how do I sort a collection with child property?

Asked 8 years, 11 months ago   Active 7 years, 2 months ago   Viewed 15k times

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I should sort parent based on a field of child.

sample code;

```
IQueryable<Parent> data = context.Parents.Include(o=>o.Children);
```

//Child has a member (string) Name.

question: how can I sort Parent by Children Names.

linq   linq-to-sql   entity-framework-4.1

2 Answers

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Your question is somewhat confusing, since first of all, it is tagged both with Entity Framework and LINQ-to-SQL. Which ORM are your actually using?

Secondly, and more to the point, you say that you want to `"sort Parent by Children Names"`. Which child name do you want to sort by? You do realize that you can't compare a **list** of names to another **list** of names and decide which one should come before the other?

So if I assume you want to sort by the child name that comes first lexicographically, your solution would be the following (@Paul was close on this one, but you need to specify the property you are sorting by):

```
context.
Parents.
OrderBy(p => p.
        Children.
```

```
          OrderBy(c => c.Name).Select(c => c.Name).FirstOrDefault()
      );
```

In this case, consider the following setup. Parent `PA` has children `CB` and `CD` while parent `PB` has children `CC` and `CA` . As a result of the sorting, parent `PB` will come first in the sorted list, since child `CA` will be used as the "main" child for `PB` , while `CB` will be the "main" child for `PA` . If that's not the behavior you are looking for, please provide an example and a clearer description.

answered Jul 8 '11 at 14:40

Yakimych
16.5k ● 7 ● 45 ● 64

You can take one of the children names to sort by, probably select it by doing the corresponding sorting?

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Something like:

```
IQueryable<Parent> data = context.Parents.OrderBy(
    p=>p.Children.OrderBy(chi => chi.Name).FirstOrDefault());
```

answered Jul 7 '11 at 22:51

Paul
1,731 ● 1 ● 20 ● 42

hi Paul. this linq threw exception; "DbSortClause expressions must have a type that is order comparable. Parameter name: key" — Nuri YILMAZ
Jul 7 '11 at 23:05 ✎

Can you probably try the approach described here: social.msdn.microsoft.com/forums/en-US/adodotnetentityframework/... — Paul Jul 7 '11 at 23:19

@NuriYILMAZ that's because after `FirstOrDefault()` you need to get the property or column as well such as `FirstOrDefault().MyProperty1` . —
Idrees Khan May 31 '16 at 6:52 ✎