

# M32COM Internet Systems Development

## Group coursework

**DUE 15/04/2013**

The module employs an activity led learning approach and comprise the following type of work assessed: a prototype development. This is carried out as groupwork of groups with no fewer than 3 and no more than 4 students each.

- Please read the instructions carefully before attempting the work.
- You should also consult the “Student Guide to Groupwork”, which is available from the EC Faculty website on CU Portal.

### THE PROBLEM

You have to develop a prototype demonstration of a Web Services based application.

- Identify your approach (e.g. type of a client, programming language, etc).
- Develop a fully functional prototype, carefully considering all steps needed to build the application comprising: Web Service, XML Data Source and Client tiers.
- Provide the complete and appropriately documented source code, documentation and sample set of data for the prototype on a CD/DVD.
- Deploy the prototype (make use facilities of the Faculty or alternative).
- Demonstrate the functionality of the prototype application.
- Your application should be named as **userName\_M32**, where *userName* is a University username of one of the group members.

### THE SCENARIO

You are attempting to re-make the world-famous game\* of “Tetris” as a prototype Web Service based application. At least one playable level is required. All game logic has to be on the Web Service(s).

An XML data source is used to set-up the initial data, if any, and to store the related information, e.g. the highest score etc.

\*) See Wikipedia article <http://en.wikipedia.org/wiki/Tetris> for additional information you may need.

### DOCUMENTATION

You should aim to demonstrate all of the functionality of your prototype application. An appropriate set of documentation should be provided to explain your design considerations and implementation, with comments on the results of any tests. The source code should be appropriately and correctly commented. You should also identify any assumptions that you have made. Complete source code, documentation and sample a set of data for the prototype application **MUST** be supplied.

## ASSESSMENT CRITERIA

Assessment Tasks		
To achieve	Prototype development with required functionality (40%)	Documentation and Demonstration (10%)
<b>pass mark 40%</b>	Minimal functionality Client to consume the Web service. Concurrency issues are not addressed Attempt to test, failed or no deployment. No compilation errors	Draft design consideration
<b>mark 60%</b>	Fully completed prototype. All logic on the Web Services tier. XML Data Source and Client tier fully developed and functional. Evidence of testing. Successful deployment. Dynamic graphics on the client. No run-time errors.	Fully and appropriately documented source code for the completed application. Fully playable prototype demonstrated
<b>mark &gt;70%</b>	Silverlight graphics on the Web Client  Encryption of the XML data	Evaluation of development challenges Fully and appropriately documented source code for the completed application. Fully playable prototype demonstrated

Please be informed that non-submission of the complete source code, documentation and sample set of data on the electronic media (CD/DVD) will result in an unconditional “ZERO” mark.

Please note that you do NOT need to consider Web-design/HCI aspects in this coursework.

Module staff will request a demonstration of the prototype developed in the scheduled time as well as may wish to interview students regarding their coursework contribution.

You **MUST** identify an individual contribution of group members (minimum THREE to maximum FOUR):

### Group Constitution form

Group Name:		
Member Name (Printed)	Signature	Area of contribution