

Course Name - Object Oriented Programming using Java

Java Packages -Definition, Creation of Packages

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Topic of Interest

- ▶ Concept of Package
- ▶ Categories of Package
- ▶ Advantages of JAVA Package
- ▶ Package Creation

Concept of Package

- A java package is a group of similar types of classes, interfaces and sub-packages.
- Packages are divided into two categories:
 - Built-in Packages (packages from the Java API)
 - User-defined Packages (create your own packages)

Categories of Package

□ Built-in Packages:

- The Java API is a library of prewritten classes, that are free to use, included in the Java Development Environment.
- The library contains components for managing input, database programming, and much more.
- The library is divided into **packages** and **classes**. Meaning you can either import a single class (along with its methods and attributes), or a whole package that contain all the classes that belong to the specified package.

Categories of Package Continued...

- ❑ To use a class or a package from the library, you need to use the **import** keyword.

- ❑ Syntax:

```
import package.name.Class;    //Import a single class
import package.name.*;       //Import the whole package
```

- ❑ User-defined Packages:

- ❑ JAVA provides a facility to create package as per user need.
- ❑ To create such package, use the **package** keyword.

Advantages of JAVA Package

- Java package is used to categorize the classes and interfaces so that they can be easily maintained.
- Java package provides access protection using different type of access specifier like default, protected, private, public etc.

Package Creation

Example to illustrate package criteria:

ClassA.java(Inside java\package1)

```
package package1;  
public class ClassA{  
    public void displayA()  
    {  
        System.out.println("Class A");  
    }  
}
```

*Thank
You*