Chapter 12 - Packages

Interpreter vs Compiler Interpreter translates one statement at a time into machine Code: Compiler scans the entire program and translates whole of it into machine code. Interpreter Compiler * Entire program at a time

* One statement at a time * Interpreter is needed everytime * Once compiled it is not needed

* Partial execution if error * No execution if an error occurs * Easy for programmers * Vsually not as easy as Interpreted ones

Is lava compiled or Interpreted? Java is a hybrid language - both compiled as well as interpreted

Java File (using savac) harry class by kode Can be used by Java interpreter

- → A JVM can be used to Interprete this bykcode

 This bytecode can be taken to any platform (wn/Mac/Linux)
 for execution
- Hence Java is platform independent (write once run everywhere)

| | Executing a Java Program |
|-------|--|
| | Javac Harry Java → Compiled Java Harry Class → Interpreted |
| essa. | Javac Harry Java → Compiled Java Harry Class → Interpocked |
| Anuf | So fare the execution of our program was being |
| | So fare the execution of our program was being managed by intelly Idea: We can download a source code editor like V5 (ade to compile & execute our Java programs. |
| | |
| 1/11 | A hackage is used to agout related classes |
| | Packages help in avoiding name conflicts. |
| * | Packages in Java A package is used to group related classes Packages help in avoiding name conflicts There are two types of packages: Built in packages - Java API War de Greed Backages - Greeken herbers |
| * | Vser definéed packages -> custom packages |
| | Song. mp3 photos photo2. Jpg Song3. mp3 Songs photos videos |
| | photo2. Jpg Song 3 mp3 organized videos wideos videos os folders |
| | |
| | 1. class this Java my mp3 => Song Java harry Java as packages |
| | Using a Java package |
| | |
| | import java larg * \rightarrow import everything from Java larg import java larg String \rightarrow import String from Java larg 5 = new Java larg String ("Harry") \rightarrow Use Without importing |
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| | • | | | | | |
| Cre | atina a | hackage | NINSON P | a a Java | Carriton | |
| 10 | Creating a package Javac Harry java -> Creates Harry class javac -d. Harry java -> Creates a package folder L. We can keep adding classes to ra package like this | | | | | |
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| Jan | ac -d. | Harry Java - | - crous | a package to | all | |
| | | AMAKERS | | to a backone | ridging Classes | |
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| WC | can also | Create inne | r packages | by addin | 9 package inner | |
| as | package | name | and w | be used | folder Subfolder | |
| - he | re park | ages once (| reated can | be used | MI IN | |
| by | other | Classes. | 1 country | to compile | VS Code | |
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| Acu | ss Modi | fiers in Java | | in Java- | Parkages | |
| Acc | ess modif | iers determ | ine whether | r other cla | sses Can use | |
| a | barti | cular field | og invoke | a particular | method | |
| Can | i be | bullic bri | vate protect | ted or default | (no modilier) | |
| | | 1, 2, 11 | 194 | - Assarkand | NI HINS | |
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