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MECA PROJECT

TRAINING WORKSHOP FOR TEACHERS ON JOB-LINKED EDUCATION

POLITEHNICA University of Bucharest and Giga Electronic International
30th-31th October 2017

Participants

See the list of participants. The partners from INES, Polito and OUN did not attend the workshop.

DAY 1: 30TH October

Training by the representatives of the enterprises on development of job-linked engineering courses.



- Prof. Paul Svasta, Head of UPB-CETTI: welcome and opening speech.
- Prof. Slavka tzanova, TUS asked to make changes in the agenda and to start with the rules for financial reporting because by the end of the meeting the partners are too tired. The change was accepted.
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WP1 Management. Intermediate report results. New requirement for the financial report

Slavka explained that she had a bad experience with already reported and audited Tempus project with additional financial documents required. In order to avoid collection of financial documents and huge paper work after the project end she wants to collect all documents during the project implementation and in a form the document will be sent to the financial evaluators of EACEA.

In the interim report, the staff costs for 105 persons have been reported and more than 70 mobilities. The co-ordinator cannot collect the different documents for each person/partner. That is why the partners should provide the reports in a form to be sent to Brussels in a case of audit.

The necessary documents for each position in the excel table should be combined in one pdf file. The pdf files for staff costs of one institution for the first period (until the interim report) should be in one folder, e.g. "TUS Staff costs", and pdf files for mobility



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in another folder, e.g. “TUS Mobility reports”. In a third folder should be the pdf files with all other expenditures, e.g. mobility for management, dissemination, invoices etc., costs for the project implementation but according to the KA rules, reported only as staff costs.

All folders with the pdf files should be added to one archive, uploaded on some server (through Wetransfer.com or other) and the link sent to the co-ordinator.

The KAs are result driven projects and the project budget for implementation is reported in time-sheets. The reported tasks should be concrete and described in details.

1. Activities reported without results are not acceptable, i.e. “development of the course” without the course available or “development of mClouds” without any activity in setting up mCloud.
2. Concrete and detailed description of each activity in the time-sheet should be done.

Bad example: “Management”, “Need analysis”

Good example: “Preparation of the presentation of the project activities for the kick-off meeting.”, Preparation of budget transfers to AMG-technology, Atronica, Organisation of the kick-off meeting, Preparation of the presentation for the kick-off meeting of KAs in Brussels, Checking and confirming the timesheets of the staff from TUS” etc.

Bad example: “Course development”, “Development of training modules”

Good example: “Development of course content in Microelectronics for ICT. Buffers, Development of course content in Microelectronics for ICT. Shift registers, Design of projects for students’ activity etc.”

Bad example: ”Specification of the mCloud system”, “Development of mCloud system”

Good example: “Preparation of the questionnaire for the technical cloud environment, Open VPN setup, tests with viscosity VPN, Tests of master-slave and master-master replication, Exchange of mysql data with BME to synchronize the management servers” etc.

Staff costs in one folder for all persons reported in the excel table:

Per person and per row in the excel table: all copies combined in one pdf file, and the name of the file:

P(no. of the partner institution) (abbreviation of the institution) (name of the person), for example:

P1 TUS Slavka Tzanova

The documents in the file:

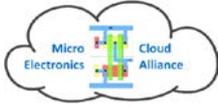
1. Time-sheets with detailed description of tasks performed
2. Employment contract with translation in English if the language is not French or German (formal language in EU: EN, FR and DE)
3. Payslips or payroll with translation

Mobility reports in one folder for all persons and training events reported in the excel table:

Per person and per row in the excel table: all copies combined in one pdf file, and the name of the file:

P(no. of the partner institution) (abbreviation of the institution) (name of the person) (destination), for example:

P1 TUS Slavka Tzanova Berlin



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The documents in the file:

1. Mobility report
2. Plane/train tickets or other reporting documents for travel by car
3. Boarding passes if travel was by airplane
4. Document for the subsistence costs
5. Hotel invoice

Slavka sent to all partners by e-mail the file with the above requirements for the financial reports and examples how to prepare the package of document for reporting. **All partners should prepare and send the financial reports by 01.12.2017.**

WP4 Instructional design of courses for training for higher order skills mCloud

DAY 2: 31ST October

WP4 Development of job-specific training modules. The courses in the Educational Cloud, Oliver

Oliver has shown the status of educational cloud with the courses.

The course developers presented the activities carried out in the last project months and the results they have achieved including the courses developed.

INSA Toulouse develops only one course instead of minimum two as the other HE partners do. They have to provide one more online course.

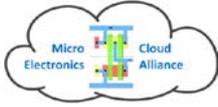
Four of the business partners developed job-related courses:

- INOMA on : "Electronics maintenance in Renewable energies"
- AMG Technology: "Design, Prototype Fabrication and Challenging Applications of Silicon Microsystems with Piezoresistive Feedback"
- INES: "Silicon Homojunction Solar Cells "
- ASTEL created a Video Lesson about main criticisms in handling semiconductor devices manufacturing. In this course the design of an optical inspection station of semiconductor wafers is presented.

BME developed interactive courses with a lot of Flash animation:

WP4 Raising the interactivity of courses and tutors' support, experiences of distance education universities, Manuel

Prof. Manuel Castro shared the experience of UNED in providing guidance to their distant students with a network of support centers, virtual laboratories practical work in enterprises. In order to rise the interactivity of courses more activities for students should be added and support by tutors provided.



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Slavka suggested all partners to organise the students training with project assignments and different tasks for performance. Feedback should be provided as well.

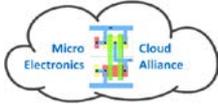
WP3 Implementation of mClouds

All partners reported the work done after the previous meeting in Berlin. Slavka has shown the plan and mClouds with all HEIs connected should be done by the end of 2017 in order to start the pilot test. Slavka asked all participants from the higher education institutions if they have got support by Massimo Rio Roch or somebody else from Polito for setting up the clouds around Europe. All declared that no support has been provided by Polito and even Massimo has not replied most of the partners' e-mails related to this support. Those who have joined mClouds did it with support from eWorks.

The conclusion of the PSC is that Polito has not participated in mClouds set up.

WP1 Management. ToDo list and planning the next meeting.

- Martin Klossek, P11 – mCloud
 - o CloudStack installations;
 - o Add HTTPS/SSL encrypted connection;
 - o “basecamp”;
 - o “mecaadmin” – offers access for all other partners to one partner’s courses;
 - o There are 6 universities connected to mCloud from all 8 (TUB and INSA);
 - o MECA Global Template Repository MGTR;
 - o Store virtual machines on a central server;
 - o Obtain official SSL certificate.
- TO DO: mandatory virtual meetings; the first/next one in the presence of system administrators/system officers/system managers – on 5 December 2017 at 12.00 CET.
- ASTEL – Company
 - o Developed a course on Handling Techniques of Critical Silicon Wafers (a case study).
- Oliver Kramer, BMT:
 - o Developed 4 courses in collaboration with companies.
- There will be 24 developed courses available as open educational resources.
- The next project meeting – training seminar for teachers – will be held in Cadiz/Spain between 1 and 2 March 2018.
- We should report dissemination activities / new papers published – all information should be added in Google Drive.
- Etienne Sicard, INSA:
 - o First, he presented what has been done;
 - o Pilot test on EMC course with 11 industrial and academic attendees;
 - o Support the course with practical activities;
 - o Published a book “Basic of EMC...”;
 - o They should join the CloudStack;
 - o They want to record educational videos;



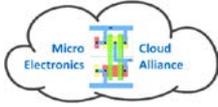
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- o They will provide free use of the software they develop, Microwind.
- Prof. Slavka, TUS:
 - o 2 HTML courses are ready;
 - o They coordinate all the activities of the project;
 - o Develop the questionnaires for the pilot test.
- Cyril and Methodius University Skopje, UKIM, P5:
 - o They finished the PPT presentations for 2 courses;
 - o They are preparing a book in collaboration with TUS.
- TO DO: Add tasks, questionnaires, practical projects, homework, feedback, face-to-face meetings for each developed course; interactivity between courses.
- AMG Technology Ltd, P6:
 - o First, he presented what has been done;
 - o www.tetramax.eu – enlarge the collaboration with companies, e.g. HORIZON2020.
- TUB:
 - o They have done 3 job-oriented courses and 1 course on superconductive materials;
 - o The attendees will receive a certificate;
 - o They are organizing a 5-day seminar “How to develop e-learning materials” (it is free for the partners and 50% sale for the hotel cost);
 - o 10 teachers will be trained in a pilot test.
- Prof. Norocel Codreanu, UPB-CETTI, P9:
 - o They had strong support from the business partners P10 and P11 for the CloudStack;
 - o They developed 2 courses and prepared one book in Romanian;
 - o Then, he presented what has been done;
 - o There was a MECA section at the SIITME 2017 conference for dissemination and papers’ presentations.
- Manuel Castro, UNED, P4:
 - o Finish CloudStack / Security set-up;
 - o Develop 2 courses;
 - o MOOCs ???

WP1 Management. ToDo list and planning the next meeting

Slavka made an overview of the project progress and tasks for next period.

- Objective 1 – has been achieved.
- Objective 2 – very good status; Networking of project partners for collaboration; we should have many contracts between universities and companies/enterprises to support education; So far, there are four courses developed by partner companies.
- Objective 3 – we haven’t received any help from the partner responsible Polito; Thanks to eWorks, 5 of the HEIs are ready. Development of the mCloud, deadline: December 2017.
- Objective 4 – we should conduct a Pilot Test between January 2018 and March 2018 on a small group of volunteers (10/country). We can exchange only free software.



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- Objective 5 – between April 2018 and December 2018; 240 students and retrain teachers.
- WP6 – Pilot Test
 - TO DO: usability questionnaires and questionnaires on learning attitudes by 23 December 2017 in order to be delivered to the partners by 8 January 2018.
 - Indicators for impact on target groups (at least 50% with positive feedback).
 - We need training seminars, collaboration between students from different countries – virtual mobility of students.
- Outcomes – 23 shared courses for Master students (in 8 countries) with very active participation of business partners.

ToDo List

- Financial reports by all partners – deadline 1 December
- Usability questionnaire and questionnaire on learning attitudes to be developed by OUN, TUS and TUB – 23 December and sent to all partners - 8 January 2018
- Contracts between HEIs and business – continuous
- TUB and INSA to join mClouds until 1 December 2017. If politico continues not providing support, to work with eWorks
- Plan for the pilot test by each university - 1 December 2017
- Plan for sharing resources and free software – Suggestion by each HEI on 5th December
- Next virtual meeting on 5th December at 11:00 CET for planning the hardware and software sharing and accepting the template CloudStack (Adobe Connect, Appear.in).
- Next training seminar for teachers – in Cadiz on 1st- 2nd March 2018
- To develop assignments for different student's activities (projects) for interactivity of courses.