Project Cloud Computing

Project outline, semester project and information

Henry-Norbert Cocos cocos@fb2.fra-uas.de

Computer Science
Department of Computer Science and Engineering
Frankfurt University of Applied Sciences



Contents

- Organization
- Assessment and Grading
- Next Steps



Cloud Computing – Admission to Exam

We only have a limited capacity...

therefore we have a strict limit for the admission to Cloud Computing!

Admission Cloud Computing - winter semester 2025

Unless you have at least **40 ECTS** from previous courses in the **High Integrity System**Master you should not participate in the Course Cloud Computing!!!

We have to give students with higher ECTS precedence over others, since the capacity of the course is limited to 40 students!!!

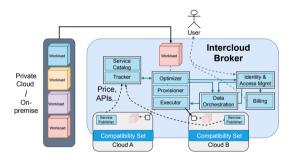
Group Poll

Please take part in the group poll in CampUAS



Sky Computing

Organization



Sky Computing

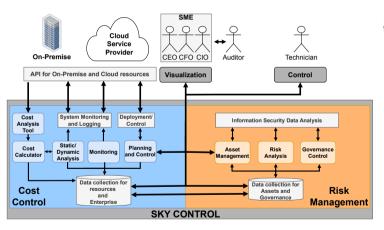
The examination in the master course Cloud Computing will be a group research project over the course of the semester. You need to work together on the prototype and the milestones outlined in the Gitl ab Workspace.



Sky Control

Organization

000000



Semester Project

Sky Control addresses the challenges SMEs face when using multi-cloud deployments. The figure presents the architecture of Sky Control, along with the desired functionalities needed to fulfill the requirements of SMEs. It consists of a module for Cost Control and Risk Management.

OF APPLIED SCIENCES

Semester project

Examination

The examination in the master course Cloud Computing will be a group research project over the course of the semester. You need to form groups of 4-5 people and work on the milestones outlined in this presentation.

There are several features in the project e.g.:

- Oevelopment of an automated CI/CD pipeline for prototype development
- ② Development of a uniform architecture for application implementation
- Automated deployment of services in multi-cloud

Requirements in GitLab

A list of requirements can be seen in the GitLab repository of the project. This is not the final list, since you can also find new requirements and features for the project.

How we work in this semester

- One GitLab Repository for the whole class!
- Documentation is done in the Repository!
- You develop, test and commit code to a common repository!
- You all work together in the class!
- We will have several groups working agilely in teams of 4-5 people!

Agile Working

- We will have a "Daily" each week in the exercise!
- You will work autonomously and perform all relevant meetings in your teams Sprint Review, Retro, etc.!
- We will have <u>three</u> Stake Holder Meetings in the semester!



Source on Scrum

• The Scrum Culture, Dominik Maximini, Springer, ISBN:978-3-319-73842-0.

Group Poll

Participation Cloud Computing - winter semester 2025

Group Poll in Summer Term 2025



Please take part in the group poll on CampUAS!!!

That helps to plan the capacity for the course and the time slots, since the capacity of the course is limited to 40 students!!!

Group Poll

Please take part in the group poll in CampUAS

Assessment and Grading

Relevant for your final grade are the following points:

- Active participation in the project (number of commits, Daily participation, documentation).
- Features committed to the prototype.
- Ideas and concepts for features and documentation of the features.

Exam

Presentation of your code features at the end of the semester!

Inspiration for your modules

- https://github.com/ibhayb/cloud-cost-dashboard
- https://github.com/muhammadibad0338/CloudComputingWednesday
- https://github.com/abuzar-rasool/cloud-cost-explorer
- https://github.com/shiva-kumar-biru/Multi-Cloud-Analysis-Dashboard
- https://github.com/khaledffm02/Kostenanalyse

Next Steps

- Register for the CampUAS course!
- Make the Poll until the end of the week (19.10.2025)!
- Sign the Consent Form until next week (26.10.2025)!
- Choose your groups until (31.10.2025)!

After you have successfully done the above steps you will get an invitation to the **GitLab repository**!

Resources

CampUAS:

Course: Cocos Cloud Computing WiSe 25/26

Password: Cloud_Busters_WiSe25-26

Thank You For Your Attention!

Henry-Norbert Cocos, M.Sc

Frankfurt University of Applied Sciences Room 1-230

4 +49 69 1533-2699

⊠ cocos@fb2.fra-uas.de

www.henrycocos.de



