**Player Project – Babitha**

Steps to run the project

1. Download and Unzip the folder in local.
2. Ensure java jdk 1.8 (Used old version for personal comfort) and maven 3.9.9 is setup in local.
3. Open Command Prompt (cmd) and navigate to the project directory PlayerProject.

C:\Users\PlayerProject

1. Run Shell Script based on same or separate java process.

Unable to share shell script along with the project folder.

Run below command in cmd

Command for "same process" mode

mvn clean install

java -cp target/player-communication-1.0-SNAPSHOT.jar com.example.Main same

Command for "separate process" mode

java -cp target/player-communication-1.0-SNAPSHOT.jar com.example.Main separate

OR

Save file start.bat with below commands in PlayerProject folder

@echo off

SETLOCAL ENABLEDELAYEDEXPANSION

:: Check if an argument is provided

IF "%1"=="same" (

echo Starting players in the same process...

mvn clean install

java -cp target/player-communication-1.0-SNAPSHOT.jar com.example.Main same

) ELSE IF "%1"=="separate" (

echo Starting players in separate processes...

mvn clean install

java -cp target/player-communication-1.0-SNAPSHOT.jar com.example.Main separate

) ELSE (

echo Invalid mode. Use 'same' or 'separate'.

)

ENDLOCAL

Command for "same process" mode

start.bat same

Output

A screenshot of a computer

AI-generated content may be incorrect.

Command for "separate processes" mode

start.bat separate

OutputA screenshot of a computer program

AI-generated content may be incorrect.

* Player1 initiates the communication with Hello.
* Player2 receives and sends back (concatenation of received message and counter) and so on in a loop util 10 messages are sent and received.
* In the same-process mode, two players are created and run on separate threads, communicating through blocking queues.
* In the separate-process mode, each player is started as a separate Java process using Process Builder, with their interactions logged to separate files.
* Player1 is client who initiates call with Hello and Player2 is server communicating via sockets.