

Black Box Testing

ERP records input test

To check whether the current time is in the ERP records

Create time records with different attributes: of (Day type, time (start and end), current time)

Target function: `inRecord` in `Application/app/static/js/manager_erps.js`

ERP Class Test sets

	Possible Input
ERP records(Day type)	Weekdays/Saturday
ERP records(Start time)	0000 to 2359
ERP records(End time)	0000 to 2359

Boundary Testing Values

Valid Equivalence Class:

ERP Records: Day Type; Start Time; End Time

{[Weekday; Start Time: 0700; End Time: 0800]}, [Saturday; Start Time: 0700; End Time: 0800]} }

Upper Boundary: ~~0758~~ 0759 0800

Lower Boundary: 0659 0700 ~~0701~~

Invalid Equivalence Class:

Start Time > End Time (24 hours format)

Upper Boundary: End Time

Lower Boundary: Start Time

Test Cases

Valid Equivalence Class

[Weekday; Start Time: 0700; End Time: 0800]			
Test Case:	DateTime Input (Date; Current Time)	Expected Output	Actual Output
1	03/11/2020 (Weekday); 0659	False	False
2	03/11/2020 (Weekday); 0700	True	True
3	03/11/2020 (Weekday); 0759	True	True
4	03/11/2020 (Weekday); 0800	False	False
5	07/11/2020 (Saturday); 0700	False	False
6	08/11/2020 (Sunday); 0700	False	False

[Saturday; Start Time: 0700; End Time: 0800]			
Test Case:	DateTime Input (Date; Current Time)	Expected Output	Actual Output
1	07/11/2020 (Saturday); 0659	False	False
2	07/11/2020 (Saturday); 0700	True	True
3	07/11/2020 (Saturday); 0759	True	True
4	07/11/2020 (Saturday); 0800	False	False
5	08/11/2020 (Sunday); 0700	False	False
6	06/11/2020 (Weekday); 0700	False	False

Invalid Equivalence Class

[Weekdays; Start Time: 0800; End Time: 0800)]			
Test Case:	DateTime Input (Date; Current Time)	Expected Output	Actual Output
1	07/11/2020 (Saturday); 0659	Throw error	Throw error

[Saturday; Start Time: 0800; End Time: 0800)]			
Test Case:	DateTime Input (Date; Current Time)	Expected Output	Actual Output
1	07/11/2020 (Saturday); 0659	Throw error	Throw error

Test Output

passes: 14 failures: 0 duration: 0.02s

100%

ERP

inRecord

Weekday

- ✓ should return false right before start time
- ✓ should return true at start time
- ✓ should return true right before end time
- ✓ should return false at end time
- ✓ should return false on Saturday
- ✓ should return false on Sunday

Saturday

- ✓ should return false right before start time
- ✓ should return true at start time
- ✓ should return true right before end time
- ✓ should return false at end time
- ✓ should return false on Sunday
- ✓ should return false on a Weekday

Invalid Record

- ✓ should throw if startTime > endTime for a Weekday record
- ✓ should throw if startTime > endTime for a Saturday record