## OCENA: ONLINE COURSE/LECTURER EVALUATION SYSTEM

SYSTEM MANUAL

## System prerequisites

The Java SE Runtime Environment (JRE) is required. This should be installed prior to the installation of Apache TomEE. For full details on the installation of JRE, check out this page:  
[ [JDK 8 and JRE 8 Installation Start Here](https://docs.oracle.com/javase/8/docs/technotes/guides/install/install_overview.html" \l "CJAGAACB) ].

TomEE is the application server used in the development and subsequently needed for the running of Ocena. Installing tomee is a simple process which is well outlined in this page:   
[ <http://tomee.apache.org/installing-tomee.html> ]

## Installing and running Ocena

Ocena application comes as a web archive war file [ Ocena.war ].

To run this application, one ought to copy this file into the webbaps folder [ $CATALINA\_HOME/webapps/ ]. The top-level directory of the unpacked TomEE archive is called apache-tomee-plus-x.y.z/. This is the directory referred to as $CATALINA\_HOME.

After the copying the next step involves starting TomEE. To start TomEE process, invoke: $CATALINA\_HOME/bin/startup.sh. This will start TomEE as a background process.

As TomEE starts, the war file will be extracted and deployed. You can then access Ocena on your browser using an address of the form: <http://41.204.186.106:8080/Ocena/> where 41.204.186.106 is the hosting address.

When running TomEE in background, it will only print a couple of environment variables.

The log messages go to a file : $CATALINA\_HOME/logs/catalina.out

(there will be a number of these varied by dates)

As time goes by, changes will be made to the system. These changes will have to be effected. How this is handled is by stopping TomEE, deleting Ocena.war file and Ocena folder from $CATALINA\_HOME/webapps/ folder, and repeating the process of deploying a war file but this time, the war file with incorporated changes will be used.

To stop TomEE, invoke: $CATALINA\_HOME/bin/shutdown.sh

## Report generation and retrieval

Ocena is a system that enables course/lecturer evaluation be done. The system then assesses the evaluation submitted and generates reports conveying the assessment made. These reports are stored in the root folder of the application in a folder called Evaluation reports.

The root folder I am referring to is Ocena folder in webapps [ $CATALINA\_HOME/webapps/Ocena/ ]. Hence the path to the reports folder is [ $CATALINA\_HOME/bin/Ocena/Evaluation reports ].

Since the application will most definitely be running on the server, retrieval from the client side is necessary and actually possible. At the faculty/department home and admin dashboard is a navigation item labeled ‘Reports’. On clicking this a subitem labeled ‘Download reports’ slides out. Clicking this button will open the save/download dialog. On choosing to accept the download, a zip file is downloaded to the client computer. This zip contains the aforementioned evaluation reports.

## Known bugs and troubleshooting

The system is prone to failure on request for closure of an evaluation session. This particularly happens during the evaluation assessment that is stimulated on evaluation session closure.

The simplest approach in finding a solution to this mishap and any other mishap is by going through the TomEE logs in $CATALINA\_HOME/logs folder, specifically the file catalina.out. Normally, the exception will be specified towards the end of this particular file. On getting an understanding on the exception, debugging process starts in a bid to ensure a smooth running of Ocena.

Any other system malfunction shall be solved following the process explained in the previous paragraph.