

# Stage A - The IB Computer Science IAs Organisation Problem

## IB CS IA Solution Guide

[All IB Resources](#)

[Record of Tasks form](#): .rtf - But don't lose your on-going copy!!

[Record of Tasks Example](#) from "Richard Mulkman" Example from IB

[Scope & Sequence Points](#)

[Miscellaneous Points](#) (Lots there, but not too organized at this point.)

[Choosing Your Topic](#)

[Past Dossiers](#) and dossier ideas.

General approach to these criteria and their submissions:

If possible, each submitted as first and final drafts.

The only two things that can be further tweaked after the final draft are the code itself and the video.

(Though there are little things that will likely need to be adjusted in the Final Stages work.)

Criterion A - Planning

- [IB Description and Rubric](#)
- [IB Additional Documentation, Sample & Moderator Comments](#)
- Preliminary job # 1: [The Initial Interview](#) (advice from Mr Rayworth)
- Preliminary job # 1: [The Prototype & Prototype Interview](#) (advice from Mr Rayworth)
- [Mr Rayworth Advice, Instructions](#)
- ["Richard Mulkman" Example from IB](#) (could use a paper copy exemplar also) (JSR: Link it here too)

Criterion B - Solution Overview

Just one thing to keep in mind mentioned many places, but it's really, really important, especially for B and C:

**Client:** Mr. John Scott Rayworth

**Problem Statement:** Mr. John Scott Rayworth, the IB computer science teacher, needs an IA database that manages and organises the way each projects and resources are sorted.

### Description of Scenario:

John Scott Rayworth (the client) is the International Baccalaureate (IB) Computer Science Teacher at the International School of Bangkok and had been teaching the 12th Grade students about a project known as the Internal Assessment (IA) for 30 years. The Computer Science IA is officially referred to as 'The Solution', which requires that students involves using Computing technology to solve a problem for a real-life client. The students can access IA notes and previous samples through Mr. Rayworth's personal website, which was directly taken from the IB Computer Science curriculum.

After some investigation, the way the sample IAs and notes are layout on Mr. Rayworth's website are very unorganised and his students are having a difficult time navigating through the resources and

finding most of the information needed. Mr. Rayworth believed that a management system is needed in order to organise and restructure how the IAs and notes are sorted. After a discussion with him, I volunteered to develop a solution using NetBeans to create a graphical user interface to confirm Mr. Rayworth's statement.

### **Stating Criteria for Success:**

- Can sort IAs into different categories.
  - Criterias A to E
  - Video Quality with Explanation
  - Writing Style with Presentation
  - Code along with Client's comments
  - Interviews and interactions with Clients
  - Commenting
  - Grading Quality (1 to 7)
  
- Allow the client to easily add future IAs data into the database and save it in a data file for future use and modification.

### **Rationale for the Proposed Product:**

I decided to write a devoted program using a programming language, rather than a website, as the solution will require fast computerization and strong abstraction. Users interacting with search bars in a browser won't be that helpful, as the solution must automatically organise and sort resources according to the client's preferences. The client and users will need to input their preferences in how they want the notes and resources to be sorted.

I decided to use Java for the following reasons because:

- I am familiar with Java.
  
- Java was designed to be easy to use and is therefore easy to write, compile, debug, and learn compare to other programming languages.
  
- It is an open source software and is free.
  
- It enables developers to write code that would run on any machine.

**Word Count:** 407