

# If I don't have any items, what error should my `IFolderView::Items` method return?

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A customer wanted to know what error code their shell extension should return from the `IFolderView::Items` method if their folder has no items.

This was a trick question, because you shouldn't return an error at all!

Returning an error means, "I was unable to retrieve the list of items. Something terrible happened!" This generally leads to a cascade of failures, and Explorer gives up on your shell extension.

If you want to say "I have no items," then return `S_OK` and an empty collection. If the requested interface is `IEnumIDList`, then return an enumerator that enumerates on objects. If the requested interface is `IShellItemArray`, then return a zero-sized array.

The point is that you want to say "I was able to get the items. And here they are!" (And you give them an empty collection.)

This is a general principle for all collection-returning functions: If you want to return an empty collection, then return an empty collection.<sup>1</sup> Don't return an error.

Embrace the power of the empty set.

By analogy, suppose you had a method

```
class WidgetContainer
{
public:
    std::vector<Widget> GetActiveWidgets();
};
```

If there are no active Widgets in the `WidgetContainer`, you shouldn't throw an exception. You should just return an empty `std::vector`.

<sup>1</sup> In this case, the customer also tried returning `S_OK` and a null pointer from the `IFolderView::Items` method. This caused Explorer to crash on a null pointer, because Explorer asked for the items, and you said, “Sure, here they are!” and gave a null pointer.

There are some methods, such as `IShellFolder::EnumObjects`, which carve out a special case that permits you to return `S_FALSE` and a null pointer as the result. But these are special cases that apply only if the method explicitly permits it. And even then, they don’t allow you return a failure; returning a failure means that you were unable to get the items at all.