## Introduction

The IB Computer Science Internal Assessment Project (IA Project) requires each student to "develop a solution for a specified client to a specified problem or an unanswered question." The solution will include a computer program which solves a real(istic) problem, as well as documentation which describes the project from beginning to end.

The project will be completed in 5 stages:

- 1. **Project Proposal Form** [due September 12, 2014]
- 2. **Stage A: Planning** [checkpoint: September 29, 2014] investigating, planning, and analyzing the problem. The Planning stage includes extensive consultation with your client and includes a detailed analysis of the problem, leading to a set of "success criteria" that will guide the design and be used to test the success of the project.
- 3. **Stage B: Design** [checkpoint: October 31, 2014] designing the program (before programming). A pre-programming design of a complete solution describing data-structures, algorithms, modules, etc., that will be included in the solution.
- 4. **Stage C: Development** [checkpoint: December 15] writing and testing of the program.
- 5. **Stage D/E: Documentation & Evaluation** [checkpoint: February 16] Documentation includes extended writing detailing all of the stages of the project, as well as a video (e.g., a narrated screencast) of the working program in action. Evaluation consists of the student's assessment of the success of the solution, (as determined by the success criteria), as well as discussion of notable issues that arose during the project cycle, recommendations for improvement and extension of the solution, etc.

The project will be due on **Monday**, **March 16**, **2015** (the week prior to Spring Break). The checkpoints will be used to assess student progress toward satisfactory completion of the project.

## The Client and the Adviser

The following is from the **IB Computer Science Guide**:

- The term "client" refers to the person for whom the product is being developed. The student may also be the client.
- The term "adviser" refers to a third party the student must identify to assist him or her in the development of the product. [It is assumed that this person has some computer programming knowledge.]

There are three scenarios for the development of the product.

- 1. The student is developing the product for a third party who is the client and also acts as the adviser.
- 2. The student is developing the product for a third party who is the client. Another person acts as the adviser.
- 3. The student is the client (developing the product for himself or herself). An appropriate adult must act as the adviser.

## **FAQs**

- How much does the IA project count towards our course grade? 30%.
- Can we do our IA project with a partner? No. The IB Computer Science Guide states that "the development of the solution must be undertaken by the student on an individual basis. Collaborative or group work may not be undertaken by students."
- Can Mr. B be my adviser? No. The IB Computer Science Guide recommends that "wherever possible, students select an adviser who is known to them or their family. This could include members of the school community, local clubs or businesses."
- **Does my adviser have to be local?** No. You do not necessarily have to meet with your adviser face-to-face; you could communicate via email, Skype, etc.
- How long will the project documentation be? 2000 words maximum.

For more detailed information on the IA project, see the following:

<u>IB Computer Science Guide</u> (http://www.ncbis.net/Editor/EditorImages/Computer%20Science.pdf ) details on the IA Project begin on page 75.

IA Project Documentation Templates
Sample IA Project

IA Project Ideas (see class website)