

# Model traversing, Visitor pattern

Here is an example of how to collect all children from the [com.nomagic.uml2.ext.magicdraw.classes.mdkernel.Element](#) and avoid recursion using a simple *for* cycle:

```
List<Element> children = new ArrayList<Element>();
Element current = ...
children.add(current);
// if the current element has children, list will be increased.
for (int i = 0; i < children.size(); i++)
{
    current = children.get(i);
    // add all children into end of this list, so it emulates a
    recursion.
    children.addAll(current.getOwnedElement());
}
```

It is highly recommended to use more advanced collecting methods from [com.nomagic.magicdraw.uml.Finder](#) utility:

- [byScope\(\)](#)
- [byType\(\)](#)
- [byTypeRecursively\(\)](#)

## Related pages

- [Visitors](#)
- [ModelHierarchyVisitor](#)