IFY Computing Project April 2023

Report Individual Presentation Report of the project outline, design, and action plan.

30%

Report on software development and evaluation.

50%

Oral Presentation.

20%

You will choose one of the projects outlined below

Projects mainly involving web design

1. Health and Fitness Advisor
   A program or website that asks for information about people's diets/habits/exercise regimes and gives advice about how to improve.
   (1-4)

2. Website for Building Futures
   Create a website for the ISC's building futures project. The website will advertise events, manage invitations and collect donations.
   (2-4)

3. Interactive Story
   Create a web-based interactive story where the reader makes decisions at key points, and this affects the rest of the story (Like Bandersnatch on Netflix). At a higher level, you could create a database engine that allows people to create and edit their own interactive stories.
   1-3, with engines 4-5)

4. Student-devised Website Development Project
   Your own idea of a topic to create a website – you should aim to make a website of publishable standard with interactive features and multimedia.
   (HTML/JavaScript 1-5)

Projects mainly involving database design

5. Budget and Expenses database.
   Create a database to help a student track what they are spending their money on. At a more advanced level the database could have a web interface so that each user can input data via a form. Data can also be analysed and viewed.
   (1-4)

6. House share bills database.
   Create a system that allows students who are sharing a house to enter details of the bills they have paid to make sure everyone pays their share. At a more advanced level the database could have a web interface so that each user can input data via a form. Data can also be analysed and viewed.
   (2-5)

7. Sports results database.
   Create a system that allows results to be entered and searched. Data can also be analysed and viewed. At a more advanced level the database could have a web interface so that each user can input data via a form.
   (2-5)

8. Student-devised Database Project
   Your own idea of a database on a particular topic with a front end.
   (Database 1-5)

Projects mainly involving programming.

9. Elevator Control
   Write a program in Java that will control an elevator in a house with 2 floors (called a lift in the UK). The lift will accept inputs from control panels on each floor as well as the control panel in the lift itself. The program could be extended to a larger building.
    (3 - 5)

10. 20 questions game
    Make a game that the player thinks of an object and answers yes/no questions about it until the computer guesses what it is. The initial idea here is that you have a defined set of objects with yes/no attributes in an array list and you eliminate the ones you don't want until done. But you could expand this idea
    (2-5)

11. Student-devised Programming Project
    Your own idea of a project that consists mostly of writing a program in Java. Typically, the project will involve programming in Java in console mode (the user types the input and the output is printed out using System.out.println) – but you may wish to add graphical features.
    (Java 1-5)