Connect 4 Deployment Document

- If you do not have JDK installed, download Java Development Kit (JDK) here: https://www.oracle.com/java/technologies/javase/jdk14-archive-downloads.html
- Ensure you have the latest version of JDK.
- If you do not have Eclipse installed, download Eclipse here: https://www.eclipse.org/downloads/
- Importing the Project
  - Find the project at: https://github.com/herald-of-spring/CSCI201Project_Connect4
  - Click "Code" → "Download ZIP".
  - Open the zip file from downloads.
  - In Eclipse, click "File" → "Import"
  - Click "General" → "Existing Projects into Workspace"
  - Click "Browse…" and choose the imported ZIP file
  - Click "Finish"
- Running the Project
  - Navigate: CSCI201Project_Connect4/src/connect4
  - To start the server, right click on Servermain.java and click "Run As" → "Java Application".
  - To play the game, right click on Clientmain.java and click "Run As" → "Java Application"
  - The application uses port 10000, so make sure it is available
- Testing the Project
  - Start the SQL server and run the attached script: connectfour.sql
  - While running Servermain.java, enter the username and password of your local SQL database to set up player data storage
  - Then, while running Clientmain.java, to search for a random player, who is also searching, enter "play"
    - There is a five minute time-limit before a time-out occurs when a match cannot be found, i.e. the user is the only one searching
  - While running Clientmain.java, a registered user can invite another specific registered player through "find" and, if accepted, both will start a game session
  - To accept an invitation, the user must not have already issued a "play" or "find" command. Then, once the invite has been sent, issue any command and the invite will appear and interrupt the session.
  - A declined invitation returns both players to the main lobby.

- While in a game session, each player sequentially issues a column number selection to add a token. The opponent's move and an updated game board is printed at the end of each player's turn.
    - The user is always represented as 'X' and the opponent as 'O'. As such, the opponent's board view would be an inverted version of the user's view.
- Once a winner is found, the respective outputs are sent to each player, and they both return to the main lobby
- Finally, the quit command can be issued anytime to exit the program and terminate the thread