

Post CreateTaxiStat

input/request:

url: <http://localhost:10001/api/yellowtaxi/taxitrip>

body [Json]:

```
{
  "vendorID": 2,
  "tpepPickupDatetime": "2015-01-15 19:05:42",
  "tpepDropoffDatetime": "2015-01-15 19:16:18",
  "passengerCount": 1,
  "tripDistance": 1.53,
  "pickupLongitude": "-73.991127014160156",
  "pickupLatitude": "40.750080108642578",
  "rateCodeID": 1,
  "storeAndFwdFlag": "N",
  "dropoffLongitude": "-73.988609313964844",
  "dropoffLatitude": "40.734889984130859",
  "paymentType": 2,
  "fareAmount": 9,
  "extra": 1,
  "mtaTax": 0.5,
  "tipAmount": 14.0,
  "tollsAmount": 0,
  "improvementSurcharge": 0.3,
  "totalAmount": 2.0
}
```

output/response:

```
{
  "costResponse": {
    "id": "e726e643-ad42-4c14-98c6-bcacbee53554",
    "message": "Successfully persisted",
    "status": "Success"
  },
  "extraInfoResponse": {
    "id": "e726e643-ad42-4c14-98c6-bcacbee53554",
    "message": "Successfully persisted",
    "status": "Success"
  },
  "passengerResponse": {
    "id": "e726e643-ad42-4c14-98c6-bcacbee53554",
    "message": "Successfully persisted",
    "status": "Success"
  }
}
```

```

        "status": "Success"
    },
    "timeResponse": {
        "id": "e726e643-ad42-4c14-98c6-bcacbee53554",
        "message": "Successfully persisted",
        "status": "Success"
    }
}

```

Test-Case Design:

Apply Black Box Technique Boundary value analysis.

Table Equivalence Classes:

Input Condition	Valid Equivalence Classes	Invalid Equivalence Classes
vendorID	1 [first provider] (1) 2 [second provider] (2)	empty field (3) something different to a number (4) 3 [Not a register provider] (5) -1 [Not a register provider (negative)] (6)
tpepPickupDatetime and tpepDropoffDatetime	a valid date for both and pickup date younger than dropoff (7)	empty field tpepPickupDatetime (8) empty field tpepDropoffDatetime (101) a invalid pickup date (9) a invalid dropoff date (10) a invalid date for both (11) pickup date older than dropoff (12)
passengerCount	1 passenger (13) 10 passenger (14)	empty field (15) something different to a number (16) 0 passengers (17) a negative amount of passenger (18)
tripDistance	a valid distance (19)	empty field (20) something different to a number (21) 0 distance (22) a negative distance (23)
pickupLongitude	180 (24) -180 (25)	empty field (26) something different to a number (27) 181 (28) -181 (29)
pickupLatitude	90 (30) -90 (31)	empty field (32) something different to a number (33) 91 (34) -91 (35)
rateCodeID	1 (36) 6 (37)	empty field (38) something different to a number (39) a negative number (40) 0 (41) 7 (42)
storeAndFwdFlag	Y (43) N (44)	empty field (45) something different to a

		Y and N (46)
Dropoff_longitude	180 (47) -180 (48)	empty field (49) something different to a number (50) 181 (51) -181 (52)
Dropoff_latitude	90 (53) -90 (54)	empty field (55) something different to a number (56) 91 (57) -91 (58)
Payment_type	1 (59) 6 (60)	empty field (61) something different to a number (62) a negative number (63) 0 (64) 7 (65)
fareAmount	a positive amount (66)	empty field (67) something different to a number (68) 0 (69) a negative number (70)
extra	0 (71) a positive number (72)	empty field (73) something different to a number (74) a negative number (75)
mtaTax	0 (76) a positive number (77)	empty field (78) something different to a number (79) a negative number (80)
tipAmount	0 (81) a positive number (82)	empty field (83) something different to a number (84) a negative number (85)
tollsAmount	0 (86) a positive number (87)	empty field (88) something different to a number (89) a negative number (90)
improvementSurcharge	0 (91) a positive number (92)	empty field (93) something different to a number (94) a negative number (95)
totalAmount	a positive number (96)	empty field (97) something different to a number (98) 0 (99) a negative number (100)

Write test cases that cover the classes.

Table test valid cases:

Number	Test case	Cases that cover	Expected output/response
1	{ "vendorID": 1, "tpepPickupDatetime": "2015-01-15 19:05:42", "tpepDropoffDatetime": "2015-01-15 19:16:18", "passengerCount": 1, "tripDistance": 1.53, "pickupLongitude":	(1) (7) (13) (19) (24) (30) (36) (43) (47) (53) (59) (66) (71)	ok

	"180", "pickupLatitude": "90", "rateCodeID": 1, "storeAndFwdFlag": "Y", "dropoffLongitude": "180", "dropoffLatitude": "90", "paymentType": 2, "fareAmount": 9, "extra": 0, "mtaTax": 0, "tipAmount": 0, "tollsAmount": 0, "improvementSurcharge": 0, "totalAmount": 2.0 }	(76) (81) (86) (91) (96)	
2	{ "vendorID": 2, "tpepPickupDatetime": "2015-01-15 19:05:42", "tpepDropoffDatetime": "2015-01-15 19:16:18", "passengerCount": 10, "tripDistance": 1.53, "pickupLongitude": "-180", "pickupLatitude": "-90", "rateCodeID": 6, "storeAndFwdFlag": "N", "dropoffLongitude": "-180", "dropoffLatitude": "-90", "paymentType": 2, "fareAmount": 9, "extra": 1, "mtaTax": 0.5, "tipAmount": 14.0, "tollsAmount": 1, "improvementSurcharge": 0.3, "totalAmount": 2.0 }	(14) (25) (31) (37) (44) (48) (54) (60) (72) (77) (82) (87) (92)	ok

Table test invalid cases:

Number	Test case	Case that cover	expected output/response
3	{ "vendorID": , ... }	empty field (3)	rejection request
4	{ "vendorID": A, ... }	something different to a number (4)	rejection request
5	{ "vendorID": 3, ... }	3 [Not a register provider] (5)	bad request
6	{ "vendorID": -1, ... }	-1 [Not a register provider (negative)] (6)	bad request
7	{ ... "tpepPickupDatetime": "", ... }	empty field tpepPickupDatetime (8)	bad request

8	{ ... "tpepDropoffDatetime": "", ... }	empty field tpepDropoffDatetime (101)	bad request
9	{ ... "tpepPickupDatetime": "2015-13-33 19:05:42", ... }	an invalid pickup date (9)	bad request
10	{ ... "tpepDropoffDatetime": "2015-13-33 19:05:42", ... }	an invalid dropoff date (10)	bad request
11	{ ... "tpepPickupDatetime": "2015-13-33 19:05:42", "tpepDropoffDatetime": "2015-13-33 19:05:42", ... }	invalid date for both (11)	bad request
12	{ ... "tpepPickupDatetime": "2015-01-15 20:05:42", "tpepDropoffDatetime": "2015-01-15 19:16:18", ... }	pickup date older than dropoff (12)	bad request
13	{ ... "passengerCount": , ... }	empty field (15)	rejection request
14	{ ... "passengerCount": A, ... }	something different to a number (16)	rejection request
15	{ ... "passengerCount": 0, ... }	0 passengers (17)	bad request
16	{ ... "passengerCount": -1, ... }	a negative amount of passenger (18)	bad request
17	{ ... "tripDistance": , ... }	empty field (20)	rejection request
18	{ ... "tripDistance": "A", ... }	something different to a number (21)	rejection request
19	{ ... "tripDistance": 0, ... }	0 distance (22)	bad request
20	{ ... "tripDistance": -1, ... }	a negative distance (23)	bad request
21	{ ... "pickupLongitude": "", ... }	empty field (26)	rejection request
22	{ ... "pickupLongitude": "A", ... }	something different to a number (27)	rejection request
23	{ ... "pickupLongitude": "181", ... }	181 (28)	bad request
24	{ ... "pickupLongitude": "-181", ... }	-181 (29)	bad request
25	{ ... "pickupLatitude": "", ... }	empty field (32)	rejection request
26	{ ... "pickupLatitude": "A", ... }	something different	rejection request

		to a number (33)	
27	{ ... "pickupLatitude": "91", ... }	91 (34)	bad request
28	{ ... "pickupLatitude": "-91", ... }	-91 (35)	bad request
29	{ ... "rateCodeID": , ... }	empty field (38)	rejection request
30	{ ... "rateCodeID": "A", ... }	something different to a number (39)	rejection request
31	{ ... "rateCodeID": "-1", ... }	a negative number (40)	bad request
32	{ ... "rateCodeID": "0", ... }	0 (41)	bad request
33	{ ... "rateCodeID": "7", ... }	7 (42)	bad request
34	{ ... "storeAndFwdFlag": "", ... }	empty field (45)	rejection request
35	{ ... "storeAndFwdFlag": "A", ... }	something different to a Y and N (46)	bad request
36	{ ... "dropoffLongitude": "", ... }	empty field (49)	rejection request
37	{ ... "dropoffLongitude": "A", ... }	something different to a number (50)	rejection request
38	{ ... "dropoffLongitude": "181", .. }	181 (51)	bad request
39	{ ... "dropoffLongitude": "-181", ... }	-181 (52)	bad request
40	{ .. "dropoffLatitude": "", .. }	empty field (55)	rejection request
41	{ ... "dropoffLatitude": "A", ... }	something different to a number (56)	rejection request
42	{ ... "dropoffLatitude": "91", ... }	91 (57)	bad request
43	{ ... "dropoffLatitude": "-91", ... }	-91 (58)	bad request
44	{ ... "paymentType": , ... }	empty field (61)	rejection request
45	{ ... "paymentType": "A", ... }	something different to a number (62)	rejection request
46	{ ... "paymentType": -1, ... }	a negative number (63)	bad request
47	{ ... "paymentType": 0, ... }	0 (64)	bad request
48	{ ... "paymentType": 7, ... }	7 (65)	bad request
49	{ ... "fareAmount": , ... }	empty field (67)	rejection request
50	{ ... "fareAmount": "A", ... }	something different	rejection request

		to a number (68)	
51	{ ... "fareAmount": 0, ... }	0 (69)	bad request
52	{ ... "fareAmount": -1, ... }	a negative number (70)	bad request
53	{ ... "extra": , ... }	empty field (73)	rejection request
54	{ ... "extra": "A", ... }	something different to a number (74)	rejection request
55	{ ... "extra": -1, ... }	a negative number (75)	bad request
56	{ ... "mtaTax": , ... }	empty field (78)	rejection request
57	{ ... "mtaTax": "A", ... }	something different to a number (79)	rejection request
58	{ ... "mtaTax": -1, ... }	a negative number (80)	bad request
59	{ ... "tipAmount": , }	empty field (83)	rejection request
60	{ ... "tipAmount": "A", ... }	something different to a number (84)	rejection request
61	{ ... "tipAmount": -1, ... }	a negative number (85)	bad request
62	{ ... "tollsAmount": , ... }	empty field (88)	rejection request
63	{ ... "tollsAmount": "A", ... }	something different to a number (89)	rejection request
64	{ ... "tollsAmount": -1, ... }	a negative number (90)	bad request
65	{ ... "improvementSurcharge": , ... }	empty field (93)	rejection request
65	{ ... "improvementSurcharge": "A", ... }	something different to a number (94)	rejection request
66	{ ... "improvementSurcharge": -1, ... }	a negative number (95)	bad request
67	{ ... "totalAmount": }	empty field (97)	rejection request
68	{ ... "totalAmount": "A" }	something different to a number (98)	rejection request
69	{ ... "totalAmount": 0 }	0 (99)	bad request

70	{ ... "totalAmount": -1 }	a negative number (100)	bad request
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