



Oxford Cambridge and RSA

Wednesday 17 January 2024 – Morning

Level 3 Cambridge Technical in IT

05839/05840/05841/05842/05877 Unit 3: Cyber security

INSERT



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.

PH Virtual Challenges

PH Virtual Challenges sells virtual fitness challenges. Examples of challenges include:

- English Channel
- Land's End to John O'Groats (LEJOG)
- Mount Everest
- Great Wall of China

Customers can sign up for a challenge. They use a fitness app or smart watch to upload their activities to the PH Virtual Challenges website. The website maps their progress against the challenge.

When customers log into the website they will see:

- a map of the challenge they have signed up to, showing their progress
- other customers on the same challenge as them and their progress
- a list of all the activities they have uploaded that count towards the challenge

PH Virtual Challenges is one of a number of companies in this market. It is continually coming up with new and varied challenges to maintain and expand its customer base.

The data uploaded from the fitness app or smart watch includes:

- User ID
- Latitude and Longitude
- Timestamp (including date)

From this data, the duration and distance are automatically extracted and plotted on the challenge map.

An example (non-consecutive rows) of part of an uploaded data file is given below:

A	B	C	D	E
UserID	Latitude	Longitude	Elevation	TimeStamp1
4712Z564BTA4ST				
	4.607737	114.325187	5	2022-10-31 - 21:40:22 Z
	4.609641	114.319567	4.4	2022-10-31 - 21:45:54 Z
	4.615356	114.317619	4.5	2022-10-31 - 21:49:24 Z
	4.61733	114.317552	4.1	2022-10-31 - 21:52:10 Z
	4.620909	114.32804	3.8	2022-10-31 - 21:58:17 Z
	4.621878	114.330706	3.2	2022-10-31 - 22:01:23 Z
	4.619229	114.323108	0.5	2022-10-31 - 22:06:10 Z

From this file, 6.57 km and a duration of 35:26 was added to User: 4712Z564BTA4ST Great Wall of China challenge.

Further Research

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

- The types of data stored by PH Virtual Challenges and why it needs to be protected.
- Different types of attacker that could target PH Virtual Challenges and how the attacker might obtain the data.
- The impact of data loss from a cyber security incident on both PH Virtual Challenges and its customers.
- The range of threats to PH Virtual Challenges including to:
 - the data it holds
 - the services it provides.
- How PH Virtual Challenges would respond to a cyber security incident.
- The various sections that would need to be completed in a cyber security incident report (CSIR).



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C387/2401