



Software Engineering IT314

Project: Student leave and TA assistantship management

Group: 9

- **Group Members:**

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1. Leave Form

From Date: It should be greater than equal to Current Date (From date \geq Current date)

To Date: It should be greater than equal to the Current date and From date (To date \geq From date & To date \geq From date)

Equivalence Class	FromDate	ToDate	Reason length	Expected Output
E1	\geq Current	\geq Current & \geq FromDate	≥ 1	Submit
E2	\geq Current	\geq Current & $<$ FromDate	≥ 1	Error
E3	\geq Current	$<$ Current & \geq FromDate	≥ 1	Impossible
E4	\geq Current	$<$ Current & $<$ FromDate	≥ 1	Error
E5	\geq Current	$>$ Current & $>$ FromDate	< 1	Error
E6	\geq Current	\geq Current & $<$ FromDate	< 1	Error
E7	\geq Current	$<$ Current & \geq FromDate	< 1	Impossible
E8	\geq Current	$<$ Current & $<$ FromDate	< 1	Error
E9	$<$ Current	\geq Current & $>$ FromDate	≥ 1	Impossible
E10	$<$ Current	\geq Current & $<$ FromDate	≥ 1	Impossible
E11	$<$ Current	$<$ Current & \geq FromDate	≥ 1	Error
E12	$<$ Current	$<$ Current & $<$ FromDate	≥ 1	Impossible

E13	< Current	> Current & > FromDate	<1	Error
E14	< Current	>= Current & < FromDate	<1	Impossible
E15	< Current	< Current & >= FromDate	<1	Error
E16	< Current	< Current & < FromDate	<1	Error

Let's say, Current Date: 22/04/2023

Test Case	FromDate	ToDate	Reason length	Expected Output
1	23/04/2023	24/04/2023	10	Submit
2	25/04/2023	24/04/2023	5	Error
3	23/04/2023	? < Current & >= FromDate	20	Impossible
4	29/04/2023	20/04/2023	1	Error
5	10/05/2023	15/05/2023	0	Error
6	26/04/2023	23/04/2023	0	Error
7	30/04/2023	? < Current & >= FromDate	0	Impossible
8	22/04/2023	18/04/2023	0	Error
9	18/04/2023	? >= Current & > FromDate	50	Impossible
10	21/04/2023	? >= Current & < FromDate	5	Impossible
11	22/03/2023	25/03/2023	30	Error

12	22/04/2022	? < Current & < FromDate	10	Impossible
13	02/04/2023	> Current & > FromDate	<1	Error
14	15/02/2023	? >= Current & < FromDate	<1	Impossible
15	15/04/2023	20/04/2023	<1	Error
16	03/04/2023	01/04/2023	<1	Error

Boundary Value Analysis:

From Date >= Current Date

To Date >= Current Date and To Date >= From Date

Test Case	FromDate	ToDate	Reason length	Expected Output
1	current	From+1	0	Error
2	current	From-1	0	Error
3	current	From	0	Error
4	current	current+1	0	Error
5	current	current-1	0	Error
6	current	current	0	Error
7	current+1	From+1	0	Error
8	current+1	From-1	0	Error
9	current+1	From	0	Error
10	current+1	current+1	0	Error
11	current+1	current-1	0	Error

12	current+1	current	0	Error
13	current-1	From+1	0	Error
14	current-1	From-1	0	Error
15	current-1	From	0	Error
16	current-1	current+1	0	Error
17	current-1	current-1	0	Error
18	current-1	current	0	Error
19	current	From+1	1	Submit
20	current	From-1	1	Error
21	current	From	1	Submit
22	current	current+1	1	Submit
23	current	current-1	1	Error
24	current	current	1	Submit
25	current+1	From+1	1	Submit
26	current+1	From-1	1	Error
27	current+1	From	1	Submit
28	current+1	current+1	1	Submit
29	current+1	current-1	1	Error
30	current+1	current	1	Error
31	current-1	From+1	1	Error
32	current-1	From-1	1	Error
33	current-1	From	1	Error
34	current-1	current+1	1	Error
35	current-1	current-1	1	Error
36	current-1	current	1	Error

37	current	From+1	2	Submit
38	current	From-1	2	Error
39	current	From	2	Submit
40	current	current+1	2	Submit
41	current	current-1	2	Error
42	current	current	2	Submit
43	current+1	From+1	2	Submit
44	current+1	From-1	2	Error
45	current+1	From	2	Submit
46	current+1	current+1	2	Submit
47	current+1	current-1	2	Error
48	current+1	current	2	Error
49	current-1	From+1	2	Error
50	current-1	From-1	2	Error
51	current-1	From	2	Error
52	current-1	current+1	2	Error
53	current-1	current-1	2	Error
54	current-1	current	2	Error

Decision Table-Based Testing:

[illegible]