Test cases

# Edge cases

## TEST CASE: Test scenario when is leap year.

Given that I navigate to <http://adam.goucher.ca/parkcalc/index.php>

And I select the **Economy-Parking** option from *Choose a Lot* dropdown

And I enter **12:00 AM** and **2/1/2016** in the *Choose Entry Date and Time* section

And I enter **12:00 AM** and **3/1/2016** in the *Choose Leaving Date and Time* section

When I click ***Calculate***

Then the **COST** is equal to **$ 225.00**

And the **DURATION** is **(29 Days, 0 Hours, 0 Minutes)**

**Observation:** When is not leap year (e.g. 2/1/2017 to 3/1/2017) the COST is $216.00 and DURATION is (28 Days, 0 Hours, 0 Minutes).

It would be good to do the same verification but using years. For example, 1/1/2015 through 1/1/2017 using short-term parking will have a **COST** of $ 19,008.00 and DURATION (*731 Days*, 0 Hours, 0 Minutes) whereas the same period but not including the leap year like 1/1/2017 to 1/1/2019 will be $ **18,982.00** and (*730 Days*, 0 Hours, 0 Minutes). There is one day of difference.

## TEST CASE: Test Scenario for Daylight Saving Time

Given that I navigate to <http://adam.goucher.ca/parkcalc/index.php>

And I select the **Long-Term Surface Parking-Parking** option from *Choose a Lot* dropdown

And I enter **09:30 PM** and **3/12/2016** in the *Choose Entry Date and Time* section

And I enter **11:15 PM** and **3/13/2016** in the *Choose Leaving Date and Time* section

When I click ***Calculate***

Then the **COST** is equal to **$ 14.00**

And the **DURATION** is **(1 Days, 1 Hours, 45 Minutes)**

**Observation:** When is no Daylight saving time if we chose the same data range the cost and duration will be different. For example, If we select the same parameters except with the year (let’s use 2016) the **COST** would be $ 12.00 and **DURATION** (1 Days, 0 Hours, 45 Minutes). There is one hour of difference.

## Test case: Test scenario for lower bound and upper bound costs

### Lower Bound:

Given that I navigate to <http://adam.goucher.ca/parkcalc/index.php>

And I select the **Economy-Parking** option from *Choose a Lot* dropdown

And I select **today’s date** in the *Choose Entry Date and Time* section

And I enter **today’s date + hour + 1 min** in the *Choose Leaving Date and Time* section

When I click ***Calculate***

Then the **COST** is equal to **$ 3.00**

And the **DURATION** is **(0 Days, 1 Hours, 1 Minutes)**

### Upper Bound

Given that I navigate to <http://adam.goucher.ca/parkcalc/index.php>

And I select the **Economy-Parking** option from *Choose a Lot* dropdown

And I select **today’s date** in the *Choose Entry Date and Time* section

And I enter **today’s date + hour + 31 min** in the *Choose Leaving Date and Time* section

When I click ***Calculate***

Then the **COST** is equal to **$ 4.00**

And the **DURATION** is **(0 Days, 1 Hours, 31 Minutes)**

# Invalid inputs

## TEST Case: Test Scenarios for invalid inputs

Given that I navigate to <http://adam.goucher.ca/parkcalc/index.php>

And I select the **Any-Parking** option from *Choose a Lot* dropdown

And I enter **an invalid time** and **2/1/2016** in the *Choose Entry Date and Time* section

And I enter **12:00 AM** and **3/1/2016** in the *Choose Leaving Date and Time* section

When I click ***Calculate***

Then an error message should be displayed related to the invalid input.

**Observation:** We can do the same for all time/date fields but I’ll just create this as an example.