an abstract class inherits another abstract class issue

5

I have an inheritance schema like below:

```
public abstract class BaseAttachment
{
    public abstract string GetName();
}

public abstract class BaseFileAttachment:BaseAttachment
{
    public abstract string GetName();
}

public class ExchangeFileAttachment:BaseFileAttachment
{
    string name;
    public override string GetName()
    {
        return name;
    }
}
```

I basically want to call GetName() method of the ExchangeFileAttachment class; However, the above declaration is wrong. Any help with this is appreciated. Thanks

c# .net inheritance abstract-class encapsulation

edited Nov 29 '12 at 15:30
tmesser
5,328 2 19 36

asked Nov 27 '12 at 20:03
stoney78us
100 1 3 16

1 Is your intent to provide a completely new `GetName` method on `BaseFileAttachment` that *hides* `BaseAttachment.GetName` ? If not, just omit the redeclaration. – Chris Sinclair Nov 27 '12 at 20:06

@Servy For what it's worth this at least compiles fine, so there's that. I think it'd be pretty awesome to have some more detail though, for sure. – tmesser Nov 27 '12 at 20:21

@YYY It's still possible for his problem to be that his project isn't compiling, which would tell us that his problem is in code that's not posted, or that he changed something when posting the code. – Servy Nov 27 '12 at 20:22

2 Answers

19

✓

The two immediate problems I see is that your final `ExchangeFileAttachment` class is declared `abstract`, so you'll never be able to instantiate it. Unless you have another level of inheritance you are not showing us, calling it will not be possible - there's no way to access it. The other problem is that `BaseFileAttachment` has a property that is hiding the `GetName()` in `BaseAttachment`. In the structure you are showing us, it is redundant and can be omitted. So, the 'corrected' code would look more like:

```
public abstract class BaseAttachment
{
    public abstract string GetName();
}

public abstract class BaseFileAttachment : BaseAttachment
{
}

public class ExchangeFileAttachment : BaseFileAttachment
{
    string name;
    public override string GetName()
    {
        return name;
    }
}
```

I put corrected in quotes because this use-case still does not make a ton of sense so I'm hoping you can give more information, or this makes a lot more sense on your end.

answered Nov 27 '12 at 20:12

11

Just remove the redeclaration from `BaseFileAttachment` :

```
public abstract class BaseFileAttachment : BaseAttachment
{
}
```

`BaseFileAttachment` already inherits the abstract `GetName` declaration from `BaseAttachment` . If you really want to mention it again in `BaseFileAttachment` , use the `override` keyword:

```
public abstract class BaseFileAttachment : BaseAttachment
{
    public override abstract string GetName(); // that's fine as well
}
```

answered Nov 27 '12 at 20:10

Heinzi

126k 40 281 419

this works! thanks – stoney78us Nov 27 '12 at 20:30