

Access Level Modifiers in Java

- There are **four access level modifiers**:

1. public
2. 'default' ("package" or "friendly")
3. protected
4. private

Note: Within a **project**, all classes are considered to be in the same **package** (i.e. anything not imported is together in the “**default package**”).

- Each class can either be “**public**”, meaning *anyone can create one instance of it*, or “**friendly**”, meaning it *can be instantiated only by methods of classes in the package*.
- Any of the 4 access level modifiers can be chosen for any *instance variable* (data member), *method*, or *class variable* (**static variable**). The table on the right summarises what they imply:

| Access is available to: | public | protected | default | private |
|-----------------------------|---------------|------------------|----------------|----------------|
| All classes | yes | no | no | no |
| All subclasses | yes | yes | no | no |
| Classes in the same package | yes | yes | yes | no |
| Class itself | yes | yes | yes | yes |