

Code Review

RESTAURACE

Hodnocení

Úkol splněn podle požadavků, chybí pouze bonus (*API dokumentace, odeslání e-mailu při zapomenutí hesla a napojení na externí API*). Kompletní seznam splnění položek zadání je možné najít na <https://github.com/michalnik/visitors-book/blob/main/README.md>.

Možná zlepšení

- Použít `prefetch_related` pro návštěvy (`visits`) a `annotate` pro agregované hodnoty (`rating` a `spending`) a snížit tím počet volání do databáze.
- Použít `DecimalField` serializer pro agregované hodnoty (místo `3.6666666666666665` zobrazit `"3.67"`).

```
31 class RestaurantAggregatedViewSet( # pylint: disable=too-many-ancestors
32     viewsets.ReadOnlyModelViewSet):
33     """This viewset opens summary endpoints for listing and detail view
34     """
35     queryset = Restaurant.objects.prefetch_related("visits").annotate(
36         rating=Avg("visits__evaluation"), spending=Sum("visits__expense")
37     )
38     serializer_class = RestaurantAggregatedSerializer
39     filter_backends = [filters.SearchFilter, filters.OrderingFilter]
40     search_fields = ["name", "place"]
41     ordering_fields = ["name", "place", "type"]
42     ordering = ["name"]
43
```

Přidání prefetch related a anotace agregovaných hodnot.

```
37 class RestaurantAggregatedSerializer(serializers.ModelSerializer):
38     """Serializer aggregating visits for summary view
39     """
40     visits = VisitsDateSerializer(many=True)
41     rating = serializers.DecimalField(max_digits=11, decimal_places=2)
42     spending = serializers.DecimalField(max_digits=11, decimal_places=2)
43
44     class Meta:
45         model = Restaurant
46         exclude = ["creator"]
47
```

Použití decimal field pro serializaci dat.

```

In [16]: qs = Restaurant.objects.all()

In [17]: res = RestaurantAggregatedSerializer(qs, many=True)

In [18]: res.data
Out[18]: [OrderedDict([('id', 1), ('aggregates', {'rating': 3.6666666666666665, 'spending': Decimal('681.50')})), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'Spojovna'), ('place', 'Praha 11'), ('type', 'CZ')]), OrderedDict([('id', 2), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'The Pind'), ('place', 'Praha 3'), ('type', 'HT')]), OrderedDict([('id', 4), ('aggregates', {'rating': 3.0, 'spending': Decimal('520.50')})), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'Krakonoš'), ('place', 'Pec Pod Sněžkou'), ('type', 'CZ')]), OrderedDict([('id', 5), ('aggregates', {'rating': 2.0, 'spending': Decimal('146.50')})), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'U masožravky Adély'), ('place', 'Brno'), ('type', 'FR')]), OrderedDict([('id', 6), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'Raději nechodit'), ('place', 'Černobyl'), ('type', 'GE')]), OrderedDict([('id', 3), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'Knoblauch'), ('place', 'Praha 4'), ('type', 'GE')]), OrderedDict([('id', 7), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'Knoblauch'), ('place', 's'), ('type', 'FR')])]

In [19]: num_of_queries()
15

```

Počet dotazů je 15.

```

In [12]: qs = Restaurant.objects.all().prefetch_related("visits")

In [13]: res = RestaurantAggregatedSerializer(qs, many=True)

In [14]: res.data
Out[14]: [OrderedDict([('id', 1), ('aggregates', {'rating': 3.6666666666666665, 'spending': Decimal('681.50')})), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'Spojovna'), ('place', 'Praha 11'), ('type', 'CZ')]), OrderedDict([('id', 2), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'The Pind'), ('place', 'Praha 3'), ('type', 'HT')]), OrderedDict([('id', 4), ('aggregates', {'rating': 3.0, 'spending': Decimal('520.50')})), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'Krakonoš'), ('place', 'Pec Pod Sněžkou'), ('type', 'CZ')]), OrderedDict([('id', 5), ('aggregates', {'rating': 2.0, 'spending': Decimal('146.50')})), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'U masožravky Adély'), ('place', 'Brno'), ('type', 'FR')]), OrderedDict([('id', 6), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'Raději nechodit'), ('place', 'Černobyl'), ('type', 'GE')]), OrderedDict([('id', 3), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'Knoblauch'), ('place', 'Praha 4'), ('type', 'GE')]), OrderedDict([('id', 7), ('aggregates', {'rating': None, 'spending': None}), ('visits', []), ('name', 'Knoblauch'), ('place', 's'), ('type', 'FR')])]

In [15]: num_of_queries()
9

```

Použití prefetch related pro návštěvy - počet dotazů je 9.

```

In [6]: qs = Restaurant.objects.all().prefetch_related("visits").annotate(rating=Avg("visits_evaluation"),
...: spending=Sum("visits_expense"))

In [7]: res = RestaurantAggregatedSerializer(qs, many=True)

In [8]: res.data
Out[8]: [OrderedDict([('id', 3), ('rating', None), ('spending', None), ('visits', []), ('name', 'Knoblauch'), ('place', 'Praha 4'), ('type', 'GE')]), OrderedDict([('id', 5), ('rating', '2.00'), ('spending', '146.50'), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'U masožravky Adély'), ('place', 'Brno'), ('type', 'FR')]), OrderedDict([('id', 4), ('rating', '3.00'), ('spending', '520.50'), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'Krakonoš'), ('place', 'Pec Pod Sněžkou'), ('type', 'CZ')]), OrderedDict([('id', 6), ('rating', None), ('spending', None), ('visits', []), ('name', 'Raději nechodit'), ('place', 'Černobyl'), ('type', 'GE')]), OrderedDict([('id', 2), ('rating', None), ('spending', None), ('visits', []), ('name', 'The Pind'), ('place', 'Praha 3'), ('type', 'HT')]), OrderedDict([('id', 7), ('rating', None), ('spending', None), ('visits', []), ('name', 'Knoblauch'), ('place', 's'), ('type', 'FR')]), OrderedDict([('id', 1), ('rating', '3.67'), ('spending', '681.50'), ('visits', [datetime.date(2022, 1, 16), datetime.date(2022, 1, 16), datetime.date(2022, 1, 16)]), ('name', 'Spojovna'), ('place', 'Praha 11'), ('type', 'CZ')])]

In [9]: num_of_queries()
2

```

Použití prefetch related a anotace agregovaných hodnot - počet dotazů je 2.

200 OK94.5 ms1005 B

Preview▼Header9CookieT

```
50      "name": "Raději nechodit",
51      "place": "Černobyl",
52      "type": "GE"
53    },
54    {
55      "id": 1,
56      "aggregates": {
57        "rating": 3.6666666666666665,
58        "spending": 681.5
59      },
60      "visits": [
61        "2022-01-16",
62        "2022-01-16",
63        "2022-01-16"
64      ],
65      "name": "Spojovna",
66      "place": "Praha 11",
67      "type": "CZ"
68    },
69    {
70      "id": 2,
71      "aggregates": {
72        "rating": null,
73        "spending": null
74      },
75      "visits": [],
76      "name": "The Pind",
77      "place": "Praha 3",
78      "type": "HT"
79    },
80    {
81      "id": 5,
82      "aggregates": {
83        "rating": 2.0,
84        "spending": 146.5
85      },
86      "visits": [
87        "2022-01-16",
88        "2022-01-16",
89        "2022-01-16"
90      ],
91      "name": "U masožravky Adély",
92      "place": "Brno",
93      "type": "FR"
94    }
95  ]
96 }
```

\$.store.books[*].author

200 OK49.5 ms903 B

Preview▼Header9Cookie

```
37    {
38      "id": 6,
39      "visits": [],
40      "rating": null,
41      "spending": null,
42      "name": "Raději nechodit",
43      "place": "Černobyl",
44      "type": "GE"
45    },
46    {
47      "id": 1,
48      "visits": [
49        "2022-01-16",
50        "2022-01-16",
51        "2022-01-16"
52      ],
53      "rating": "3.67",
54      "spending": "681.50",
55      "name": "Spojovna",
56      "place": "Praha 11",
57      "type": "CZ"
58    },
59    {
60      "id": 2,
61      "visits": [],
62      "rating": null,
63      "spending": null,
64      "name": "The Pind",
65      "place": "Praha 3",
66      "type": "HT"
67    },
68    {
69      "id": 5,
70      "visits": [
71        "2022-01-16",
72        "2022-01-16",
73        "2022-01-16"
74      ],
75      "rating": "2.00",
76      "spending": "146.50",
77      "name": "U masožravky Adély",
78      "place": "Brno",
79      "type": "FR"
80    }
81  ]
82 }
```

JSON výstup před a po použití decimal field pro serializaci a úpravě dotazu.