## **Edexcel GCE**

# **Applied Information and** Communication Technology Unit 7: Using Database Software

May 2012

**Scenario** 

Paper Reference

6957/01

The scenario should be distributed to candidates at least three working weeks before the examination.

Note: There are **no** practice files for this examination.

This scenario should be used for the purposes of preparing candidates for the examination. This copy must not be taken into the examination. The information contained in the scenario will be included in the examination paper.

Further details are in the Instructions of the Conduct of Examinations (ICE), available from the Edexcel website for this qualification.

Edexcel will not accept any request for special consideration should candidates be given the incorrect scenario for the examination they are sitting.

Turn over ▶





#### Scenario

#### **Weekend Run Club**

Weekend Run Club is a voluntary organisation that hosts running events at different locations around the country. Each location has a difficulty level between 1 and 5 with 5 being the most difficult. The difficulty level is set according to the terrain.

One branch of the club is based in the North East of England. It hosts runs at the same three locations every Saturday.

Volunteers act as officials for each location. These include:

- a Race Manager, who has overall responsibility for the location and for emailing weekly results to the North East of England coordinator
- Registrars, who record the details of each runner. For new runners the Registrar will record their name and date of birth, otherwise the RunnerID is recorded
- Number Allocators, who assign each runner with a bib
- Timers, who record the finishing time and details of each runner.

Tracy Little is the coordinator for the North East of England branch and she is responsible for maintaining the records. She currently uses a paper-based system, which is not efficient. Tracy knows you are studying ICT and thinks you could develop an IT-based solution to replace the current system. In the first instance, it has been agreed that you will design and build a *prototype* relational database system that will focus on four tasks. The final system will be based on your evaluation of the prototype and your recommendations for further functionality.

These are the tasks.

- 1. **Registration**, which involves:
  - the input of personal details
  - ensuring name and date of birth are present
  - generating the age of the runner
  - determining the age category of the runner
  - generating a unique RunnerlD, which is a sequential number that is always one more than the highest currently in use
  - storing the runner's details if all requirements are met
  - providing a suitable message for Tracy so that she knows what is happening.

#### 2. **Creating Runs**, which involves:

- entering or selecting one of the three run locations
- automatic generation of the run date
- generating a unique code for the run, which combines letters from the run location with a sequential number that is always one more than the highest currently in use
- storing the run details.

### 3. **Recording Results,** which involves:

- searching for a particular run
- displaying details of the run
- entering the runners and their times
- storing the results
- updating the total number of runs for each runner
- updating their personal best time if necessary.
- 4. **Printing Results** printout of the results including location, run and runner details.

The printout will need to look professional and be easy to read.