# ET4437/EE4023 Final project specification

You need to build a Tic-tac-toe game that uses the webservice provided and which provides at least all the following:

1. Two interfaces – one written as a Java desktop application, the other a PHP driven website. Both interfaces need to work with the webservice provided and with the version running in the lab on the demonstration day. Both interfaces need to be able to talk to each other and with the interfaces of other groups.   
     
   Using the webservice correctly will allow this automatically.
2. A main screen that loads when the game starts offering access to create an account or login using existing credentials.
3. A login screen to enter credentials.
4. A registration screen to create a new account.
5. Once logged in you should move to a screen that shows the following:
   1. A button to access a score system that will keep track of the number of wins, losses and draws the player has. (this should open a new window)
   2. A button to access a leader board, showing the statistics (wins, losses and draws) for each registered user. (this should open a new window)
   3. A button to create a new game.
   4. A table showing a list of open games that you can join. (Take a look at JTable to implement this).
   5. A mechanism of using the above table to join an existing game.
6. Threading (your game has two players at remote locations – without threads you will not be able to control who can take a turn at a time)

You will also need to write a report on the design of the final system and what part each member of your team has added to the system, (how you designed your system, implemented it, and tested it, and who did which parts). You must provide a printed copy of this report at the lab in Week 12 where you will demonstrate your game.

I am supplying you with a webservice for communicating with the database that your desktop application can talk to. Only code that uses this webservice will be accepted. On demo day in Week 12, you will need to update your webservice links to point to a copy of the webservice that will be running in the lab. You will need to be able to play against other teams in the lab on the demo day.

This project is worth 40% of the total module grade. The marking scheme for this project is as follows:

* Demonstrate the program running in the lab (20%)
* A well written report, a printed copy of which you will provide at the lab demonstration (20%)
* All features implemented i.e. login, registration, score board, leader board, playable game (20%)
* Overall appearance & user experience, well written code (40%)

Please note that depending on how much each team member contributes your mark may be capped by your overall attendance at labs this semester.  
  
**Deadline & Deliverables**: You will submit your project (as an exported zip file for your Java desktop application and a zipped folder containing your website for your PHP driven website), and your report in a Word Document (.doc or .docx format only. All other formats will not be accepted) to SULIS at the beginning of your lab slot in Week 12. The uploaded copy will be the only copy you can use for the demonstration. No changes bar changing the WSDL the application uses will be allowed in the lab slot.

**Late submissions will not be allowed**. If you cannot upload your project at the lab you will receive zero marks for the assignment.

If you have any further questions please contact me by email or in class.

Regards,

James

PS. Notes on how to write a good technical report can be found at <http://pslc.ul.ie/ssc/seminar_report.html>