# CO1111
# Computing Skills
## Lab Session 3 – Heuristic Evaluation

Dr Brendan Cassidy bcassidy1@uclan.ac.uk

In todays lecture we looked at Testing and Evaluation. You will need to conduct both software testing and user evaluation on your quiz apps to score well in tomorrow's show and tell. We looked at two types of evaluation, evaluation involving users (such as user testing and think aloud) and evaluation involving experts (such as cognitive walkthrough and heuristic evaluation).

## Todays Task:

This should be carried out in teams. Your team is to perform a heuristic evaluation of another teams quiz app. You are to use Nielsen's heuristics (see below).

**Visibility of system status**
: The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

**Match between system and the real world**
: The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

**User control and freedom**
: Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

**Consistency and standards**
: Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

**Error prevention**
: Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

**Recognition rather than recall**
: Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

**Flexibility and efficiency of use**
: Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

**Aesthetic and minimalist design**
: Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

**Help users recognize, diagnose, and recover from errors**

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

**Help and documentation**

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Each person should be an evaluator and complete an evaluation pro-forma listing the problems you found and the severity rating you gave it. (you can use the example given in the lecture as a template for your problem report pro-forma (form)). Completing this exercise with another team will allow you to talk about your heuristic evaluation results in your show and tell.

## Weekly Challenge

To meet the minimum specification your application should:

- Allow the user to choose a category of questions.
- Allow the user to decide how many questions they will answer (5, 10 or 15).
- Display the questions and allow the user to select an answer.
- Show a running score.
- Have a high scores table showing the top ten scores which is saved to TinyWebDB.
- Have a well designed user interface.

There are many ways to enhance your application. Topics will be covered in Lectures and within Labs which should give you ideas. As always it is better to have something simple that works rather than something impressive that doesn’t!