


Awarding Great British Qualifications



Designing and Developing Object-Oriented Computer Programmes

Topic 6:


Consolidation (1)

1

Title of Topic: Topic 1 - 1.2

Scope and Coverage

Topic 6 – This is a consolidation topic




2

Title of Topic: Topic 1 - 1.3

Learning Outcomes

By the end of this topic students will be able to:

- Integrate all unit material to date into a worked example.*




3

Title of Topic: Topic 1 - 1.4

Introduction - 1

- This chapter is going to change the format of the unit briefly, permitting you time to strengthen your understanding of the material covered to date.
- Here, we'll look at a worked example that draws everything we have discussed together into a single, coherent program that you will develop independently before the solution is discussed as a class.




4

Title of Topic: Topic 1 - 1.5

Introduction - 2

- Refer to the previous chapters for guidance on how to make use of all the tools you have available.
- All of these will be important.
- You'll need to make use of:
 1. Events
 2. GUI components
 3. Selection structures
 4. Objects
- Ensure that you are comfortable with these before beginning.




5

Title of Topic: Topic 1 - 1.6

The Electronic Cash Machine - 1

- A company called 'Money Marketplace' has contacted you to build a prototype of the automated cash machine system they are intending to put into production.
- Before building large, expensive hardware devices that are installed in shops and other convenient locations, they wish to test a small scale simulation for usability.
- They've hired you to do that work.



6

Title of Topic: Topic 1 - 1.7

The Electronic Cash Machine - 2

- A user interface designer attached to the project has provided you with a storyboard from which you should work:

Balance

Withdraw

Withdraw with Receipt


Confirm

Deny

Money Marketplace

Enter Your Pin Number to login.

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7

Title of Topic: Topic 1 - 1.8

The Electronic Cash Machine - 3

- The user for this application should make use of the keypad you provide to enter a four digit personal identifier number (PIN).
- This will be checked against a number of objects stored in the program to see which account should be made active.
- Pressing 'Balance' will show the balance of the account on the main display.




8

Title of Topic: Topic 1 - 1.9

The Electronic Cash Machine - 4

- Pressing 'Withdraw' will prompt the user to type a value to withdraw into the display before pressing 'Confirm' or 'Deny' to approve or deny the transaction.
- 'Withdraw with Receipt' will show a window on the main display that lists the last transaction performed on the account.




9


Title of Topic: Topic 1 - 1.10

The Electronic Cash Machine - 5

- The underlying bank simulation should ensure that it's not possible to withdraw money if there is no sufficient sum available in the account.
- Your task is to write the code for this application.
- Refer to the tasks in the **Student Guide** to complete this project.

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Any Questions?

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