

PROGRAMMING TECHNOLOGIES AND EDUCATIONAL PRACTICE



Project - 3

GRADING POLICY

Part - 1

Implementation (50%)

a. Basic Functionality (35%)

- The program establishes a connection between the client and server using sockets, allowing it to send data packets along with their corresponding serial numbers.
- The server converts the received message to uppercase.
- Use `getInputStream()` method to obtain a handle to the socket stream.
- Use `getOutputStream()` method to send out the data through the socket stream.
- Use the `BufferedReader` method to read from the keyboard the data (Packet) that needs to be sent to the server.
- The server sends the converted message back to the client (FROM SERVER: Packet SerialNo# is received).
- The client terminates the connection upon sending a "CLOSE" message.

b. Error Handling and Exceptional Cases (10%)

- The program handles exceptions and error conditions appropriately.

- Handling of unexpected client disconnections.

a. Readability and Maintainability (5%)

- The code is well-structured, properly indented, and easy to understand.
- Descriptive variable and method names are used.
- The code follows the instructions.

Part - 2

Implementation (50%)

a. Basic Functionality (35%)

- The program successfully establishes a client-server connection using sockets.
- The client application generates a socket and connects it to the server.
- The server constructs a socket object to facilitate communication.
- The client and server can communicate by writing to and reading from the socket using the java.net package.

b. Message Sending (5%)

- The server uses `PrintStream ps = new PrintStream(socket.getOutputStream());` to send a message to Client from Server.
- The message sent by the server is received correctly by the client.

c. Message Reception (5%)

- The client uses `BufferedReader br = new BufferedReader(new InputStreamReader(socket.getInputStream()));` to receive the message from Client
- The received message is read and processed correctly by the client.

c. Error Handling and Exceptional Cases (5%)

- The program handles exceptions and error conditions appropriately.
- Handling of unexpected disconnections.