ПЛАТФОРМЕНО-НЕЗАВИСИМИ ПРОГРАМНИ ЕЗИЦИ

Лекция 9
ВХОДНО-ИЗХОДНИ ПОТОЦИ

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СЪДЪРЖАНИЕ

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- ИЗХОДНИ ПОТОЦИ

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Абстрактен клас за входни потоци:
- Родителски клас
- Интерфейси


```
public abstract class InputStream
extends Object
implements Closeable
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Абстрактен клас
за входни потоци:
– методи

```
public int read(byte[],int,int) throws IOException
public int read(byte[]) throws IOException
public abstract int read() throws IOException
public void close() throws IOException
public synchronized void mark(int)
public byte[] readAllBytes() throws IOException
public byte[] readNBytes(int) throws IOException
public int readNBytes(byte[],int,int) throws IOException
public long transferTo(OutputStream) throws IOException
public long skip(long) throws IOException
public int available() throws IOException
public boolean markSupported()
public synchronized void reset() throws IOException
public static InputStream nullInputStream()
public void skipNBytes(long) throws IOException
```

```
public abstract class InputStream
extends Object
implements Closeable
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Абстрактен клас
за входни потоци:
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public int read(byte[],int,int) throws IOException
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public byte[] readNBytes(int) throws IOException
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public long transferTo(OutputStream) throws IOException
public long skip(long) throws IOException
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public boolean markSupported()
public synchronized void reset() throws IOException
public static InputStream nullInputStream()
public void skipNBytes(long) throws IOException
```

```
public abstract class InputStream
extends Object
implements Closeable
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Абстрактен клас
за входни потоци:
– примерно
   ползване

```java
public abstract class InputStream
extends Object
implements Closeable
```

```java
int data = inputstream.read();
while(data != -1) {

    //do something with data...
    doSomethingWithData(data);

    data = inputstream.read();
}
inputstream.close();
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Файлов поток -
клас за входни
потоци от файл:
– наследяване

```
java.io

Class FileInputStream

java.lang.Object
      java.io.InputStream
            java.io.FileInputStream

All Implemented Interfaces:

      Closeable, AutoCloseable
```

```
public class FileInputStream
extends InputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Файлов поток - клас за входни потоци от файл:
- конструктори

```
public FileInputStream(FileDescriptor)
public FileInputStream(File) throws FileNotFoundException
public FileInputStream(String) throws FileNotFoundException
```

```
public class FileInputStream
extends InputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Входни потоци:
– примерно
ползване

```java
InputStream inputstream
    = new FileInputStream("c:\\myfile.txt");

int data = inputstream.read();
while(data != -1) {

    //do something with data...
    doSomethingWithData(data);

    data = inputstream.read();
}

inputstream.close();
```

```java
public class FileInputStream
extends InputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Входни потоци:
– примерно ползване с подобрена инициализация

```java
InputStream inputstream = null;
try {
    inputstream =
            new FileInputStream( new File("c:\\myfile.txt") );
} catch (FileNotFoundException e) {
    e.printStackTrace();
}
```

```java
public class FileInputStream
extends InputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас File:
- Родителски клас

- интерфейси

java.io

Class File

java.lang.Object
    java.io.File

All Implemented Interfaces:

   Serializable, Comparable<File>

```
public class File
extends Object
implements Serializable, Comparable<File>
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас File:
- конструктори

- ...

```
public File(String)
public File(String,String)
public File(java.net.URI)
public File(File,String)
```

```
public class File
extends Object
implements Serializable, Comparable<File>
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас File:

– конструктори

– методи

```
public class File
extends Object
implements Serializable, Comparable<
```

```
public String getName()
public boolean equals(Object)
public long length()
public String toString()
public int hashCode()
public boolean isHidden()
public int compareTo(File)
public int compareTo(Object)
public String[] list()
public String[] list(FilenameFilter)
public boolean isAbsolute()
public String getParent()
public boolean delete()
public boolean setReadOnly()
public boolean canRead()
public String getPath()
public java.net.URI toURI()
public java.net.URL toURL() throws java.net.MalformedURLException
public boolean exists()
public boolean createNewFile() throws IOException
public boolean renameTo(File)
public String getAbsolutePath()
public String getCanonicalPath() throws IOException
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас File:
- – конструктори
- – някои методи

```
public boolean isDirectory()
public File getAbsoluteFile()
public boolean mkdir()
public File getCanonicalFile() throws IOException
public File getParentFile()
public boolean mkdirs()
public boolean setWritable(boolean)
public boolean setWritable(boolean,boolean)
public boolean setReadable(boolean)
public boolean setReadable(boolean,boolean)
public boolean setExecutable(boolean,boolean)
public boolean setExecutable(boolean)
public static File[] listRoots()
public static File createTempFile(String,String,File) throws IOException
public static File createTempFile(String,String) throws IOException
public boolean canWrite()
public boolean isFile()
public long lastModified()
public void deleteOnExit()
public File[] listFiles(FilenameFilter)
public File[] listFiles(FileFilter)
public File[] listFiles()
```

```
public class File
extends Object
implements Serializable, Comp
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас FileOutputStream:
- родителски клас
- интерфейси

java.io

Class FileOutputStream

java.lang.Object
    java.io.OutputStream
        java.io.FileOutputStream

All Implemented Interfaces:

Closeable, Flushable, AutoCloseable

```
public class FileOutputStream
extends OutputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас FileOutputStream:
- конструктори

```
public FileOutputStream(FileDescriptor)
public FileOutputStream(File,boolean) throws FileNotFoundException
public FileOutputStream(File) throws FileNotFoundException
public FileOutputStream(String,boolean) throws FileNotFoundException
public FileOutputStream(String) throws FileNotFoundException
```

```
public class FileOutputStream
extends OutputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас FileOutputStream:
– методи

```
public void FileOutputStream.write(int) throws IOException
public void FileOutputStream.write(byte[]) throws IOException
public void FileOutputStream.write(byte[],int,int) throws IOException
public void FileOutputStream.close() throws IOException
public final FileDescriptor FileOutputStream.getFD() throws IOException
public java.nio.channels.FileChannel FileOutputStream.getChannel()
public void OutputStream.flush() throws IOException
public static OutputStream OutputStream.nullOutputStream()
```

```
public class FileOutputStream
extends OutputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Клас FileOutputStream:
- пример

```java
FileOutputStream fout;
try {

    fout = new FileOutputStream("D:\\testout.txt");
    fout.write(65);
    fout.close();
    System.out.println("saved.");

} catch (FileNotFoundException e) {
    e.printStackTrace();
} catch (IOException ioe) {
    ioe.printStackTrace();
}
```

```java
public class FileOutputStream
extends OutputStream
```

ВХОДНО-ИЗХОДНИ ПОТОЦИ

Класове за работа с текст:
- FileReader, FileWriter

java.io

Class FileReader

java.lang.Object
    java.io.Reader
        java.io.InputStreamReader
            java.io.FileReader

All Implemented Interfaces:

Closeable, AutoCloseable, Readable

java.io

Class FileWriter

java.lang.Object
    java.io.Writer
        java.io.OutputStreamWriter
            java.io.FileWriter

All Implemented Interfaces:

Closeable, Flushable, Appendable, AutoCloseable

ВЪПРОСИ