

CC111 Introduction to Computers Project Ideas:

Responsible use of online resources:

Please cite the web sites that you download examples and resources from. Copying partial contents from the Internet is alright to learn from. If you submit fully copied projects, you will receive a zero mark. Please add more features, or change the behaviour of the function, or the interface at least. Please remember that you will display a demo of your project running and explain how you wrote the source code. If the project doesn't run, you will lose a lot of marks. Similarly, if you fail to explain how the source code was written, you will lose marks.

General Rules:

- A group can be formed from 5 or 6 students per project.
- Groups are not allowed to repeat exact topic ideas, so first come first serve bases, once a group comment on the project's thread with a choice, the idea can not be chosen by another group as is. A project code can be repeated using a different application.

Grading Criteria:

The project is worth 10% of your final mark. These marks are graded individually by asking each student in the presentation for their contribution and testing their understanding. These are broken into:

- 5 marks for correctness (no compilation or run-time errors).
- 4 marks for the application of course concepts, where feasible, (such as: computer hardware components, software types and usage, program development, web site development, networking and ethical concepts)
- 1 marks for the interface, presentation, documentation, and teamwork.
- 5 bonus marks for all other concepts you self-study outside the learning objectives of the course.

Submission Details:

All project files are zipped and submitted named as "proj_LeaderStudentID.zip", where "LeaderStudentID" is replaced by a leader team member chosen by all team members.

The zip file should contain:

- All source code used to develop the project, either as a jar file, or a folder of the project packages and files.
- A written report (soft-copy and hardcopy) according to the instructions written in the guide and example shown on moodle.

Note:

- Your project will be rejected if it does not comply with the above submission requirements.
- When you submit your project you get 5 marks until you prove that it is your own work, during a demo in Week 15.

1. Project code: CC111-01: State of the Art Computing Devices

Survey 10 types available in the market for computing devices, and discuss all features, specifications, prices, brands, customer reviews, and their applicability for the different user types

2. Project code: CC111-02: State of the Art System Software

Survey 10 types of system software available, and discuss all features, specifications, prices, brands, customer reviews, and their applicability for the different user types.

3. Project code: CC111-03: State of the Art Application Software

Survey basic types of application software available, and discuss all features, specifications, prices, brands, customer reviews, and their applicability for the different user types.

4. Project code: CC111-04: Visual Basic Project Development

Implement a simple visual basic project for one of the following ideas:

- a. Calculator: design the basic calculator interface and functionalities (add, subtract, multiply, and divide).
- b. Sales Agent Commission Calculation: design an interface to read from the user input for: basic salary, sales commission percentage, sales profit, and then produce an output for the total payment for a sales agent, which is calculated as follows: $\text{basic salary} + (\text{sales profit} * \text{sales commission})$.
- c. Letter Grade calculation: design an interface that reads an input of a real score out of 100, and outputs the letter grade according to the AASTMT calculation method.
- d. Date time calculator: design an interface that reads a date time value, and a value to increment or decrement either a year, month, day, hour, minute, or seconds, then outputs the final date time after the change required by the user.

5. Project code: CC111-05: Web Site Design

Design a web site for a company, school, hobby, blog, project, event, or any other idea of your interest. Make sure you apply all studied web design concepts.

6. Project code: CC111-06: Establish a network between 2 or more computers

Using a router, a switch if required, establish a network between 2 or more computing devices (laptops, computers, tablets, smart phones, ... etc). Demonstrate your network and connectivity between the devices.