



SNS COLLEGE OF ENGINEERING



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Department of Information Technology

19CS204 OBJECT ORIENTED PROGRAMMING

I YEAR /II SEMESTER

Unit 1- INTRODUCTION TO OOP

Structure of Java Program





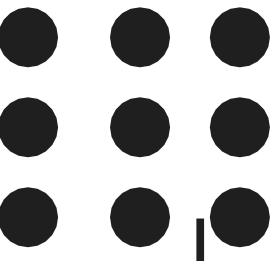
Structure of Java Program



Documentation Section
Package Statement
Import Statement
Interface Statement
Class Definition
Main Method Class { //Main method defintion }



Structure of Java Program

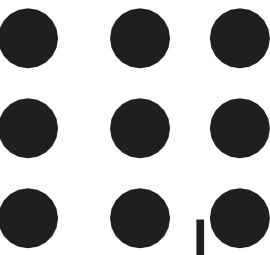


Documentation Section

- The documentation section is an important section but optional for a Java program.
- It includes basic information about a Java program.
- The information includes the author's name, date of creation, version, program name, company name, and description of the program.
- Whatever we write in the documentation section, the Java compiler ignores the statements during the execution of the program.
- To write the statements in the documentation section, we use comments.
- The comments may be **single-line, multi-line, and documentation comments**



Structure of Java Program



Single-line Comment:

It starts with a pair of forwarding slash (//).

For example: // First Java Program

Multi-line Comment:

It starts with a /* and ends with */.

We write between these two symbols.

For example: /*It is an example of multiline comment*/

Documentation Comment: It starts with the delimiter (/**) and ends with */.

For example: /**It is an example of documentation comment*/



Structure of Java Program

Package Statement

- A package is a group of classes that are defined by a name.
- That is, if you want to declare many classes within one element, then you can declare it within a package.
- It is an optional part of the program, i.e., if you do not want to declare any package, then there will be no problem with it, and you will not get any errors.
- Here, the package is a keyword that tells the compiler that package has been created.

Example:

```
package package_name;
```



Structure of Java Program



Import Statements

- The package contains the many predefined classes and interfaces.
- If we want to use any class of a particular package, we need to import that class.
- The import statement represents the class stored in the other package.
- We use the import keyword to import the class.
- It is written before the class declaration and after the package statement.

Example

```
import java.util.Date; //imports the date class
```

```
import java.applet.*; //imports all the classes from the java applet package
```



Structure of Java Program



Interface Statement

- Interfaces are like a class that includes a group of method declarations.
- It's an optional section and can be used when programmers want to implement multiple inheritances within a program.
- An interface is a lot similar to a class in Java but it contains only constants and method declarations.
- An interface cannot be instantiated but it can be implemented by classes or extended by other interfaces.

Example

```
interface stack
{
void push(int item);
void pop();
}
```



Structure of Java Program

Class Definition

- A Java program may contain several class definitions, classes are an essential part of any Java program.
- It defines the information about the user-defined classes in a program.
- A class is a collection of variables and methods that operate on the fields.
- Every program in Java will have at least one class with the main method.

Main Method Class

- The main method is from where the execution actually starts and follows the order specified for the following statements.
- There may be many classes in a Java program, and only one class defines the main method. Methods contain data type declaration and executable statements.



THANK YOU