Galway-Mayo Institute of Technology

Higher Diploma in Science (Software Development)

Network Programming Project (50%)

You are required to design and write (in Java) a simple network-based implementation of the "ten guesses" game.

Game rules / outcomes:
- Server program selects a number between 1 and 1000.
- Client has ten (iterative) attempts at guessing the number.
  (*i.e.* user running the client programme will input guesses at the keyboard)
- Server responds with "Correct – you win!", or "Too high – guess again", or "Too low – guess again", or "You're out of guesses – you lose!" as appropriate.
- Client wins if they guess correctly.
- Server wins if the client runs out of guesses.
- Server should keep a tally of scores, and should ask the user (client) at the end of each game if they would like to play again or not.

Required:

- The client program – *GuessClient* – that implements the client side functionality.
- The Server program – *GuessServer* – that facilitates the playing of the game and its outcomes.
- A brief design document that outlines the design / rationale for your programs.

Note:

The exact design and implementation details are left to yourself to decide on. For both the client and server-side, there are numerous designs and possible implementations that will deliver the required functionality.

Due date: Wednesday January 9th 2019 at 23:00.

Format: Upload a single Zip File to *Moodle* (LearnOnline) containing all of your files.