

Cloud Networking and Service Provisioning – ENCS 691K

Fall 2019

Standard project: Cloud Based - Distance-Learning Application

1. Introduction

The project consists of designing and implementing a distance learning application which offers its services as SaaS to teachers and students. The design goals are described below, followed by the requirements on the project teams and the teaching assistant contact.

2. Design goals

2.1. Pre-distance learning session

The proposed system should allow:

- a. The publication of the available courses along with the teachers who are teaching them, and the allocated time slots.
- b. The enrolment of the students for the courses they wish to take

2.2. Distance learning session

The proposed system should allow:

- a. Notifications to teachers and students when classes start
- b. Chat room between the teacher and the students
- c. Audio conference between the teacher and the students
- d. Unidirectional video streaming between the teacher and the students
- e. Provision for students with special needs (e.g. students who do not understand the language in which the course is taught, students who understand only sign language)

3. Requirements on the project teams

- Projects should be done in teams of 3 to 4 students.
- Each team should select and motivate the cloud technologies (e.g. PaaS, IaaS) used in the project.
- The expected output consists of:
 - A technical report (max: 10 pages).
 - A powerpoint presentation (5 minutes) to introduce your demo
 - A live demo

4. Teaching assistant contact

Name: Yassine Jebbar

Email: Yassine Jebbar <yassine.jeb13@gmail.com>

Availability: by appointment (Time slots: Thursdays 15h00 – 17h00)