



















ID	Task Mode	Task Name	Duration	Start	Finish	Predecessor	Resource Names	Objectivos
1		<b>Gestão do Projecto</b>	<b>81 days</b>	<b>Thu 9/20/12</b>	<b>Thu 1/10/13</b>			<b>Estruturação e document</b>
2		Plameamento do projecto	7 days	Wed 9/26/12	Thu 10/4/12			Estruturação de todos os temas e datas a
3		Dropbox	1 day	Thu 9/20/12	Thu 9/20/12			Partilha rápida de docum
4		Grupo Facebook	1 day	Thu 9/20/12	Thu 9/20/12			Criar um meio de comuni
5		Divisão de Tarefas	1 day	Thu 9/27/12	Thu 9/27/12			
6		<b>Estudo de Regras do Formula Student</b>	<b>6 days</b>	<b>Thu 9/20/12</b>	<b>Thu 9/27/12</b>			
7		Estudo de Regras Elétricas	6 days	Thu 9/20/12	Thu 9/27/12			Conhecer as limitações e requisitos ao nível
8		Apresentação ao cliente do regulamento	2 days	Tue 10/9/12	Wed 10/10/12			
9		Estudo de Regras Dinâmicas	6 days	Thu 9/20/12	Thu 9/27/12			Conhecer as limitações e requisitos da dinâmica
10		<b>Estado de arte sobre veículos eléctricos</b>	<b>15 days</b>	<b>Thu 9/20/12</b>	<b>Wed 10/10/12</b>			<b>Relatório sobre o estado da arta de veículos</b>
11		Estado da Arte dos motores eléctricos usados em carros de corrida	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte
12		Estado da Arte dos métodos de controlo de motors eléctricos	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte
13		Estado da Arte sobre travagem regenerativa	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte

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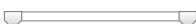







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14		Estado da Arte sobre sistema armazenamento energia	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte
15		Estado da Arte métodos de carregamento	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte
16		Estado da Arte sobre sistemas de balanceamento	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte
17		Estado da Arte sobre conversor a utilizar na alimentação/controlo do motor	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte
18		Estado de Arte sobre redes de sensores em veículo eléctricos						Elaborar um relatório do Estado da Arte
19		Estado da Arte sobre semi-condutores a utilizar no conversor	6 days	Fri 9/21/12	Fri 9/28/12			Elaborar um relatório do Estado da Arte
20		<b>Estudo teórico sobre os diferentes aspectos do projecto</b>	<b>20 days</b>	<b>Thu 9/27/12</b>	<b>Wed 10/24/12</b>			<b>Dominar os conceitos teóricos inerentes ao trabalho e calculos necessários.</b>
21		Dimensionamento dos parâmetros do motor	2 days	Wed 10/10/12	Thu 10/11/12			Calcular e dimensionar os parâmetros do motor a utilizar

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22		Dimensionamento dos semi-condutores	2 days	Wed 10/10/12	Thu 10/11/12			Calcular e dimensionar os parâmetros dos semi-condutores a
23		Dimensionamento dos supercondensadores e capacidades	2 days					Calcular as capacidades a serem usadas na regeneração de energia
24		Fontes de Energia	20 days	Tue 9/25/12	Mon 10/22/12			Calculo teórico da duração das baterias para diferentes percursos do veículo
25		<b>Análise e discussão</b>	<b>7 days</b>	<b>Wed 10/24/12</b>	<b>Thu 11/1/12</b>			
26		Motor						Análise comparativa das c
27		Controlador						Análise comparativa das características de
28		Conversor						Análise comparativa de diferentes topologias de
29		Baterias						Análise comparativa de d
30	 	<b>Implementação do ambiente de simulação</b>	<b>23 days</b>	<b>Thu 11/1/12</b>	<b>Mon 12/3/12</b>		<b>Toda a equipa</b>	<b>Desenhar todo o sistema em MATLAB, Simcoupler e PSIM, relativo:</b>










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









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31		Accionamento e propulsão	20 days	Tue 9/25/12	Mon 10/22/12			ao sistema de Propulsão (Drive + Motor)
32		Regeneração de Energia	20 days	Tue 9/25/12	Mon 10/22/12			à travagem regenerativa + outras formas de economizar energia
33		Fontes de Energia	20 days	Tue 9/25/12	Mon 10/22/12			ao armazenamento de energia (baterias + carregador + balanceamento)
34	 	<b>Testes e revisão em ambiente de simulação</b>	<b>5 days</b>	<b>Mon 12/3/12</b>	<b>Fri 12/7/12</b>		<b>Toda a equipa</b>	<b>Testar e corrigir eventuais erros/problemas da implementação em simulação, relativo:</b>
35		Accionamento e propulsão	20 days	Tue 9/25/12	Mon 10/22/12			ao sistema de Propulsão (Drive + Motor)
36		Regeneração de Energia	20 days	Tue 9/25/12	Mon 10/22/12			à travagem regenerativa + outras formas de economizar energia
37		Fontes de Energia	20 days	Tue 9/25/12	Mon 10/22/12			ao armazenamento de energia (baterias + carregador + balanceamento)
38		<b>Validação de Requisitos</b>	<b>6 days</b>	<b>Fri 12/7/12</b>	<b>Fri 12/14/12</b>			



















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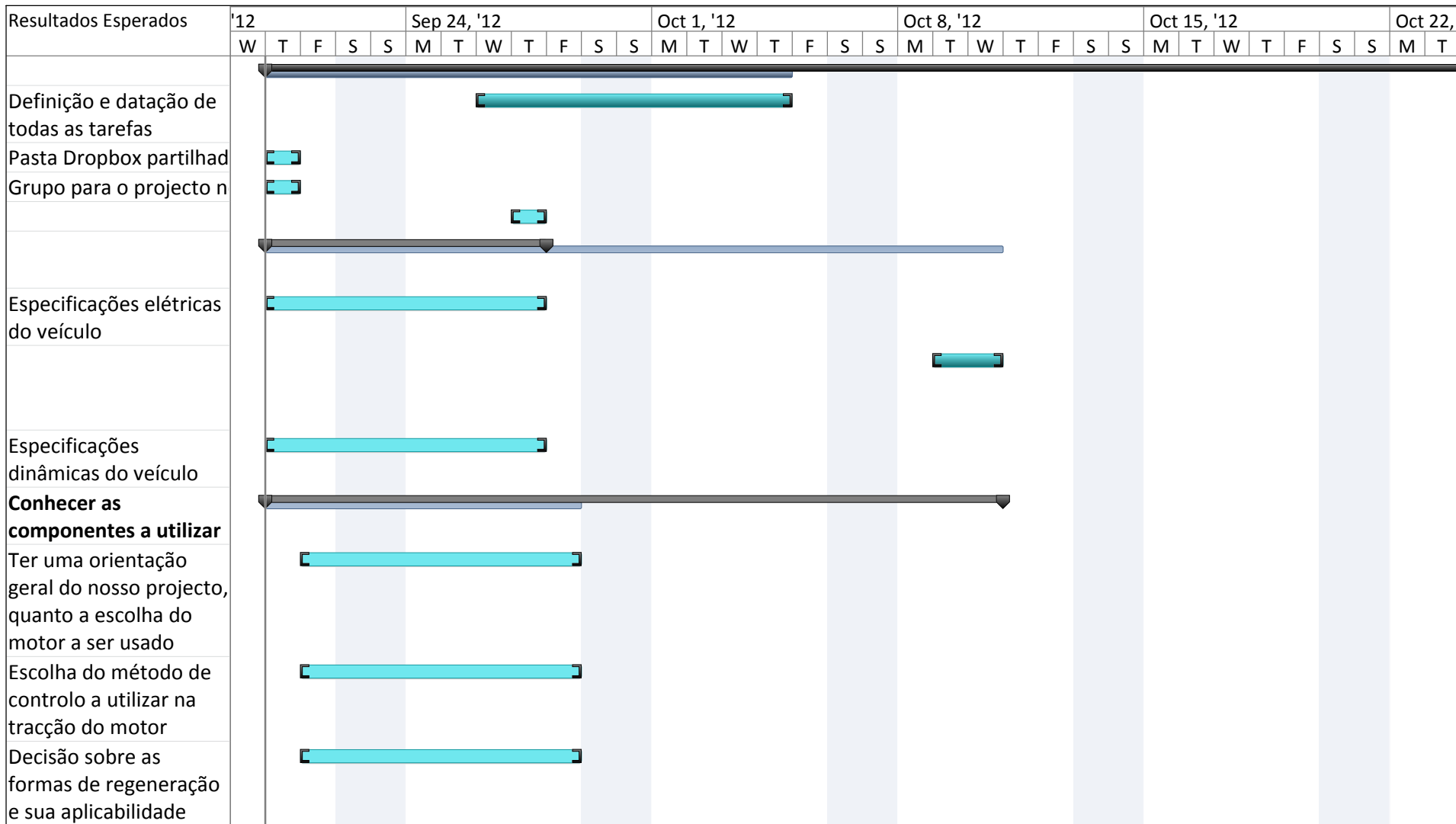
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39		Accionamento e propulsão	20 days	Tue 9/25/12	Mon 10/22/12			Validação dos requisitos iniciais do sistema de propulsão.
40		Regeneração de Energia	20 days	Tue 9/25/12	Mon 10/22/12			Validação na vantagem competitiva existente com a regeneração de
41		Fontes de Energia	20 days	Tue 9/25/12	Mon 10/22/12			Validação da capacidade energética que as baterias devem ter para os diferentes tipos de
42		Simulação do sistema final	6 days	Wed 12/12/12	Wed 12/19/12			Ter uma simulação completa de todos os sistemas interligados de forma a simular o mais próximo da realidade o veiculo projectado
43		<b>Preparação da competição</b>	<b>12 days</b>	<b>Wed 12/5/12</b>	<b>Thu 12/20/12</b>			<b>Preparar documentos necessários para a</b>
44		Prova de Custo	7 days					Conhecer os documentos necessários
45		Apresentação						Conhecer os documentos
46		Prova de Design						Conhecer os documentos necessários para este prova.

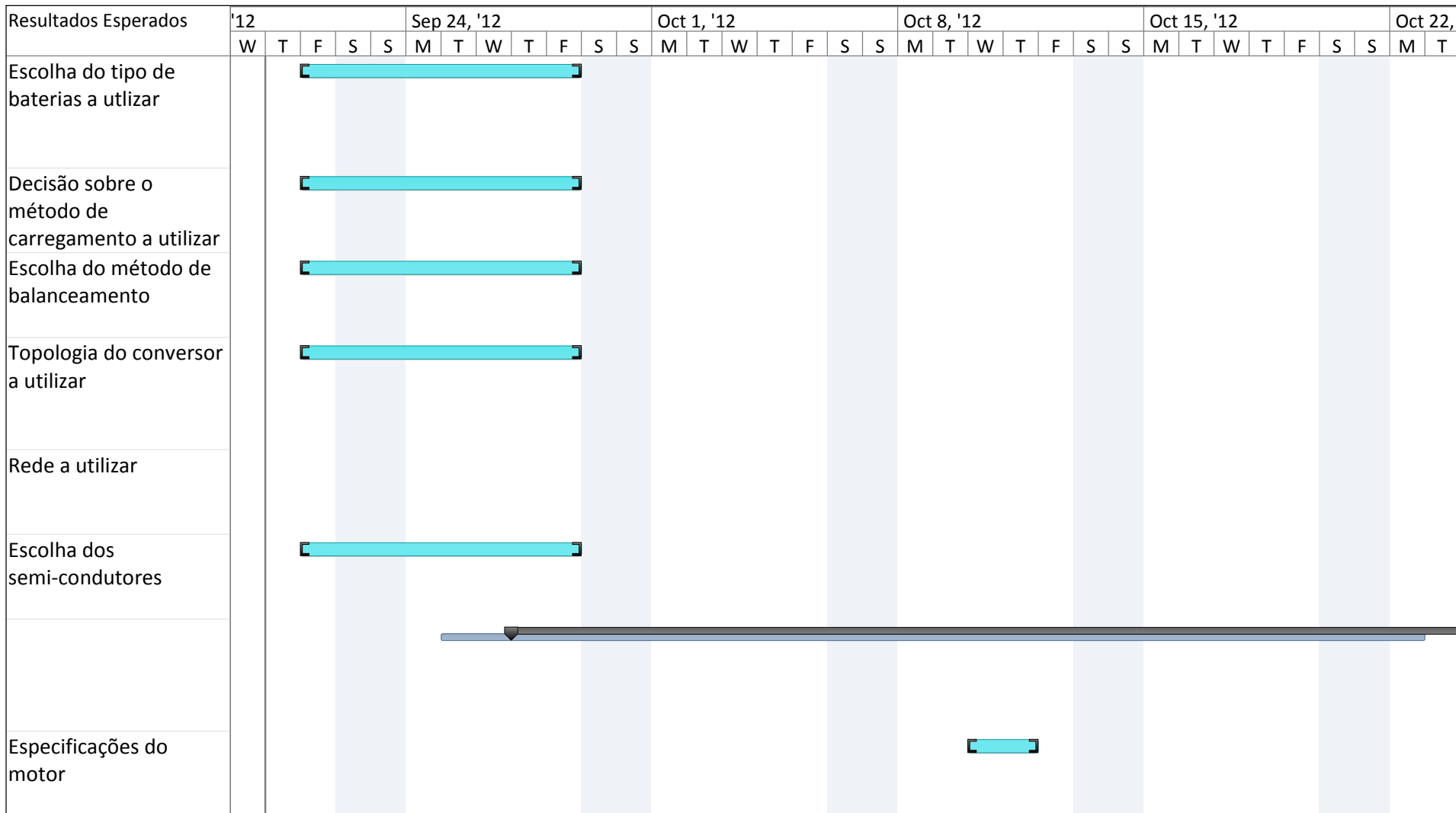
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47			Elaborar Relatório Final	27 days	Sat 12/1/12	Sat 1/5/13		Toda a equipa	Elaborar Relatório Final

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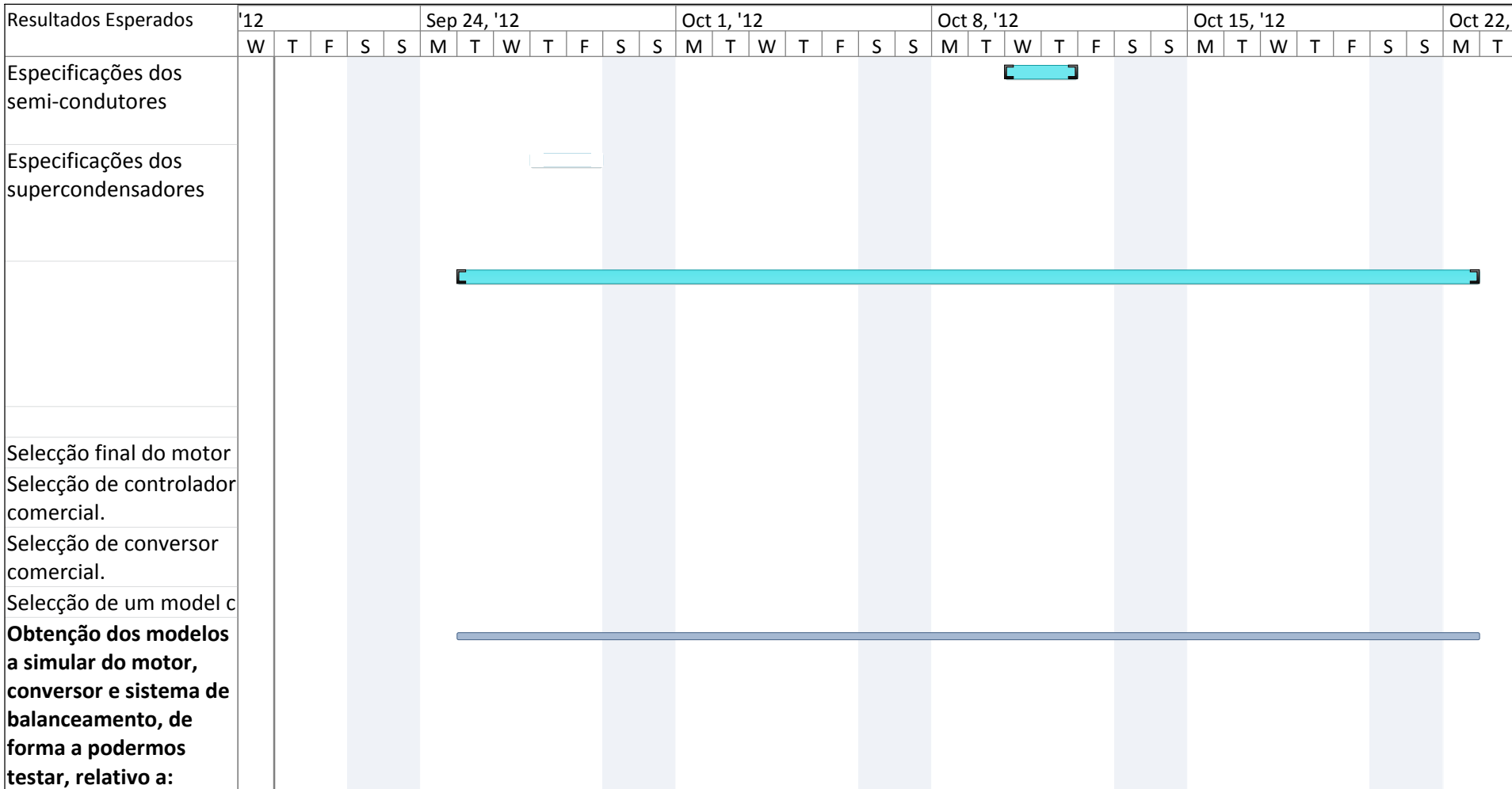


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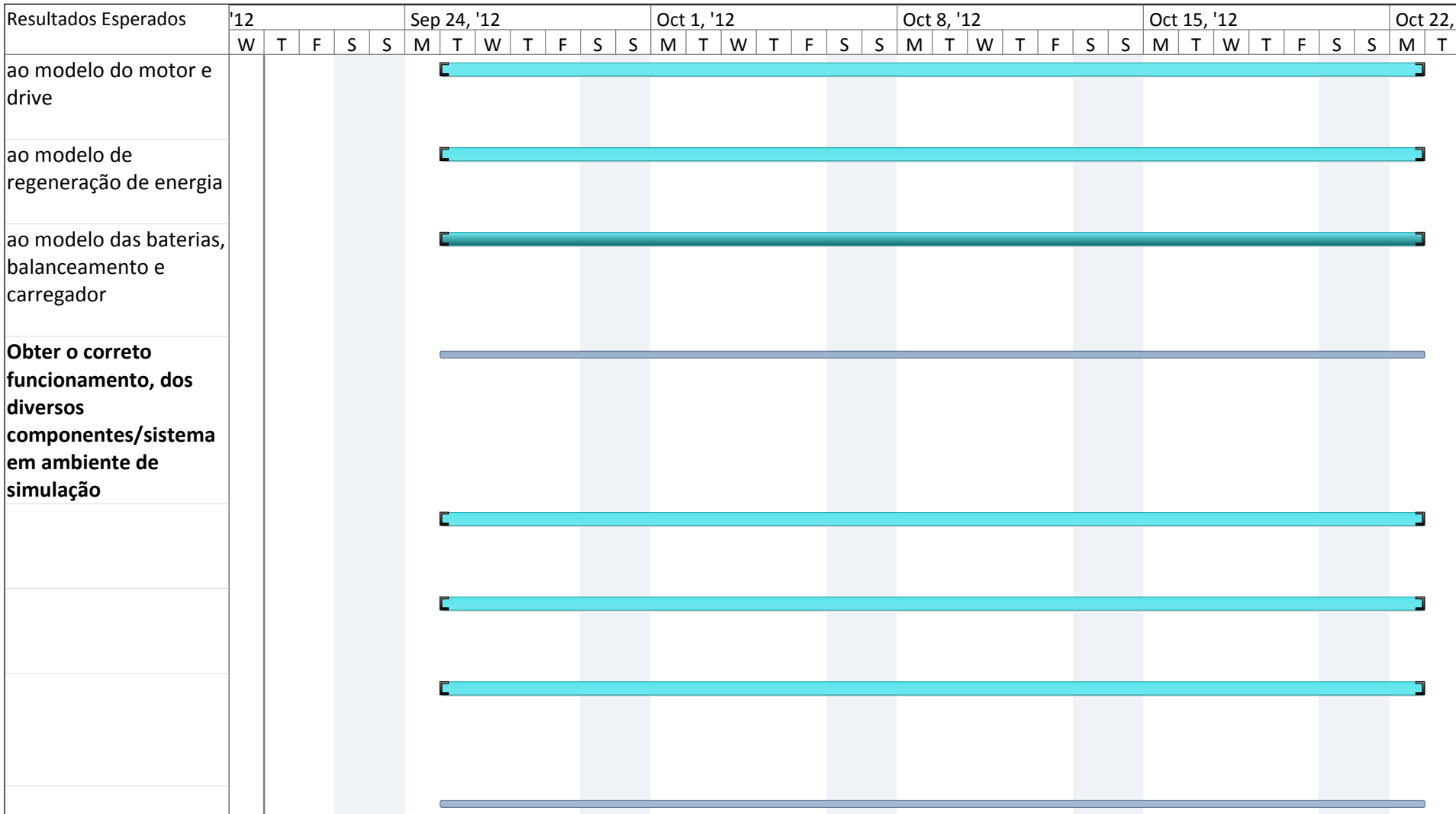
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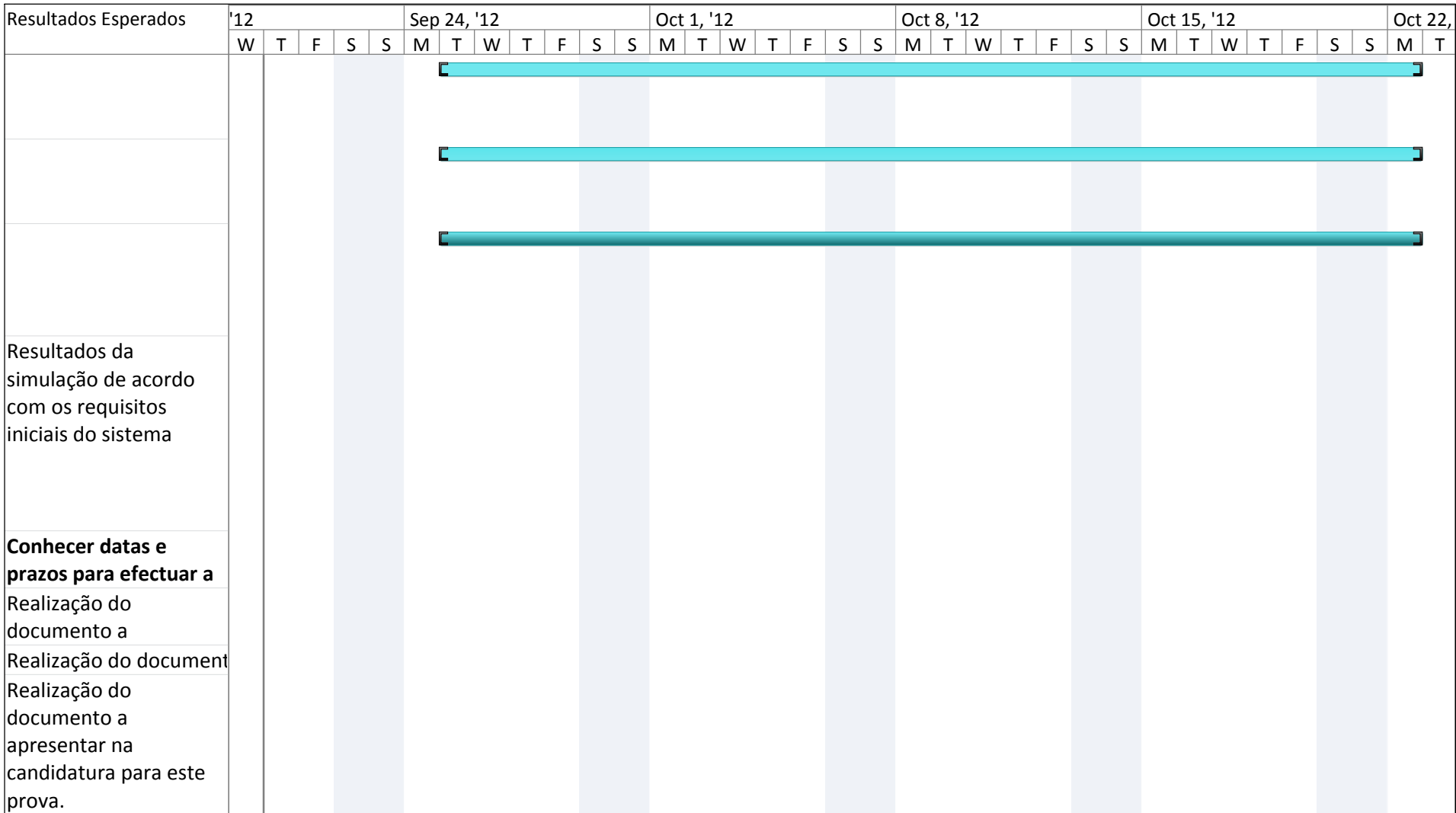
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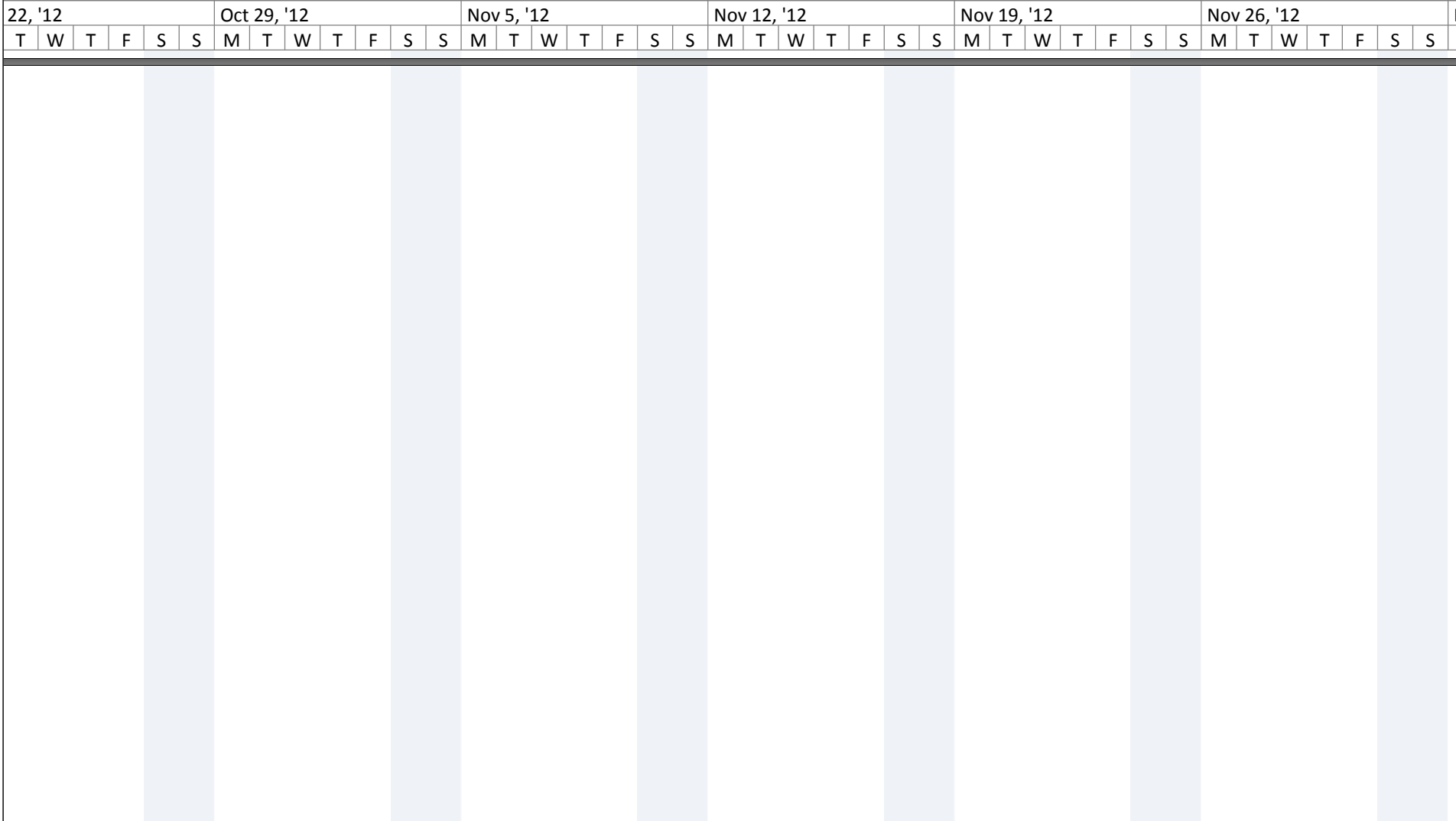
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Resultados Esperados	'12					Sep 24, '12					Oct 1, '12					Oct 8, '12					Oct 15, '12					Oct 22,									
	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T
Elaborar Relatório Final																																			

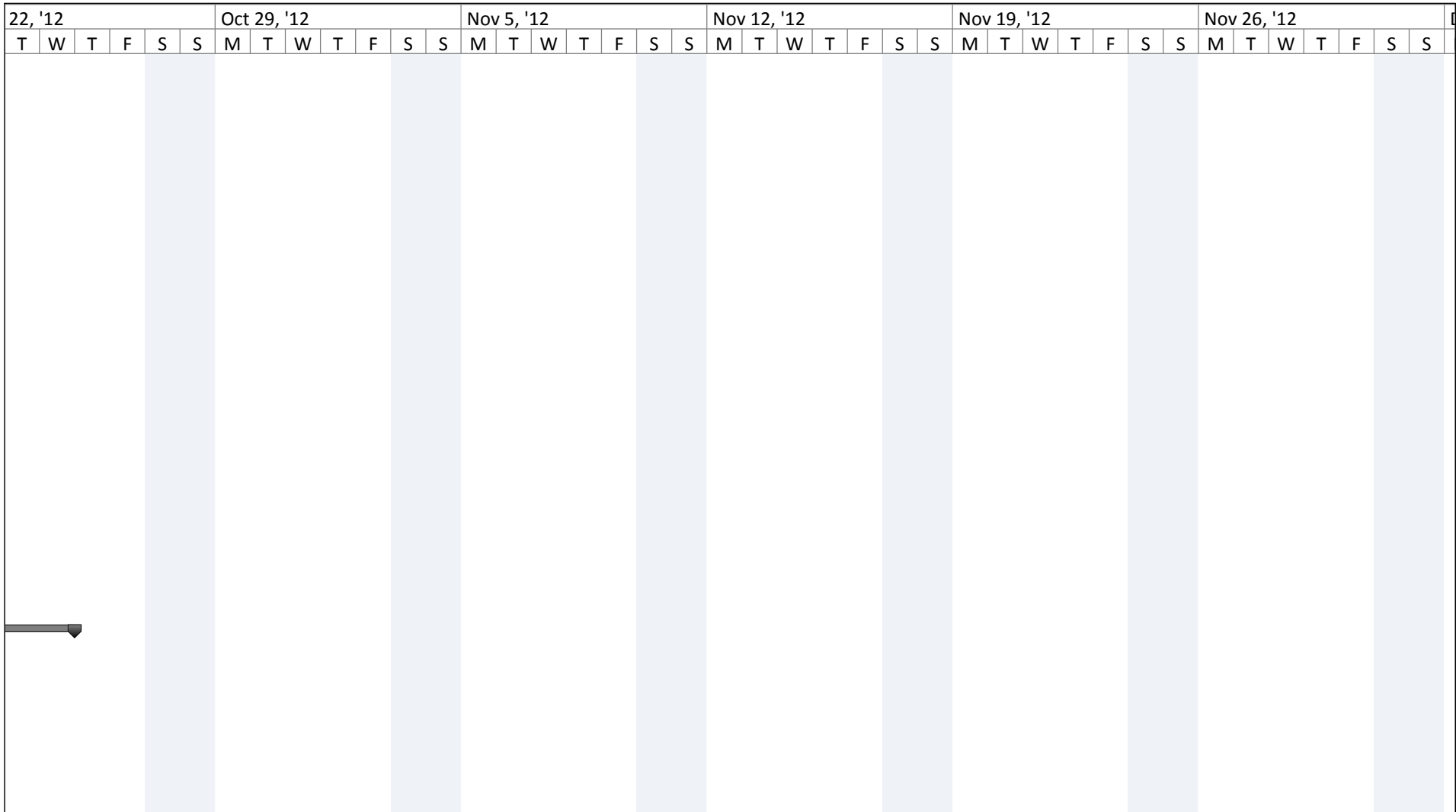


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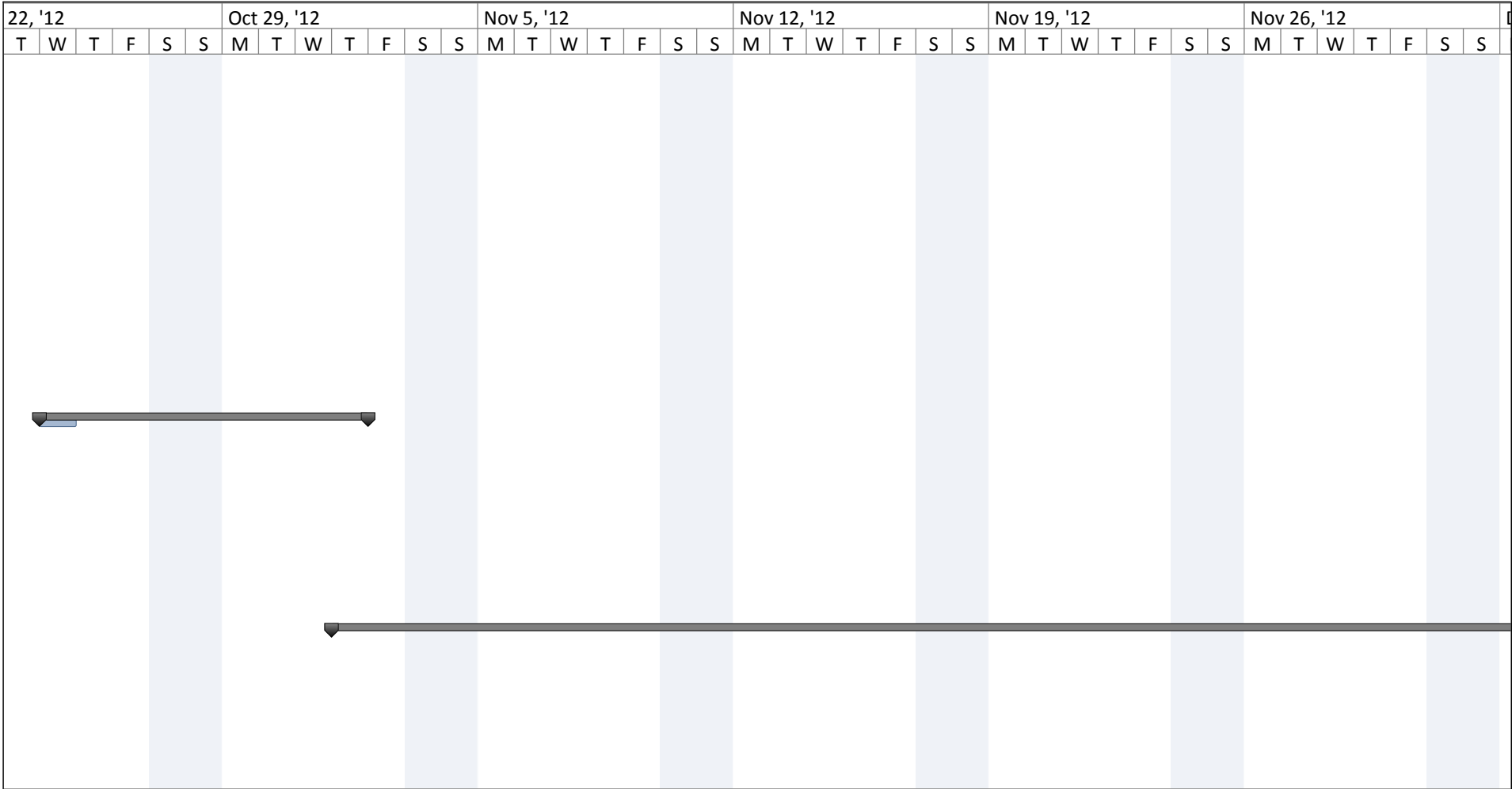
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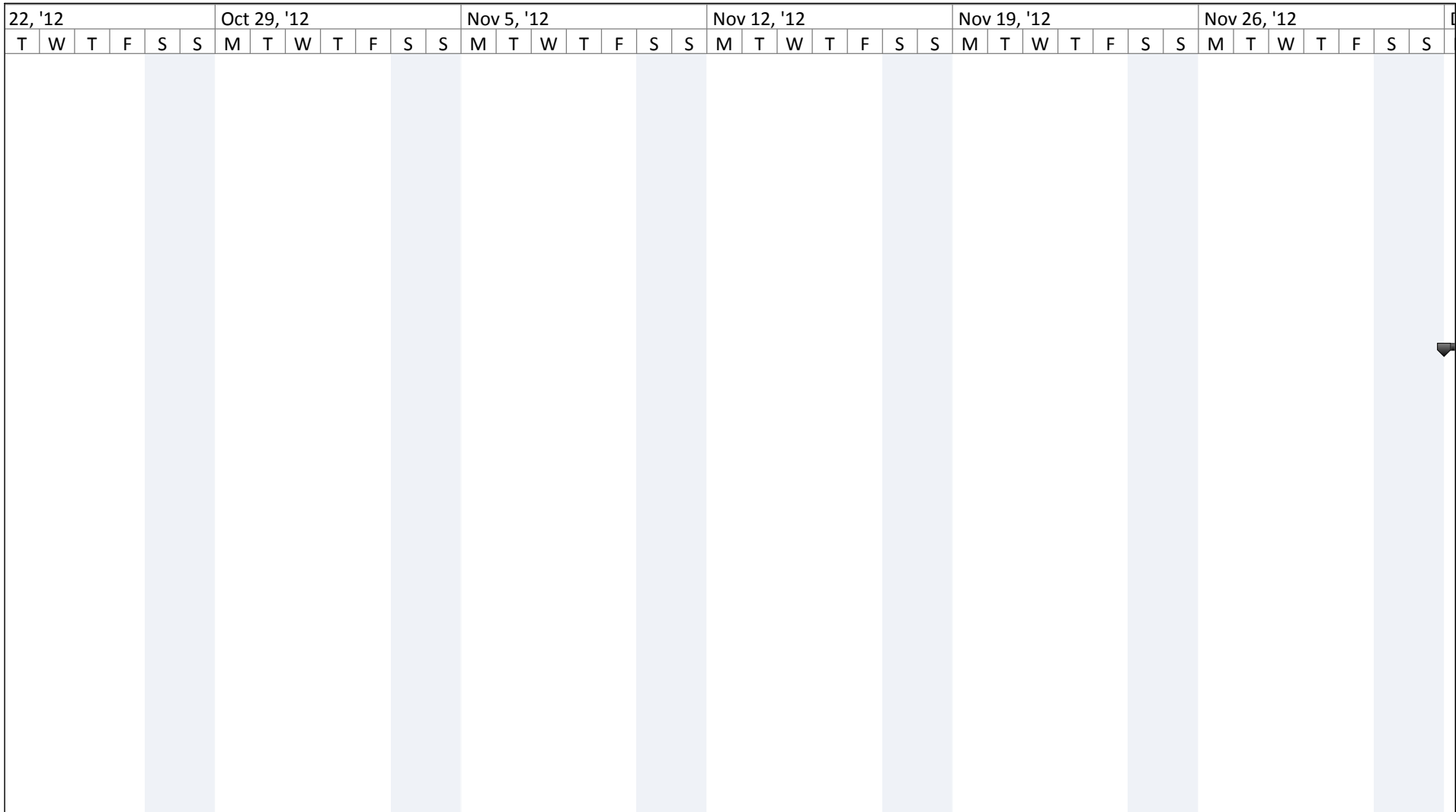
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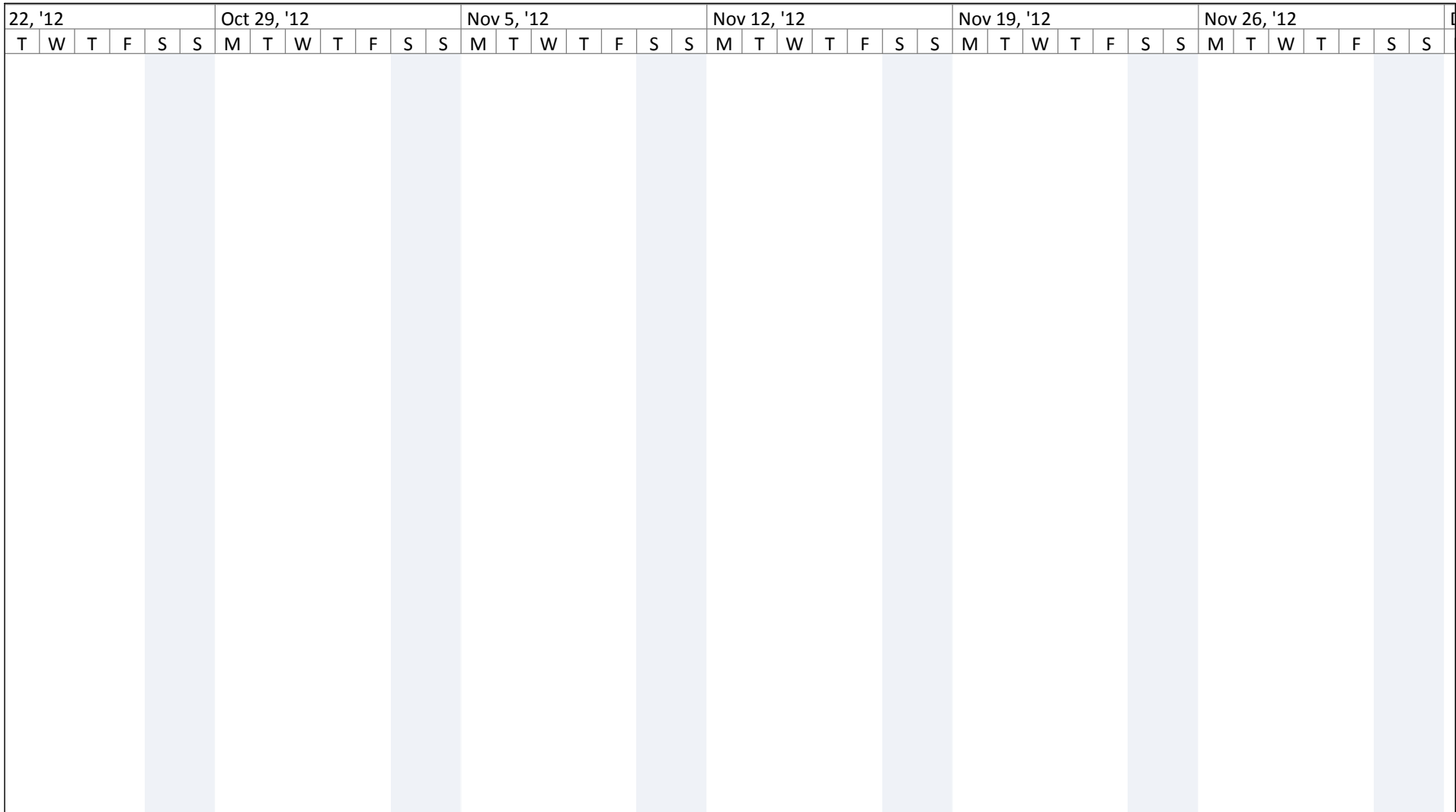
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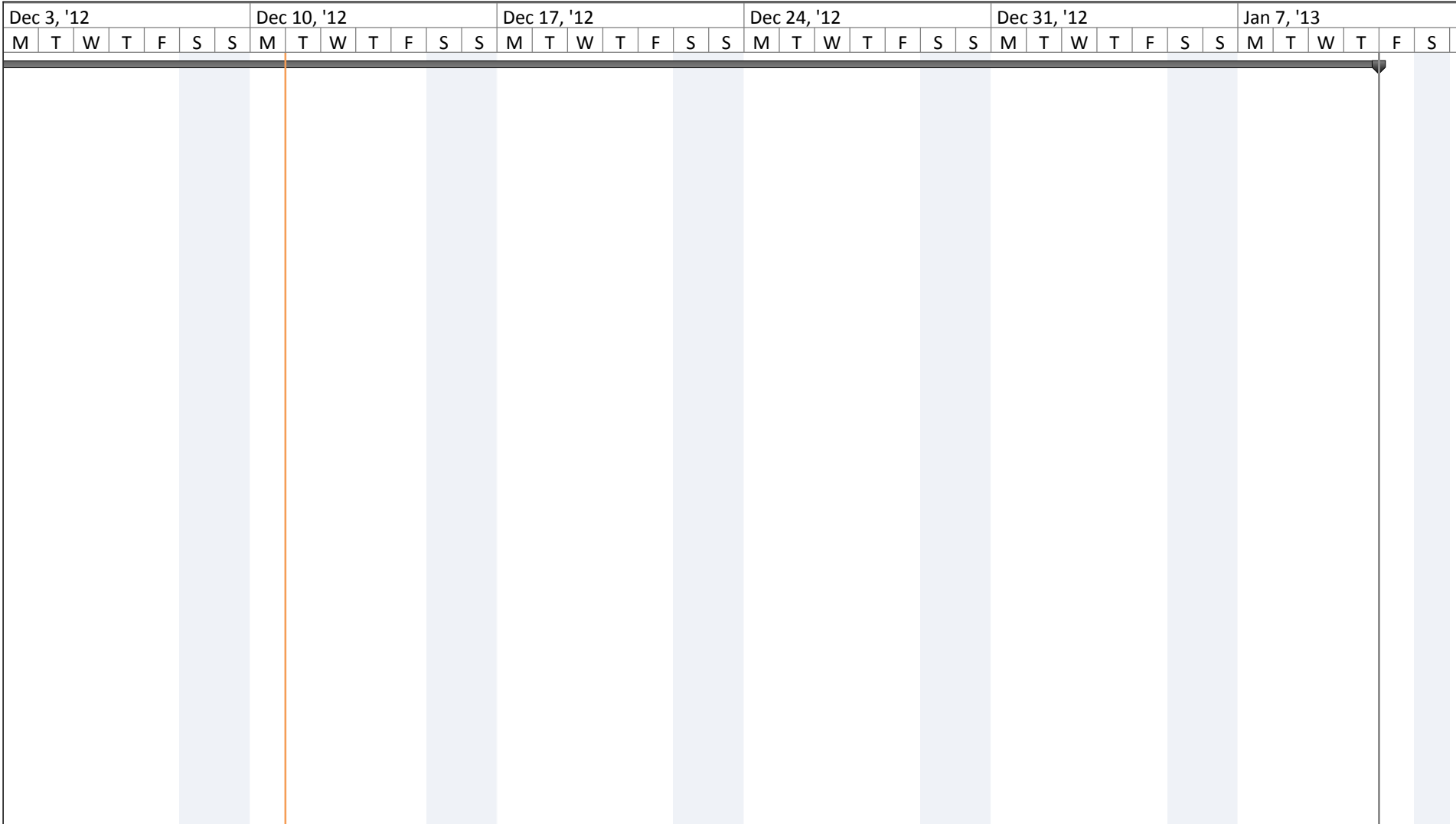
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22, '12					Oct 29, '12					Nov 5, '12					Nov 12, '12					Nov 19, '12					Nov 26, '12								
T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S



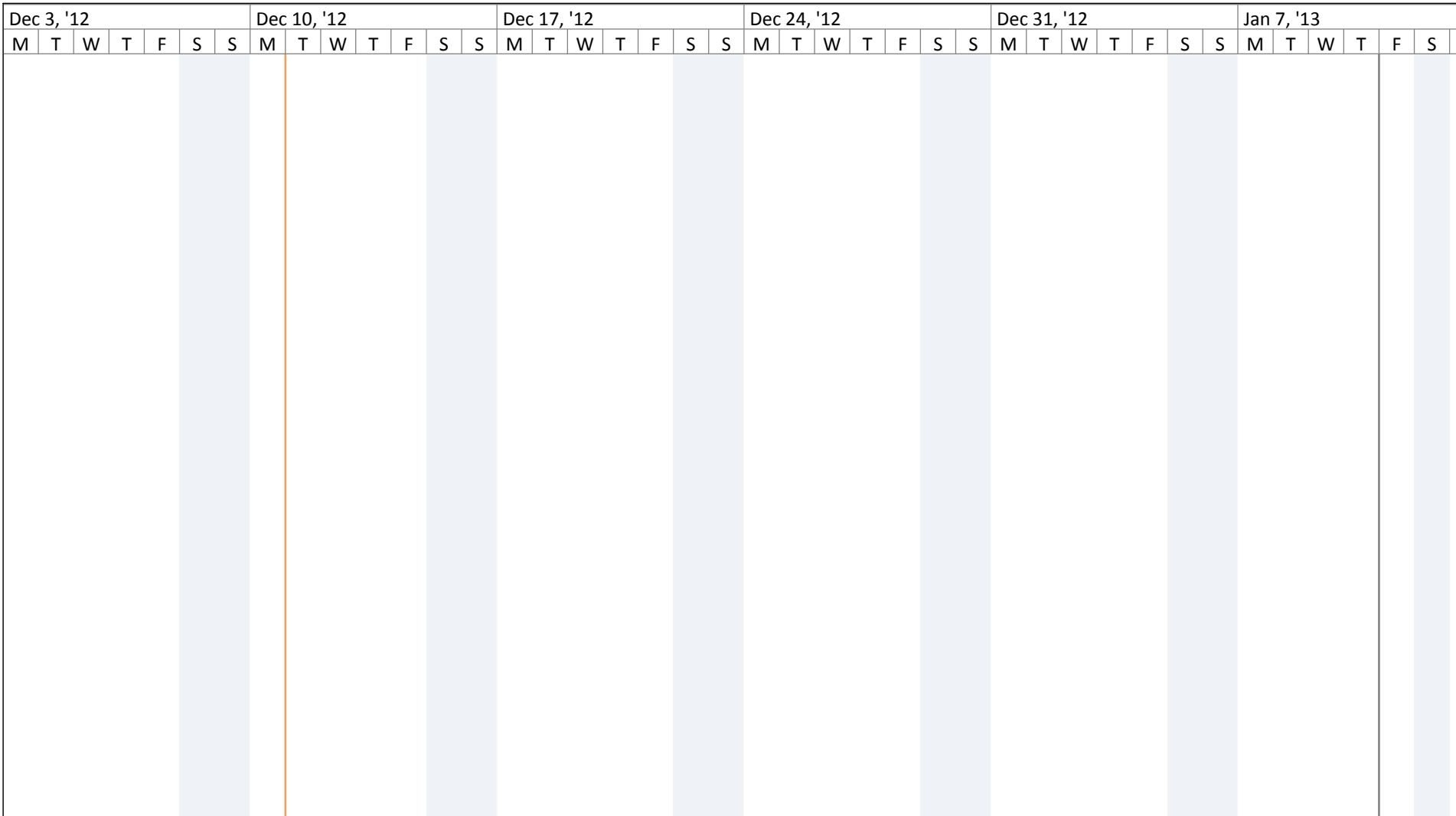
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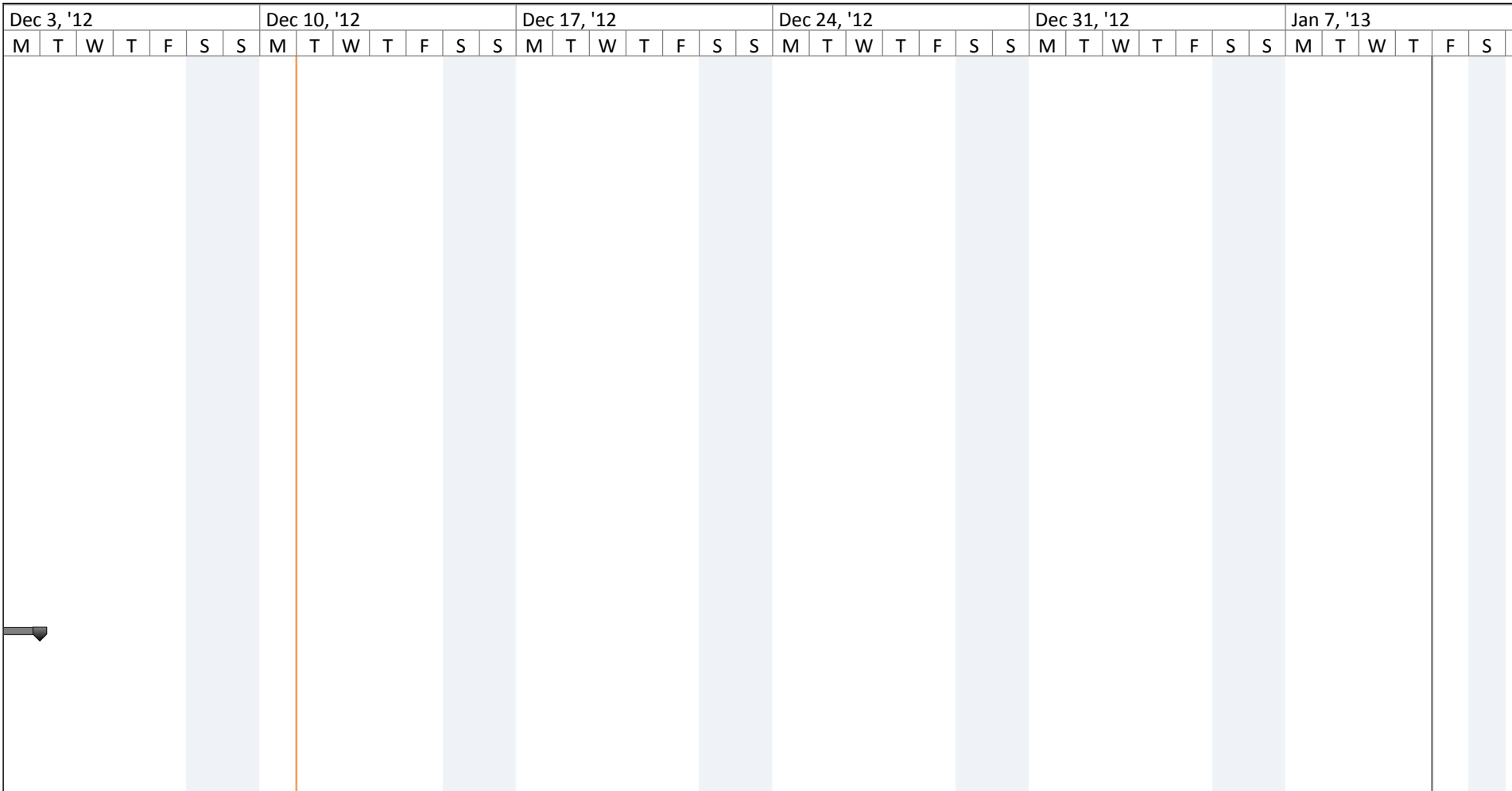
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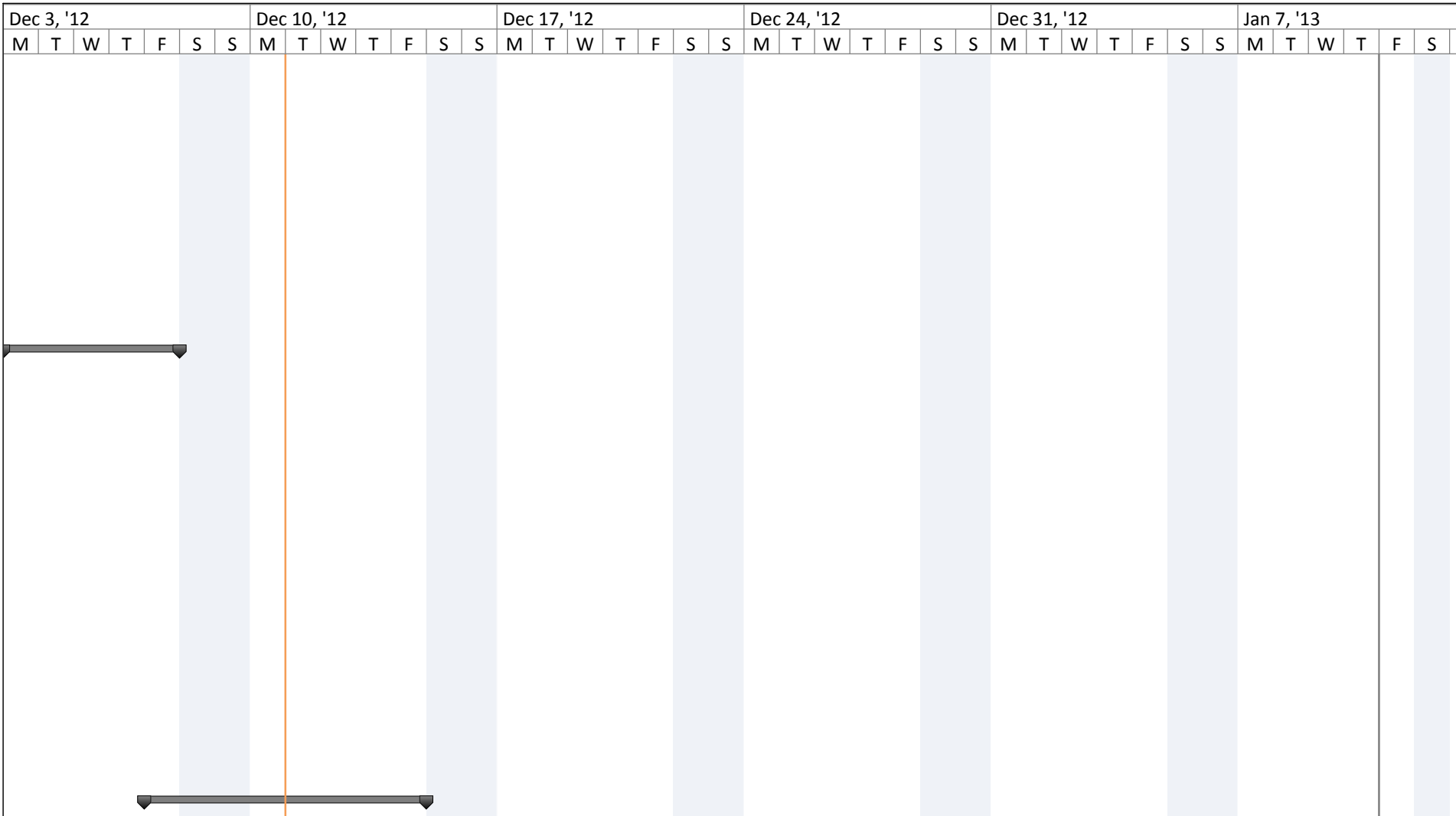
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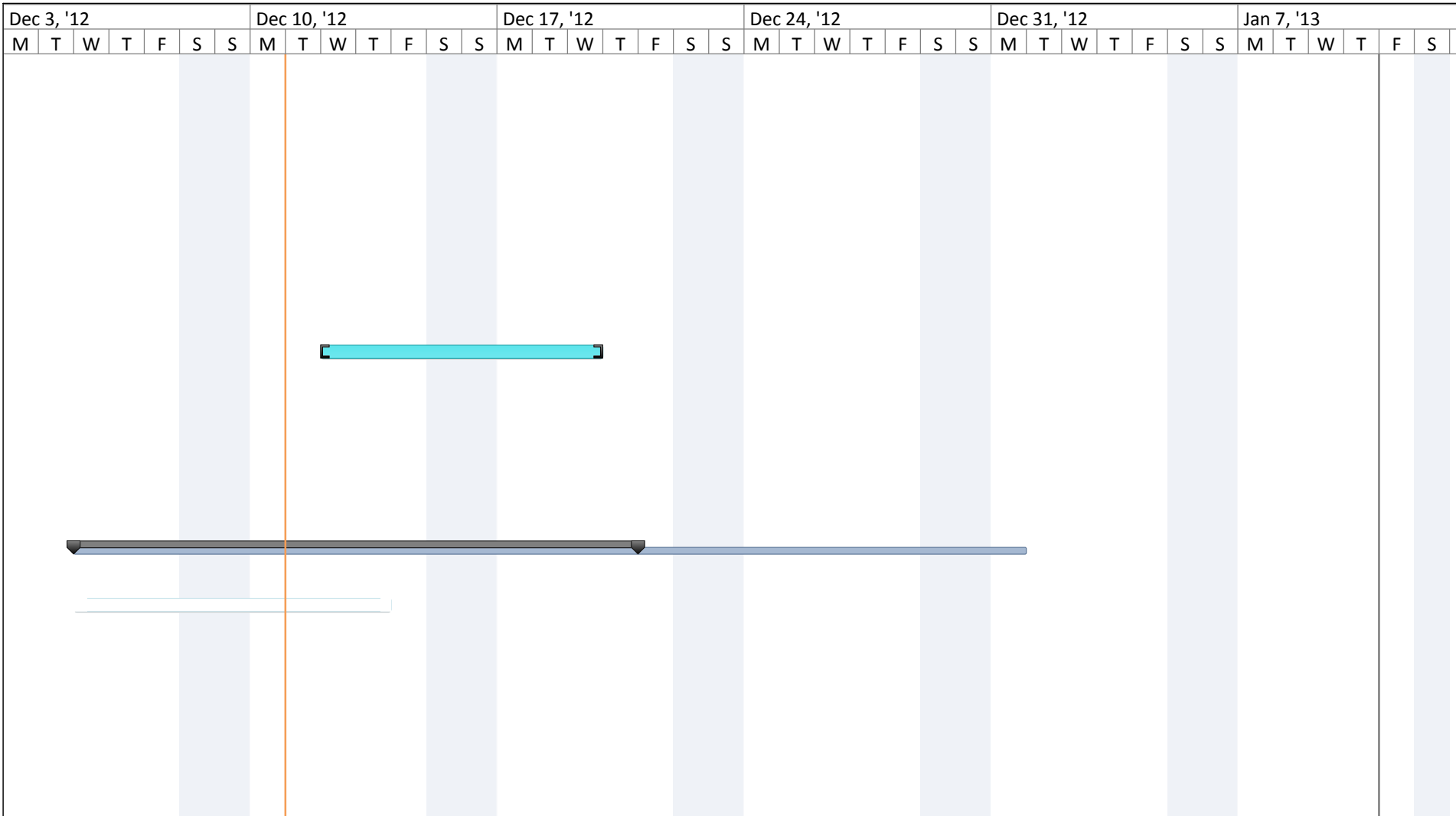
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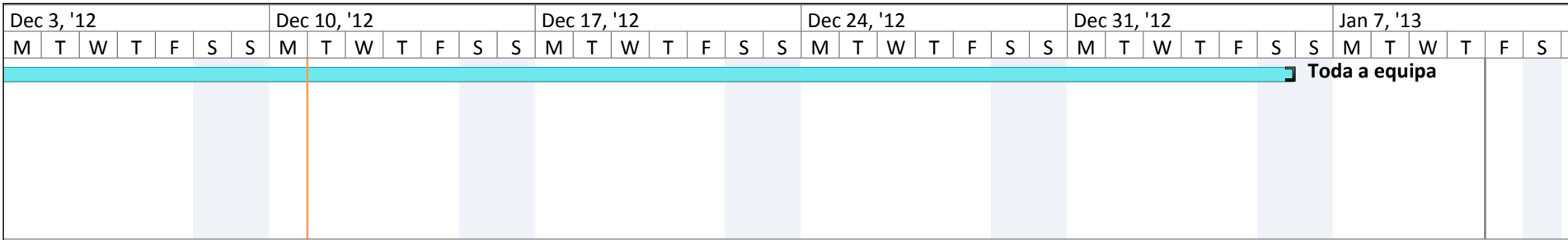
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