Concept Guide: Decision Structure - Branching

Course: CS 200

Introduction to Java Programming, Comprehensive Version, 11th ed. Text

Chapter: 3 Selections

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| Concept/Topic: | Text Notes: | Lecture Notes: |
| Logic Operators  and  Compound Logic Statements |  | (see table included) |
| Boolean data type |  |  |
| Using Boolean Data Type:  Assignment and  Comparing Value  Vs.  Direct Use |  |  |
| How can a user enter a Boolean? |  |  |
| coding literals:  true  false |  |  |
| Short-circuit/  Lazy Evaluation  Vs.  Complete  Evaluation |  |  |
| What is a decision structure? |  |  |
| if statement flow structure |  |  |
| if statement  syntax |  |  |
| if-else statement flow structure |  |  |
| if-else statement  syntax |  |  |
| Lab Time! |  |  |
| The nested if statement flow structure |  |  |
| nested if statement  syntax |  |  |
| The if-else if - else statement flow structure |  |  |
| if-else if - else  statement  syntax |  |  |
| Lab Time! |  | Use Lab Doc 02  Modify the code to place the grade of ‘A’ message in the first if statement.  Also validate data to be in the range of 0-100 inclusive |
| Comparing String Objects |  |  |
| Conditional Operator |  | (see sample code) |
| Decision structures:  binary decision  Vs.  Multiple choice decision  A case for the switch/case |  | (see table included) |
| flowcharting  if-else if – else  Vs.  switch/case |  |  |
| controlling expression |  |  |
| the case label |  |  |
| the break statement |  |  |
| the default statement |  |  |
| switch/case syntax |  | int input= 3; //input should be entered from user  switch (input)  {  case 1:  //commands for billing  break;  case 2:  case 3:  //commands for TechSupport & change password  break;  case 4:  default:  //both incorrect selection and customer  //service takes you to  //someone to help you.  } |
| Lab Time! |  |  |



