OCR

Oxford Cambridge and RSA

Friday 10 January 2025 – Afternoon

Level 3 Cambridge Technical in IT

05838/05839/05840/05841/05842/05877 Unit 2: Global information

Insert

Time allowed: 1 hour 30 minutes
C386/2501

INSTRUCTIONS
- Do **not** send this Insert for marking. Keep it in the centre or recycle it.

INFORMATION
- This Insert contains the pre-release material that you have already seen.
- This document has **4** pages.

OCR is an exempt Charity   **Turn over**

Cycle Challenge

A UK-based charity is holding a Cycle Challenge to raise funds. The challenge will be held in three countries; the UK, USA, and Australia. Each country has an organiser, but the overall organisation of the Cycle Challenge is carried out in the UK.

Each challenge will take place over a pre-defined route which has been divided into six sections. Each route is 1189 miles long, which is 1913 km. This is the distance from Land's End to John O'Groats in the UK. The challenge takes place over six weeks. A rider can complete all sections in a route individually, but the route can also be completed by different riders working as a team. Where possible, the sections follow the routes of the countries' national cycle routes. Each section could be completed over several days.

Riders must enter and register to join the Cycle Challenge. Registration takes place through the charity's UK-based website. Entries can be made individually or as a team. To register, riders have to provide their contact and payment details. Riders also need to define the country in which they are completing the challenge. Each rider, whether completing the challenge individually or as part of a team, pays an entry fee. Payment is made using a secure banking system. Validation is used to minimise the risk of data entry errors.

The registration details are automatically saved to a database on a shared device. A username and password are needed to access the entry database. An excerpt from the Entry Database is shown in **Fig. 1**.

Fig. 1

Rider ID ▼	Given Name ▼	Family Name ▼	Team ▼	Country ▼	Email ▼	Paid ▼	Individual Time ▼	Team Time ▼
122	Mia	Ling	☑	USA	MLi1@USA.com	☑	0	0
123	Jane	Taylor	☐	UK	JT@UK.com	☑	0	0
124	Jamal	Amit	☑	Australia	JA@Auz.com	☑	0	0
125	Kareem	Riley	☑	Australia	KR@Auz.com	☑	0	0

When the registration process has been completed, including the payment, a personalised link to a tracking app is sent. The tracking app is accessed through the rider's smart phone. Each rider must use the tracking app when they are completing the Cycle Challenge. The tracking app provides real-time location tracking. Riders can share the link to the tracking app with others. This may be their family or other riders in the team. The tracking app is not location limiting, meaning the rider can be located anywhere in the world. Depending on the location and other factors that could interfere with the signal, the tracking app is accurate between 2 and 5 metres.

The charity can use the tracking app to locate a rider in case of any problems, such as an accident happening. When riders register for the Cycle Challenge, emergency details are provided. The emergency details of the rider will be accessed through the Entry Database, but the emergency details are locked for access. The tracking app is used to enable emergency services to be advised of the approximate location of a rider. If the Entry Database has to be accessed, in the case of an emergency, an access code will be sent to the country's organiser.

The tracking app can also provide further details for the rider. An excerpt of these details is shown in **Fig. 2**.

Fig. 2

Date	Calories Burned	Miles	Riding time Minutes	Resting Minutes
01/06/2023	5545	101.7	600	100
02/06/2023	5020	92.2	480	80
03/06/2023	3410	61.1	360	60

Where riders are working as a team to complete the Cycle Challenge, the records stored in the database are linked.

When riders are ready to start a section of the challenge, they activate the start button on the tracking app. As they finish a section, the finish button is activated on the app. The time taken to complete the section is then shown. Riders submit this time to the charity through the app. The time for the section is automatically recorded on a Cycle Challenge spreadsheet. When all sections have been completed, the total time for the challenge is calculated. The total times are then imported into the Entry Database.

At the end of the six weeks, the total times for each individual rider and the teams is calculated. Each rider and team are emailed a certificate of completion showing their times.

Pre-release Research Brief

To prepare for the exam, you should research the following themes:

• The different information styles and data analysis tools used by the charity.

• The World Wide Web (www) technologies, types of information access and storage devices used by the charity.

• The information system structures used by the charity.

• A comparison between data protection legislation and regulation in different countries and how this impacts the charity.

• How the principles of information security should be considered by the charity, including the risks and impacts.

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