

**Hong Kong Examinations and Assessment Authority**  
**Hong Kong Advanced Level Examination 2012**  
**ASL Computer Applications Paper 2**  
**Project Assignment**

Candidates should complete **one** of the following project assignments. Candidates should develop a prototype of the application to demonstrate the design.

**Title 1: Discussion forum system**

Candidates are required to design a public discussion forum system in which a database is used to store user information and forum posts. Essential information about each post, such as the user identifier, IP address and time of the post, should be stored for security and user behaviour analysis purposes.

The system should generate statistics and carry out analysis, such as:

- posting statistics
- user statistics
- online traffic analysis
- posting habits analysis

Candidates should

- analyze the feasibility of implementing the proposed system
- describe and justify the underlying database design for the system

**Title 2: Video streaming system**

Candidates are required to design a video streaming system for a secondary school in Hong Kong.

Candidates should

- evaluate the technologies applied in the implementation of the system, in particular the selection of server and client machines, the network infrastructure and the related applications
- analyze the software and hardware requirements of the server and client machines
- describe and justify the underlying database design of the system
- propose functions that facilitate the management of video clips in the server, such as:
  - user authentication
  - security management
  - video searching

**END OF PAPER**