Hong Kong Examinations and Assessment Authority

Hong Kong Diploma of Secondary Education Examination 2013

Information and Communication Technology

School-based Assessment (Project Titles)

Candidates should choose one of the following project titles and follow the guidelines and assessment criteria stipulated by their teachers to complete the project assignment. Teachers can provide other school-based project titles to suit their needs when necessary.

Candidates should define the scope of the project carefully, produce a prototype and write a report for the compulsory part and the corresponding option of the elective part in the curriculum.

In the report, candidates may include the following elements under the selected option and other relevant elements when necessary. For each element mentioned, candidates should describe and justify its uses.

Option A (Databases)

- Database design for the system
    - database schema
    - ER diagrams
- Functionality of the system
    - application level
    - SQL implementation

Option B (Data Communications and Networking)

- Network design for the system
    - network infrastructure design
    - IP address management
- Network management and security
    - monitoring and troubleshooting
    - access control and data security

Option C (Multimedia Production and Web Site Development)

- Production of multimedia elements
    - attributes of the elements
    - integration of the elements
- Web site development
    - user interface design
    - dynamic and interactive web pages

Option D (Software Development)

- Program design
    - modularity
    - reusability
- Program implementation
    - data structures
    - algorithms

Title 1: Music Voting System

A broadcasting company is organising the Hong Kong Music Awards. The company would like to set up an information system to monitor the voting process for the Awards. The information system will be able to

    (i)   provide a voting system in kiosks located in public places such as convenience stores and railway stations,
    (ii)   display up-to-date voting results from time to time,
    (iii)   allow streaming of music videos on demand,
    (iv)   record voters' comments, and
    (v)   accommodate various issues arising from the use of ICT.

You are the IT project manager responsible for the project. You are going to provide solutions for meeting some of the above requirements for the broadcasting company.

Title 2: Health Care System

A medical health care network would like to provide an information system to deliver services to meet the needs of their clients.

You are the IT project manager responsible for the project. You are going to provide solutions for the medical health care network.

END OF PAPER