



Government of **Western Australia**
School Curriculum and Standards Authority



ATAR course examination, 2018

COMPUTER SCIENCE

SOURCE BOOKLET

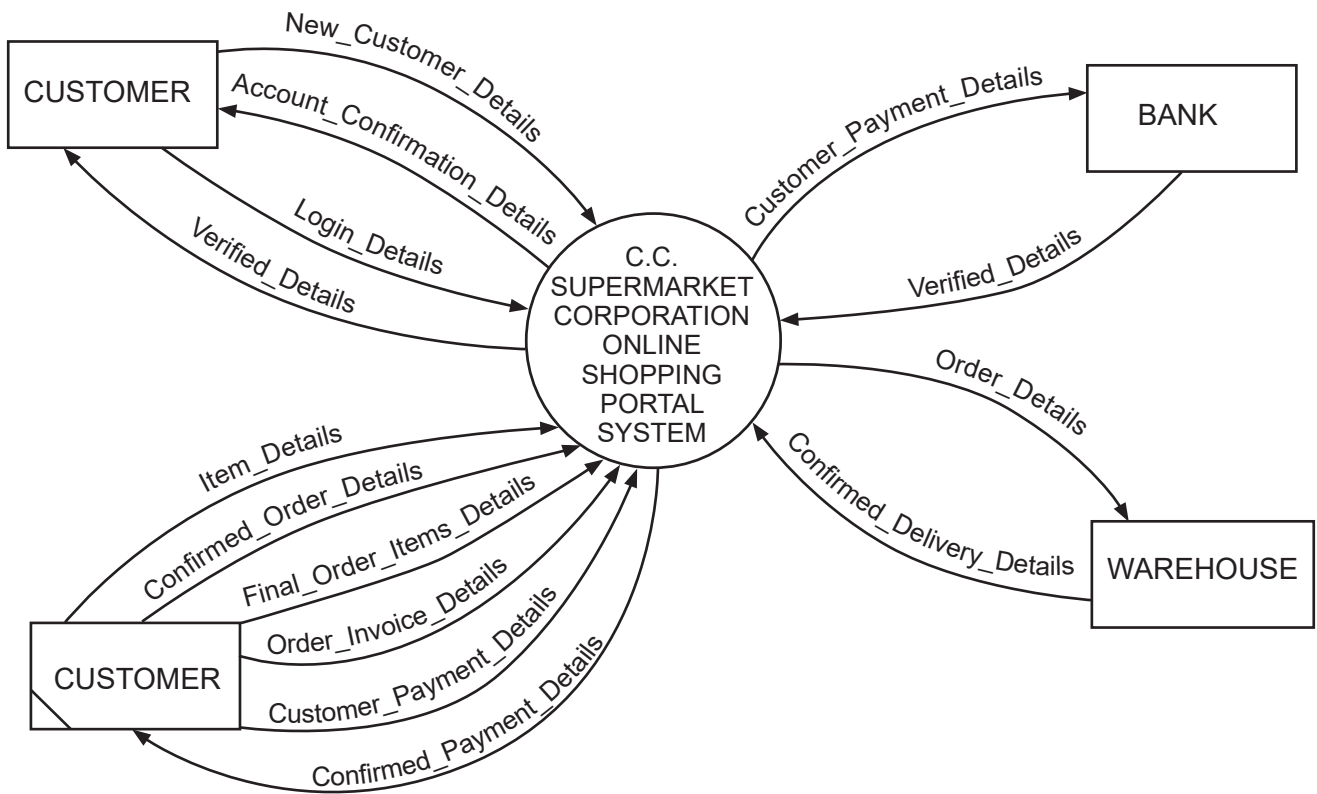
Refer to the information that follows to answer Questions 22–25 in Section Two of the examination.

The management of the C.C. Supermarket Corporation would like to develop a shopping portal for customers to order online and for deliveries to be dispatched within 24 hours. They would like to have the portal operating within six months. While they realise this is ambitious, they believe that it is possible. To meet project requirements they have assembled a large development team consisting of a system analyst, who has been appointed as the project leader, six programmers, two database developers, two website developers, two document writers and three people to support on the help desk once the system goes live.

Many meetings have been held so far and the analyst is tracking the project by using a number of computer-aided software engineering (CASE) tools. These tools ensure that the project time frame, milestones, resources and personnel are monitored carefully. The analyst has completed the preliminary design of the system and has outlined how the system will work below:

- To order online, the customer must first create an account to register with their personal details.
- Upon successful registration, the customer is emailed a confirmation of registration that includes an Identification number and password. This will be stored in the customer data store.
- To begin shopping, a customer logs in with their details.
- Their details are retrieved from the customer database and verified.
- The customer selects the item(s) that will be added to the shopping cart.
- The customer reviews their shopping cart, confirms their purchase order and proceeds to payment.
- The customer enters their credit card payment details, which are sent to the bank for verification. If the payment is successful, the customer receives an email notification that their payment details have been confirmed. The successful transaction is saved in the accounts database.
- Once payment has been processed, the final order is sent to the warehouse which will prepare the delivery of the order.
- The warehouse will send confirmation of delivery to the C.C. Supermarket Corporation Online Shopping Portal system, which will then update the status of the customer's order in the completed order data store.

A context diagram illustrating the system is shown on page 3.



This document – apart from any third party copyright material contained in it – may be freely copied, or communicated on an intranet, for non-commercial purposes in educational institutions, provided that it is not changed and that the School Curriculum and Standards Authority is acknowledged as the copyright owner, and that the Authority's moral rights are not infringed.

Copying or communication for any other purpose can be done only within the terms of the *Copyright Act 1968* or with prior written permission of the School Curriculum and Standards Authority. Copying or communication of any third party copyright material can be done only within the terms of the *Copyright Act 1968* or with permission of the copyright owners.

Any content in this document that has been derived from the Australian Curriculum may be used under the terms of the Creative Commons [Attribution 4.0 International \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) licence.

*Published by the School Curriculum and Standards Authority of Western Australia
303 Sevenoaks Street
CANNINGTON WA 6107*