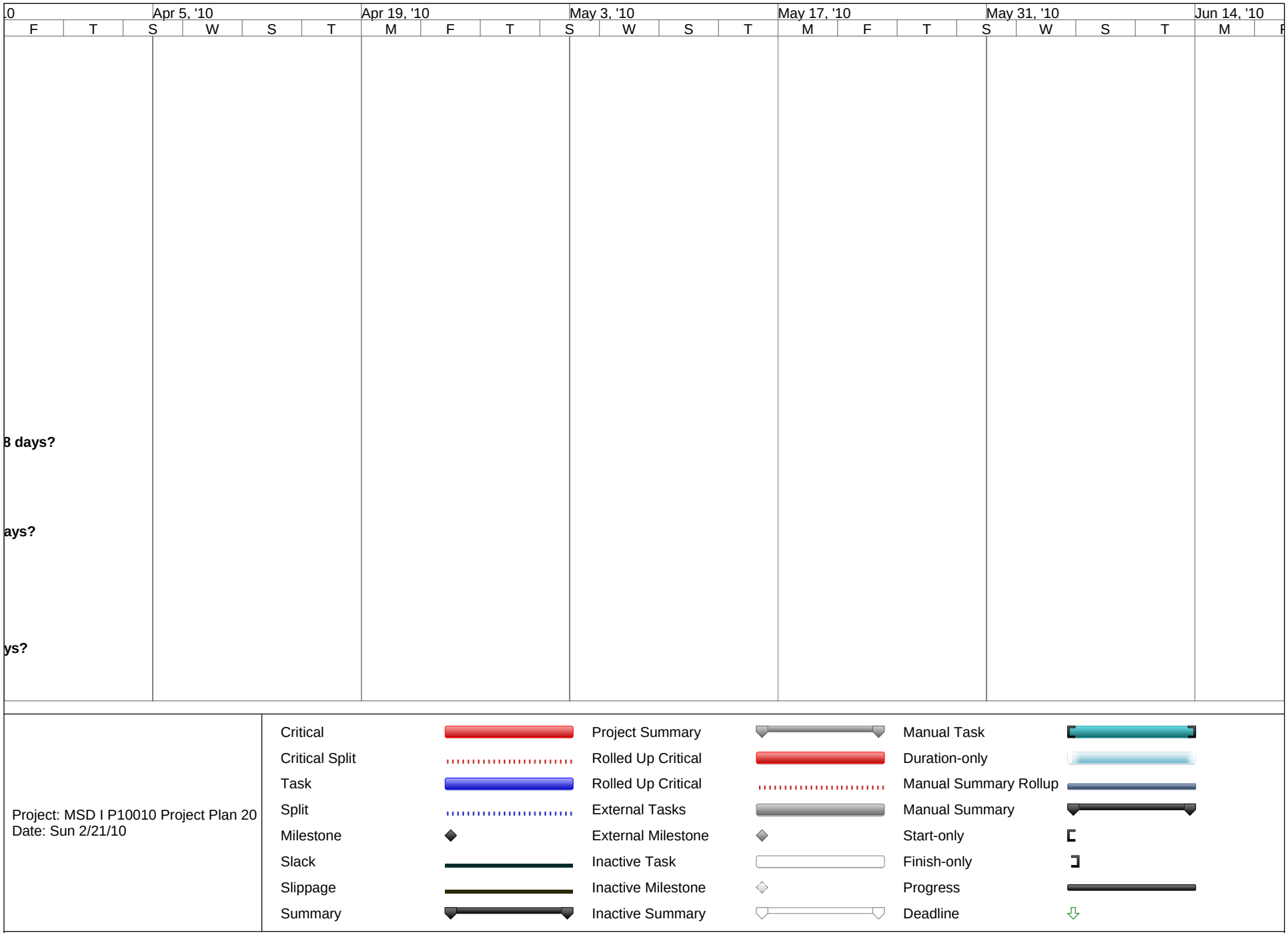

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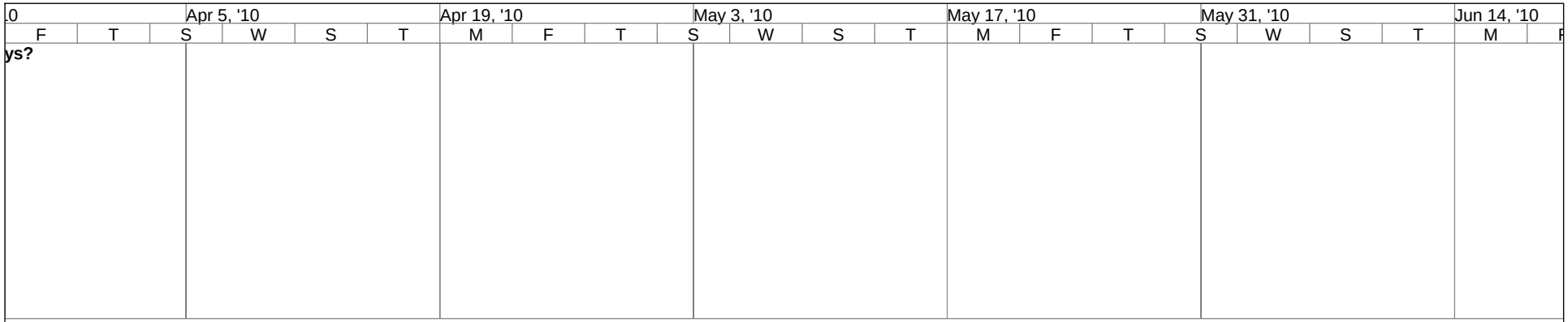

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