

ECAP615

Programming in Java



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Learning Outcomes

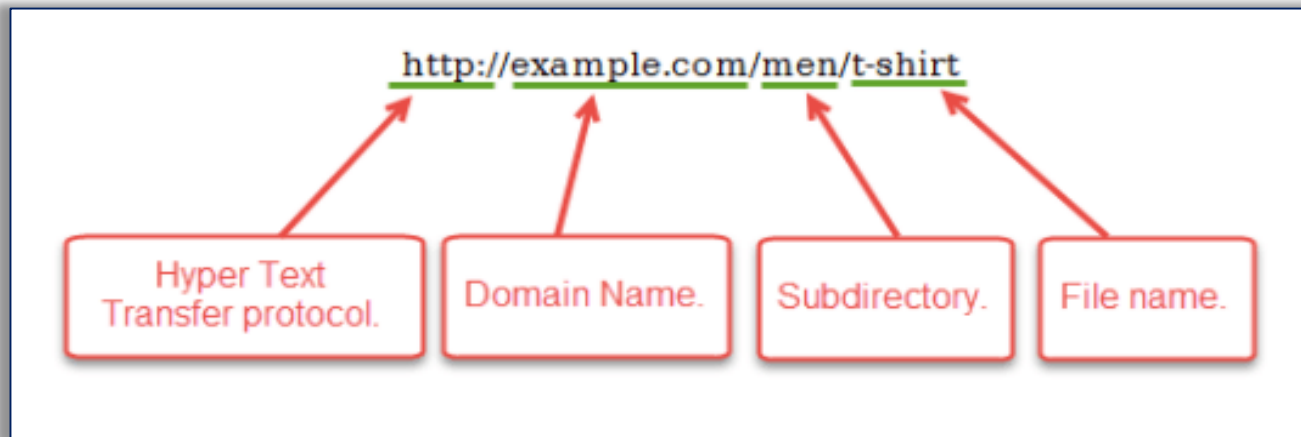


After this lecture, you will be able to

- learn the basic concept URL and URLConnection Class
- understand the various methods of URL and URLConnection Class
- implementation of URL and URLConnection Class

URL

- URL is a string of text that identifies all the resources on Internet, telling us the address of the resource, how to communicate with it and retrieve something from it.
- A Simple URL looks like:



URL Class

- The URL class is the gateway to any of the resource available on the internet.
- A Class URL represents a Uniform Resource Locator, which is a pointer to a “resource” on the World Wide Web.
- A resource can point to a simple file or directory, or it can refer to a more complicated object .
- The URL class in java is built in the java.net.URL package of java.

Constructors of URL class

- `URL(String address)` throws `MalformedURLException`
- `URL(String protocol, String host, String file)`
- `URL(String protocol, String host, int port, String file)`

Constructors of URL class

- `URL(URL context, String spec)`
- `URL(String protocol, String host, int port, String file, URLStreamHandler handler)`
- `URL(URL context, String spec, URLStreamHandler handler)`

Methods of URL Class

- `public String getProtocol()`
- `public String getHost()`
- `public String getPort()`
- `public String getFile()`

Methods of URL Class

- `public String getAuthority()`
- `public String toString()`
- `public String getQuery()`
- `public String getDefaultPort()`

Methods of URL Class

- `public String getPath()`
- `public boolean equals(Object obj)`
- `public Object getContent()`
- `public String getRef()`

URLConnection Class

- The `URLConnection` class represents a communication link between the URL and the application.
- It can be used to read and write data to the specified resource referred by the URL.

URLConnection Class

There are mainly two subclass that extends the `URLConnection` class-

- ✓ `HttpURLConnection`
- ✓ `JarURLConnection`

Features of URLConnection class

- URLConnection is an abstract class.
- With the help of URLConnection class, a user can read and write to and from any resource referenced by an URL object.
- Once a connection is established and the Java program has an URLConnection object, we can use it to read or write or get further information.

Methods of URLConnection Class

- `URLConnection.openConnection()`
- `Object getContent()`
- `Map<String,List> getHeaderFields()`
- `getContentEncoding()`

Methods of URLConnection Class

- `getLength()`
- `getDate()`
- `getHeaderField(int i)`
- `getHeaderField(String field)`

Methods of URLConnection Class

- `OutputStream getOutputStream()`
- `InputStream getInputStream()`
- `setAllowUserInteraction(boolean)`

Methods of URLConnection Class

- `setDefaultUseCaches(boolean)`
- `setDoInput(boolean)`
- `setDoOutput(boolean)`



That's all for now...