

January 2020

Level 1/2 Cambridge National in ICT

R001/01 Understanding Computer Systems

Pre-Release Case Study

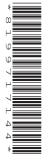
To be opened on receipt

INSTRUCTIONS

• This pre-release material may be given to candidates at any time after receipt by the Centre.

INFORMATION

- You **must** make yourself familiar with the pre-release material before you take the examination.
- You **must not** take notes into the examination.
- A clean copy of this pre-release material will be given to you with the question paper.
- You **must not** take this copy of the pre-release material into the examination.
- This document consists of 4 pages. Any blank pages are indicated.



Information for learners

Businesses providing courier services deliver packages for customers. Some of these businesses operate in local areas but others operate nationally. For small businesses providing these services, deliveries to certain parts of the country may only happen once a week to avoid making long journeys to deliver individual packages.

As courier businesses grow, they usually need new premises either because existing buildings are inappropriate or too small. They also need to set up accounts with energy suppliers and other businesses.

Scenario 1

Jamie and Gavin are joint owners of a courier business, CLSS7 Ltd. This business specialises in transporting packages with high-value contents where security and reliability are key customer requirements. Jamie is in charge of the day-to-day operation of CLSS7 Ltd whereas Gavin, who lives a long way away, is involved in more strategic decisions about the business.

The CLSS7 Ltd website advertises the services that CLSS7 Ltd provides. Customers are able to use the CLSS7 Ltd website to arrange collection and delivery of packages. They can use an interactive form on the website to calculate the delivery cost of each package. The delivery cost is based on the distance between the pick-up and drop-off addresses, size of the package, weight of the package and number of packages. The distance between the pick-up and drop-off addresses is calculated automatically after these have been input by the user and the 'calculate cost' option has been chosen. A second interactive form on the website is used to organise a delivery for the package(s). This second form links to an automated booking system that uses a database.

When customers organise deliveries, they have to supply contact details so that the package(s) can be picked up from their address, as well as a contact telephone number, their name and whether they agree to special offers being emailed to them. Customers must also provide payment details for the delivery charge. Once the automated booking system has confirmed that the payment has been accepted, all the details supplied by the customers are stored in new records on the database and a unique number is generated for each package. This unique number is used to track that package through the delivery process from initial collection at the customer's address through to final delivery.

Drivers, working for CLSS7 Ltd, are provided with a PDF document that shows their delivery schedule for the day including route and contact details for each customer. If drivers print the PDF document, they are required to dispose of the printed copy securely when they have finished with it.

Scenario 2

Jamie and Gavin would like to expand CLSS7 Ltd and have been investigating different options. Gavin has agreed to do most of the research but Jamie and Gavin have agreed to collaborate on the project.

The business will need a second warehouse. Gavin has been researching new premises and has telephoned an energy supplier to find out about charges. When he telephoned the energy supplier, he was advised that the conversation would be recorded.

Gavin has also contacted a web designer, Vernon, to enquire about a new website for the business. Gavin has been asked to provide images that can be used on this website. Gavin has searched the internet for photographs that suit the style of website that he and Jamie want. He has downloaded these photographs onto his computer and has copied them onto a storage device so that they can be given to the web designer.

Preparation

In order to prepare for the examination, you should research the use of technology in a business providing courier services.

This should include:

- the hardware and software that may be used with an interactive website;
- the suitability and features of open file formats, e.g. PDF;
- UK legislation relating to the storing of personal data and how personal data may be protected;
- suitable designs for paper-based and interactive user forms, including relevant features;
- suitable designs for databases and methods by which data held in databases can be checked for accuracy and relevance;
- methods by which packages can be tracked through a delivery system.

You should also research:

- the use of Voice over Internet Protocol (VoIP), email and video conferencing for collaboration on projects;
- advantages to companies of recording telephone conversations with customers;
- email etiquette;
- UK legislation governing the use of images and other materials;
- different types of storage media and their uses.



Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.