

Aufgaben

Kapitel 12.1 bis 12.6

1. Lesen Sie im Lehrbuch die Kapitel 12.1. bis und mit 12.3., um sich generell mit dem Thema Fehlerbehandlung vertraut zu machen.

done

2. Studieren Sie im Lehrbuch die Kapitel 12.4. bis und mit 12.6.

done

3. Lösen Sie im Lehrbuch die Aufgaben 12.22 bis und mit 12.24 und 12.28.

12.22:

<http://docs.oracle.com/javase/6/docs/api/java/io/package-summary.html>

<i>CharConversionException</i>	<i>Base class for character conversion exceptions.</i>
<i>EOFException</i>	<i>Signals that an end of file or end of stream has been reached unexpectedly during input.</i>
<i>FileNotFoundException</i>	<i>Signals that an attempt to open the file denoted by a specified pathname has failed.</i>
<i>InterruptedIOException</i>	<i>Signals that an I/O operation has been interrupted.</i>
<i>InvalidClassException</i>	<i>Thrown when the Serialization runtime detects one of the following problems with a Class.</i>
<i>InvalidObjectException</i>	<i>Indicates that one or more deserialized objects failed validation tests.</i>
<i>IOException</i>	<i>Signals that an I/O exception of some sort has occurred.</i>
<i>NotActiveException</i>	<i>Thrown when serialization or deserialization is not active.</i>
<i>NotSerializableException</i>	<i>Thrown when an instance is required to have a Serializable interface.</i>
<i>ObjectStreamException</i>	<i>Superclass of all exceptions specific to Object Stream classes.</i>
<i>OptionalDataException</i>	<i>Exception indicating the failure of an object read operation due to unread primitive data, or the end of data belonging to a serialized object in the stream.</i>
<i>StreamCorruptedException</i>	<i>Thrown when control information that was read from an object stream violates internal consistency checks.</i>
<i>SyncFailedException</i>	<i>Signals that a sync operation has failed.</i>
<i>UnsupportedEncodingException</i>	<i>The Character Encoding is not supported.</i>
<i>UTFDataFormatException</i>	<i>Signals that a malformed string in modified UTF-8 format has been read in a data input stream or by any class that implements the data input interface.</i>
<i>WriteAbortedException</i>	<i>Signals that one of the ObjectStreamExceptions was thrown during a write operation.</i>

12.23:

<http://docs.oracle.com/javase/6/docs/api/java/lang/package-summary.html>

SecurityException: unchecked exception

NoSuchMethodException: checked exception

Checked exception erben von Exception

Unchecked exception erben von RuntimeException

12.24:

```
public void addDetails(ContactDetails details)
{
    if(details == null) {
        throw new IllegalArgumentException("Null details passed to addDetails.");
    }
    book.put(details.getName(), details);
    book.put(details.getPhone(), details);
    numberOfEntries++;
}

public void changeDetails(String oldKey,
                          ContactDetails details)
{
    if(details == null) {
        throw new IllegalArgumentException("Null details passed to changeDetails.");
    }
    if(oldKey == null){
        throw new IllegalArgumentException("Null key passed to changeDetails.");
    }
    if(keyInUse(oldKey)){
        removeDetails(oldKey);
        addDetails(details);
    }
}

public void removeDetails(String key)
{
    if(key == null){
        throw new IllegalArgumentException("Null key passed to removeDetails.");
    }
    if(keyInUse(key)) {
        ContactDetails details = book.get(key);
        book.remove(details.getName());
        book.remove(details.getPhone());
        numberOfEntries--;
    }
}
```

12.28:

Nach dem try-catch Block wird versucht auf die Variable p zu referenzieren – im Fehlerfall funktioniert dies nicht und erzeugt sogleich eine Exception.

4. Beantworten Sie die Kontrollfragen A und B im Handout PRG2_OOP7.
Siehe PRG2_OOP7_KF.docx / PRG2_OOP7_KF.pdf
5. Führen Sie die Beispiele aus dem Archiv PRG2_OOP7.ZIP aus.
Es handelt sich hier um die Beispiele aus dem Theorie-Input.
Done.