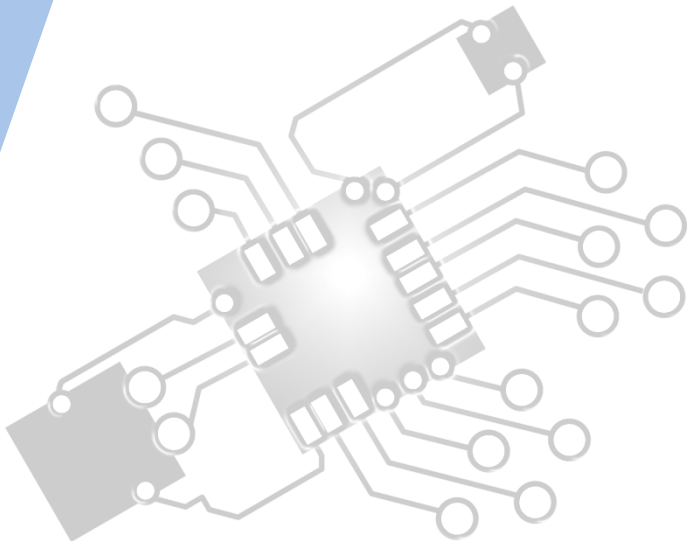




Planning & system installation

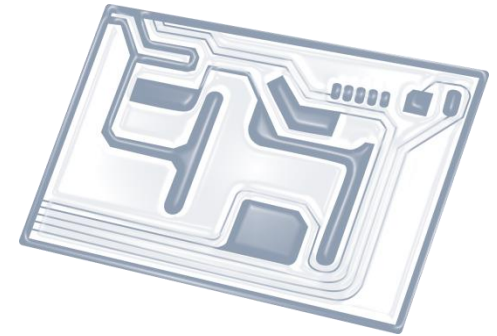
IB Computer Science



*Content developed by
Dartford Grammar School
Computer Science Department*



HL Topics 1-7, D1-4



1: System design



2: Computer Organisation



3: Networks



4: Computational thinking



5: Abstract data structures



6: Resource management



7: Control



D: OOP

HL & SL 1.1 Overview

Planning and system installation

- 1.1.1 Identify the context for which a new system is planned.
- 1.1.2 Describe the need for change management
- 1.1.3 Outline compatibility issues resulting from situations including legacy systems or business mergers.
- 1.1.4 Compare the implementation of systems using a client's hardware with hosting systems remotely
- 1.1.5 Evaluate alternative installation processes
- 1.1.6 Discuss problems that may arise as a part of data migration
- 1.1.7 Suggest various types of testing

User focus

- 1.1.8 Describe the importance of user documentation
- 1.1.9 Evaluate different methods of providing user documentation
- 1.1.10 Evaluate different methods of delivering user training

System backup

- 1.1.11 Identify a range of causes of data loss
- 1.1.12 Outline the consequences of data loss in a specified situation
- 1.1.13 Describe a range of methods that can be used to prevent data loss

Software deployment

- 1.1.14 Describe strategies for managing releases and updates



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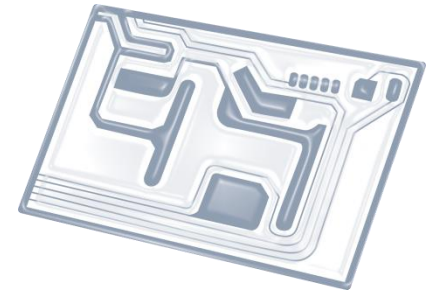


7: Control

D: OOP



Topic 1.1.7



Suggest various **types** of **testing**

Testing

- Testing is very important in developing a computerized system, as it tries to ensure that the system works as expected.
- A system that does not work as expected (it is buggy) greatly reduces productivity and end user satisfaction.
- Testing is usually done in two stages: before the system is delivered and after it has been set up.
- Testing in the first stage is often referred to as **Alpha testing**, while testing in the second stage is often referred to as **Beta testing**.

Alpha vs Beta testing

Alpha testing involves the engineers who develop the system testing it with data similar to real data while beta testing involves testing by real users with real data.

Types of testing

- Different types of testing can be:
 - Alpha testing
 - Beta testing
 - White box testing (tracing data on paper as it proceeds through algorithm)
 - Black box testing (putting in data and comparing with expected outcome)
 - Debugging (using an automatic program, a debugger)