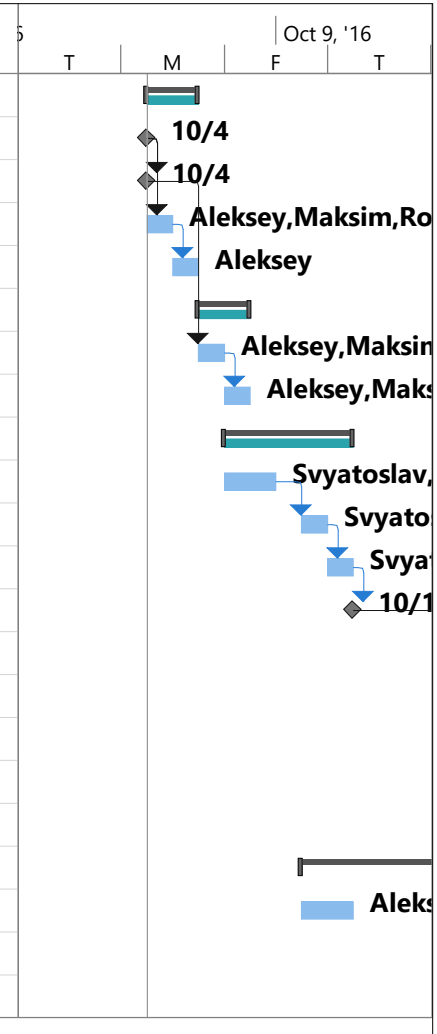
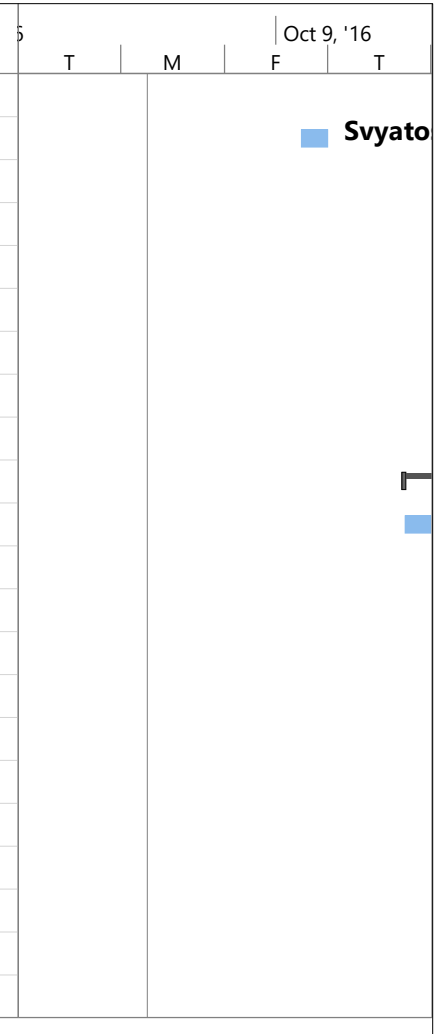
ID	Task Name	Duration	Start	Finish
1	**Establish Team**	**2 days**	**Tue 10/4/16**	**Wed 10/5/16**
2	Select Team Members	0 days	Tue 10/4/16	Tue 10/4/16
3	Schedule Regular Meeting Times	0 days	Tue 10/4/16	Tue 10/4/16
4	Meet with Team (1st Meeting)	1 day	Tue 10/4/16	Tue 10/4/16
5	Setup Communication Tools	1 day	Wed 10/5/16	Wed 10/5/16
6	**Select Project**	**2 days**	**Thu 10/6/16**	**Fri 10/7/16**
7	Meet with Team to Brainstorm Ideas	1 day	Thu 10/6/16	Thu 10/6/16
8	Create Decision Matrix/Select Project	1 day	Fri 10/7/16	Fri 10/7/16
9	**Create Project Proposal**	**4 days**	**Fri 10/7/16**	**Tue 10/11/16**
10	Write Proposal Draft	2 days	Fri 10/7/16	Sat 10/8/16
11	Review Proposal Draft	1 day	Mon 10/10/16	Mon 10/10/16
12	Revise Proposal Draft	1 day	Tue 10/11/16	Tue 10/11/16
13	Submit Final Proposal	0 days	Tue 10/11/16	Tue 10/11/16
14	**Create Requirements Document**	**7 days**	**Tue 10/18/16**	**Tue 10/25/16**
15	Write Requirements Draft	2 days	Tue 10/18/16	Wed 10/19/16
16	Review Requirements Draft	1 day	Thu 10/20/16	Thu 10/20/16
17	Revise Requirements Draft	1 day	Fri 10/21/16	Fri 10/21/16
18	Submit Final Requirements Document	0 days	Tue 10/25/16	Tue 10/25/16
19	**Research**	**21 days**	**Mon 10/10/16**	**Wed 11/2/16**
20	Explore Current Market Automated Window Shades	2 days	Mon 10/10/16	Tue 10/11/16
21	Research MCU Options	3 days	Mon 10/17/16	Wed 10/19/16
22	Research Wireless Communication Options	3 days	Mon 10/17/16	Wed 10/19/16



Project: Project1
Date: Mon 11/7/16

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

ID	Task Name	Duration	Start	Finish
23	Research Window Shades Actuator Options	1 day	Thu 10/27/16	Thu 10/27/16
24	Research Schematic Capture Software Options	1 day	Mon 10/10/16	Mon 10/10/16
25	Research MCU Programing Tools	3 days	Mon 10/31/16	Wed 11/2/16
26	**Design Window Shade Mechanism**	**8 days**	**Fri 10/21/16**	**Fri 10/28/16**
27	Brainstorm Enclosure/Mechanism Ideas	3 days	Fri 10/21/16	Sun 10/23/16
28	Draw Concept Sketches	2 days	Mon 10/24/16	Tue 10/25/16
29	Meet with Team to Select Final Mechanism Approach	1 day	Wed 10/26/16	Wed 10/26/16
30	Create 3D Model of PCB Enclosure	2 days	Thu 10/27/16	Fri 10/28/16
31	Create 3D Model of Demo Unit	1 day	Thu 10/27/16	Thu 10/27/16
32	**Design Preliminary Schematic**	**11 days**	**Fri 10/14/16**	**Wed 10/26/16**
33	Download Schematic Capture Software	1 day	Fri 10/14/16	Fri 10/14/16
34	Create Functional Block Diagram for Circuit	2 days	Mon 10/24/16	Tue 10/25/16
35	**Create Preliminary Schematic**	**7 days**	**Thu 10/20/16**	**Wed 10/26/16**
36	Design PCB Power Circuit	1 day	Wed 10/26/16	Wed 10/26/16
37	Design MCU Operation Circuit	1 day	Thu 10/20/16	Thu 10/20/16
38	Design Device I/O Circuitry	1 day	Fri 10/21/16	Fri 10/21/16
39	Select Prototyping Parts	2 days	Sat 10/22/16	Sun 10/23/16
40	Create Prototyping BOM	1 day	Mon 10/24/16	Mon 10/24/16
41	Order Prototyping Parts	1 day	Tue 10/25/16	Tue 10/25/16
42	**Prototype Project**	**8 days**	**Wed 10/26/16**	**Thu 11/3/16**
43	Build Prototype	3 days	Wed 10/26/16	Fri 10/28/16
44	Test Basic Functionality	2 days	Sun 10/30/16	Mon 10/31/16



Project: Project1
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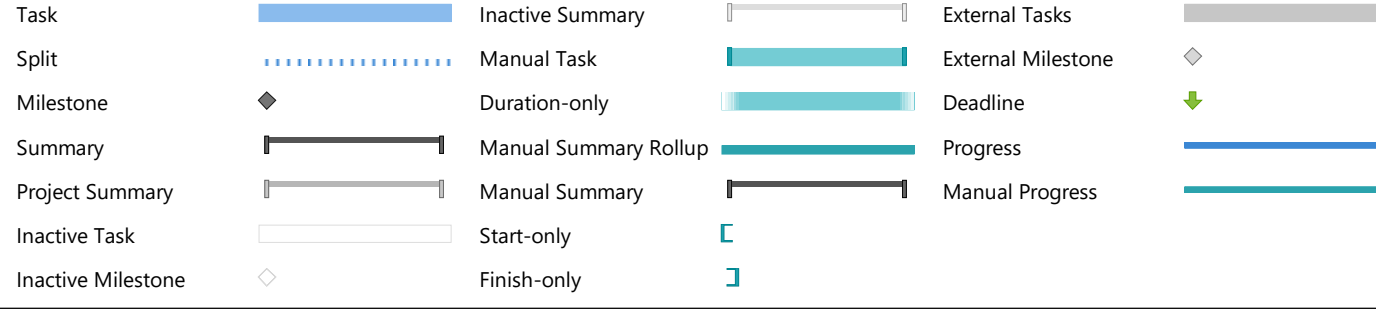
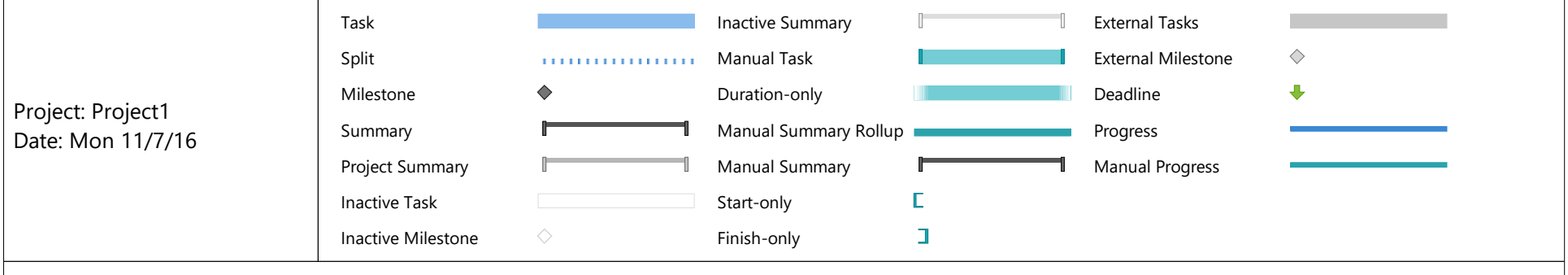
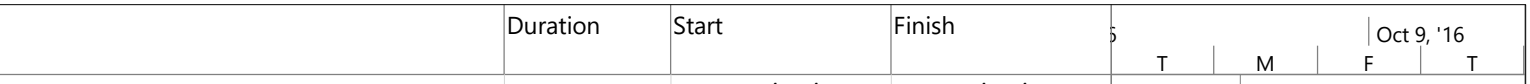


ID	Task Name	Duration	Start	Finish
45	Setup and Test Programing Tool	2 days	Wed 10/26/16	Thu 10/27/16
46	Interface each Sensor and Actuator with MCU	4 days	Mon 10/31/16	Thu 11/3/16
47	Revise Schematic Based on Prototyping	1 day	Tue 11/1/16	Tue 11/1/16
48	Review Revised Schematic	1 day	Wed 11/2/16	Wed 11/2/16
49	Upload Final Schematic	0 days	Thu 11/3/16	Thu 11/3/16
50	**Design PCB**	**15 days**	**Fri 11/4/16**	**Tue 11/22/16**
51	Select PCB Components	4 days	Fri 11/4/16	Tue 11/8/16
52	Create PCB BOM	1 day	Wed 11/9/16	Wed 11/9/16
53	Import Part Symbols and Footprints into Schematic Capture Tool	2 days	Thu 11/10/16	Fri 11/11/16
54	Determine PCB Size	1 day	Thu 11/10/16	Thu 11/10/16
55	Layout PCB	3 days	Sat 11/12/16	Tue 11/15/16
56	Review Layout	2 days	Wed 11/16/16	Thu 11/17/16
57	Route PCB	2 days	Fri 11/18/16	Mon 11/21/16
58	Review Routing	1 day	Tue 11/22/16	Tue 11/22/16
59	Review Gerber Files	1 day	Tue 11/22/16	Tue 11/22/16
60	Submit PCB Files for Ordering	0 days	Tue 11/22/16	Tue 11/22/16
61	**Program MCU**	**13 days**	**Wed 11/9/16**	**Thu 11/24/16**
62	Write Pseudocode	3 days	Wed 11/9/16	Fri 11/11/16
63	Translate Code to MCU Programing Language	5 days	Sat 11/12/16	Thu 11/17/16
64	Run Code on Prototype Setup	1 day	Fri 11/18/16	Fri 11/18/16
65	Debug Code	3 days	Mon 11/21/16	Wed 11/23/16
66	Revise Code	1 day	Thu 11/24/16	Thu 11/24/16



ID	Task Name	Duration	Start	Finish
67	Assemble Boards	2 days	Wed 11/23/16	Thu 11/24/16
68	**Assemble Window Shades for Demo**	**4 days**	**Fri 11/25/16**	**Wed 11/30/16**
69	Create PCB Enclosure	2 days	Fri 11/25/16	Mon 11/28/16
70	Build Window Shade Mechanism	2 days	Tue 11/29/16	Wed 11/30/16
71	**Verify Project Requirements Have Been Met**	**2 days**	**Thu 12/1/16**	**Fri 12/2/16**
72	Test Ease of Use	1 day	Thu 12/1/16	Thu 12/1/16
73	Conduct Stress Testing	1 day	Thu 12/1/16	Thu 12/1/16
74	Test Long Term Functionality	2 days	Thu 12/1/16	Fri 12/2/16
75	**Create Final Project Documentation**	**2 days**	**Mon 12/5/16**	**Tue 12/6/16**
76	Review Documents	1 day	Mon 12/5/16	Mon 12/5/16
77	Revise Documents	1 day	Tue 12/6/16	Tue 12/6/16
78	Submit Final Documents	0 days	Tue 12/6/16	Tue 12/6/16
79	Present Project	1 day	Wed 12/7/16	Wed 12/7/16



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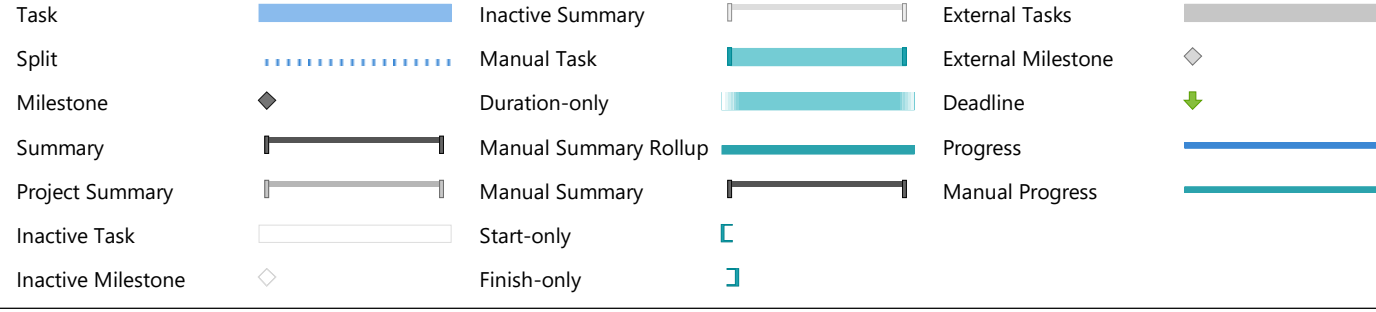

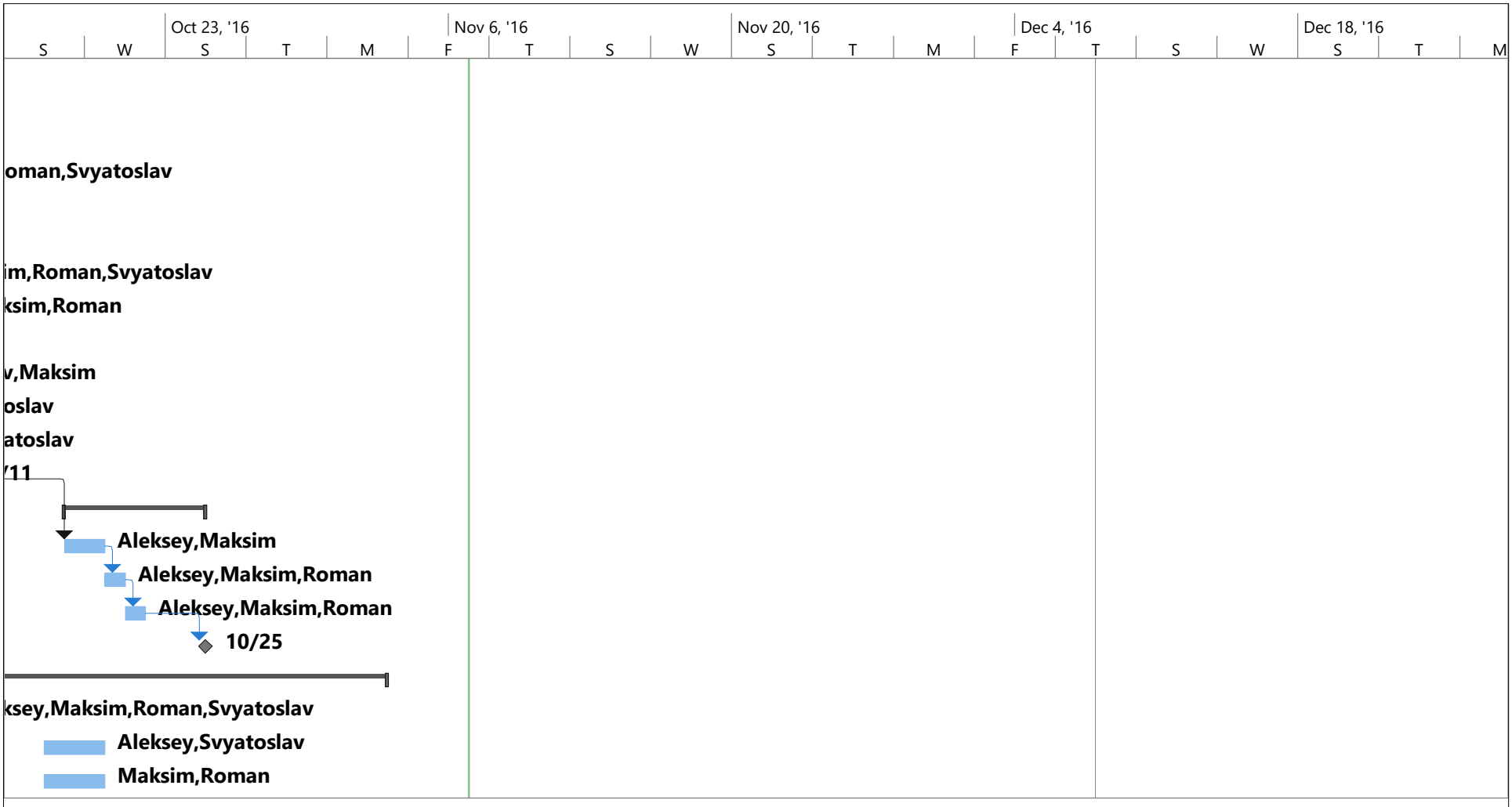

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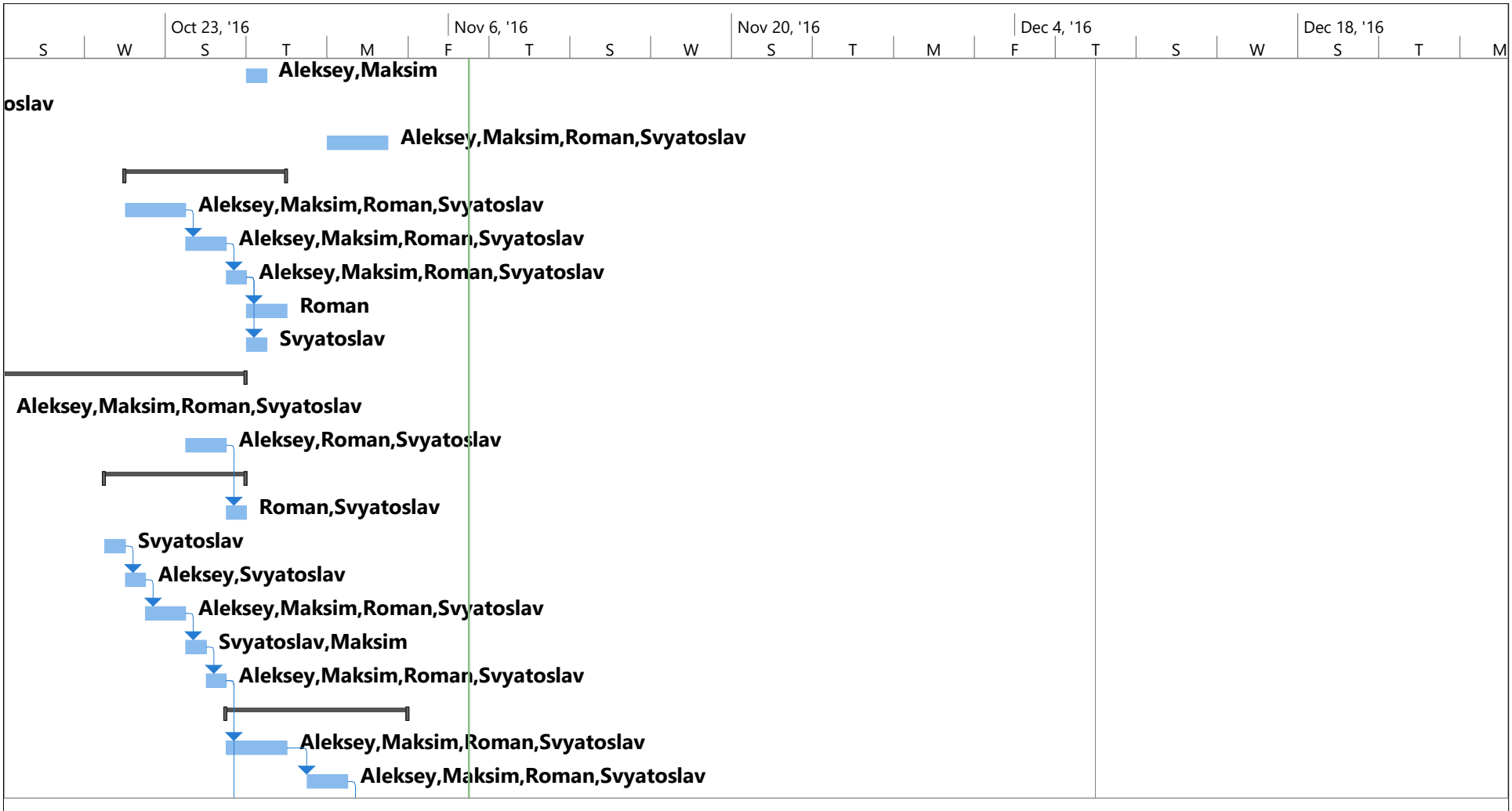

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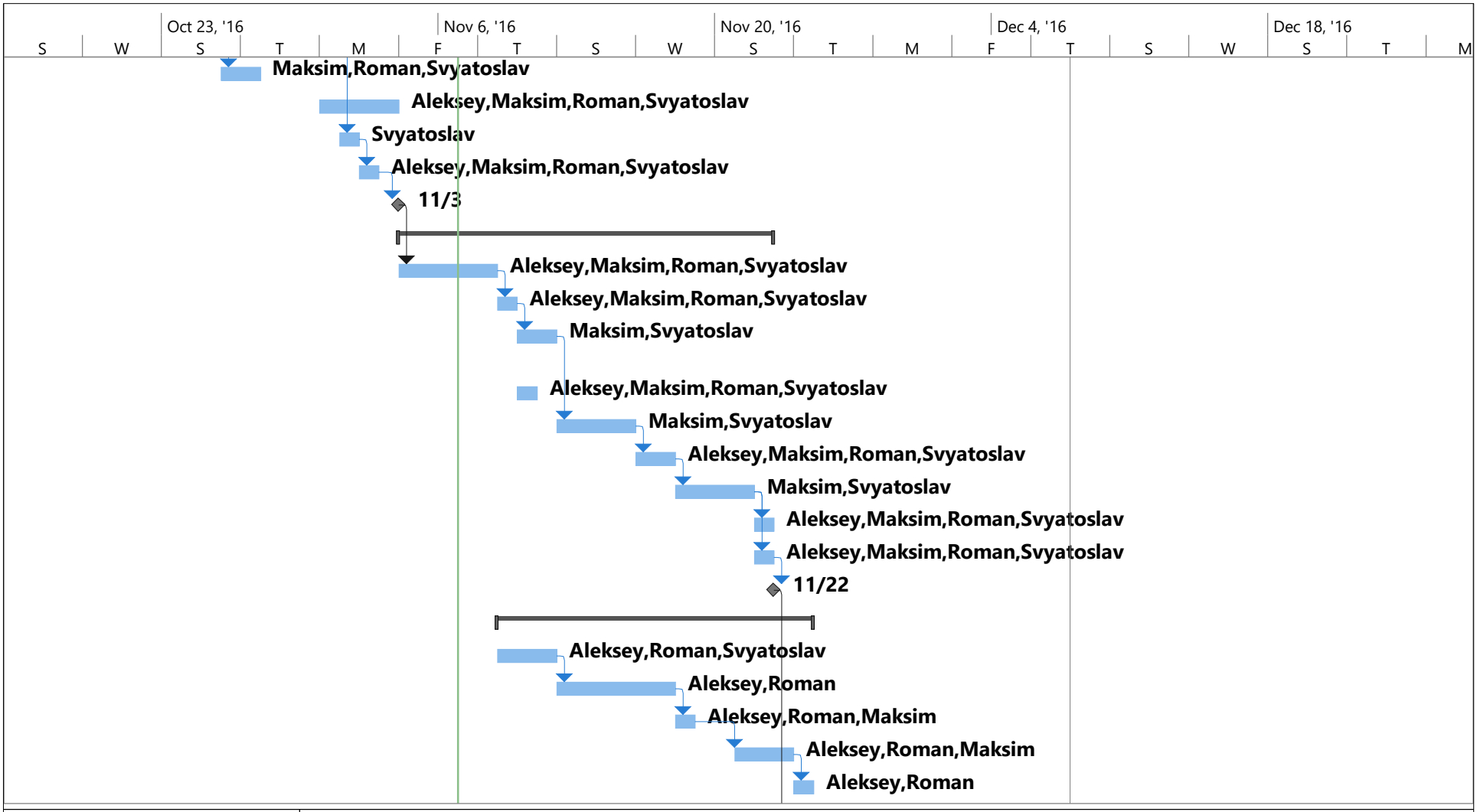

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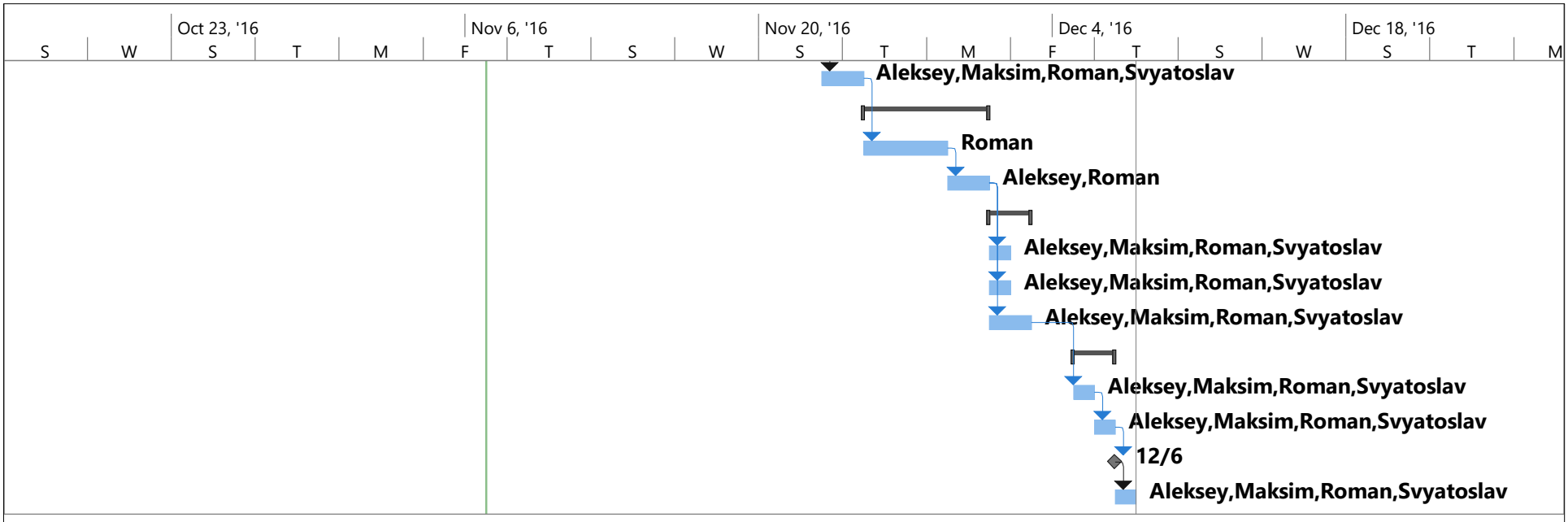

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