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Microservices and DevOps

DevOps and Container Technology

The Exam

Henrik Bærbak Christensen

A note on Evaluation

- One fagpakke = three courses
- Standard Science Faculty procedure
 - Evaluation after each *course*
 - Has ended in some minor issues
- Handleplan 2019: Evaluation after fagpakke
- But I would like to get anonymous feedback
 - (Anything you wish to say in person is also highly appreciated 😊)
- However – Too soon today, I feel...

So...

- I will issue an evaluation later in the course. Stay tuned...



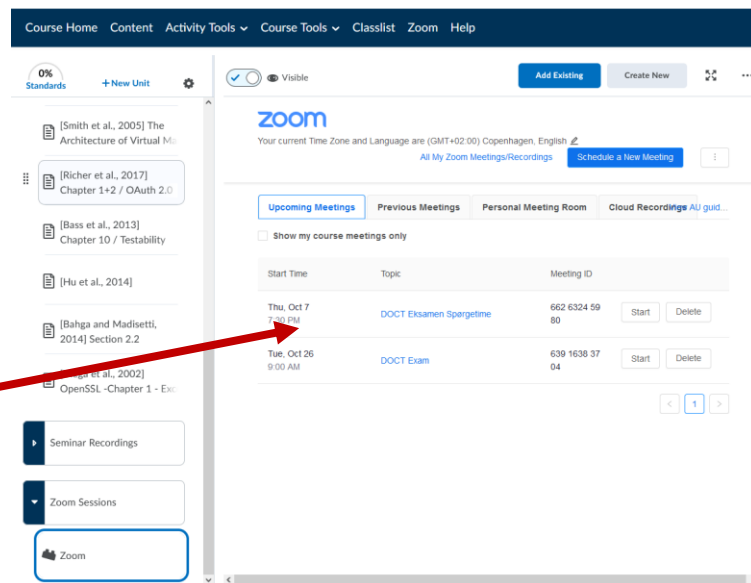
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Exam

- When and Where?
 - Check the course web site for date and time
 - Location: In a
- How
 - Jump into Zoom 10-15 minutes before start time
 - Ensure your machine is doing well, network is ok, etc.
 - You get a web link with the exam question
 - You solve as much as possible
 - You upload required hand-in material to 'exam' exercise on BS and you upload your image(s) to Docker Hub.
 - ... and I review your stuff

To prepare

- Perhaps some of you are new to Zoom.
- Meet with me to a *Q&A session before the exam* to test out the tools
 - find the link on BS
- Exam link is same place

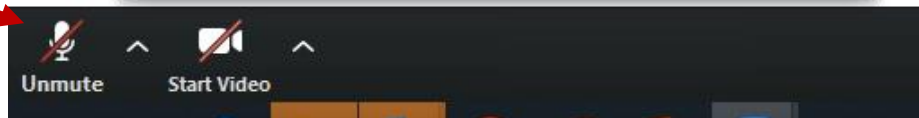


- The exam is **individual !!!**
- Preparation
 - Get your own bitbucket/github/svn account which is **private !!!**
 - Get your own docker hub account, and a **private repository !!!**
 - Ensure your SCM repository contains the latest SkyCave source
 - Ensure you can push and pull images to your docker hub
 - Ensure I am collaborator

Arrive Early 😊

- Please join *at least* 10 minutes before

- Start your audio and video initially, so we can 'meet'
- It takes a bit of time for me to admit you into the meeting...



‘Udeblevet’

- If you do **not** see you in the Zoom meeting with Video (initially), I will note your participation at the exam as ‘udeblevet’
 - Which is failed 😞
- So – it is not enough just to happy-go-lucky upload something to BS ...



Once all have joined

- You will be given the link to the exercise as a web page
- I will introduce the exam exercise
- Once everybody has acknowledged they can get the exercise web page...
- *I will start the 1½ hour timer*

During Exam

- Mute your Audio 😊
- Video

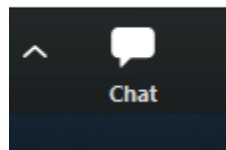


– I will ask you to keep your video running... Exam supervision!

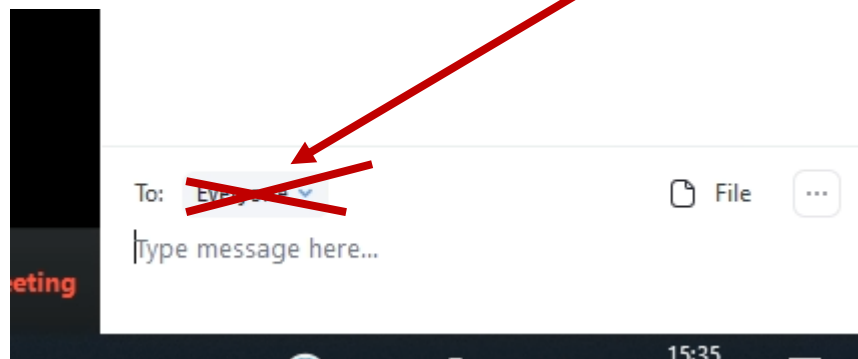
- Questions during exam:

- Use the Chat to 'Henrik Bærbak Chr.'
- Can also upload files

- But slow process 😞
- And I can only clarify!



To Henrik Bærbak



Solve the Exercises

- Solve the four exercises
 - Timebox the third exercise (make a 'command' in daemon)
 - So you have time to do something on the fourth (compose file)
- 15 minutes before deadline
 - I will notify you, begin to consider upload to hub and BS
- 5 minutes before deadline
 - Begin to upload to hub and BS !!!
- 0 minutes
 - Exam finishes, uploads started before the 0 minute mark may finish, of course

If Shit Happens

- If you run into a major stumbling block
 - Ala "I simply cannot make this sh.... work for some reason"
 - Describe the issue and your 'next steps' to solve it, *in your hand-in in brightspace...*
- If you run into major network outage
 - Ala "I have to reboot my router, which takes 8 minutes"
 - **Take a screenshot as documentation**
 - Extend the exam with what-ever time you have lost
 - Describe the issue, *in your hand-in in brightspace...*
 - Include the screenshot

- What will you be exposed to?
- Go over the 'exam-?'... exercises on Iteration 6 and you should be fine...
- Core learning activities covered
 - Dockerfile, Composefiles, (Command pattern), HTTP GET request
 - Testing and Analyzability downplayed. **Make it work.**

- Four Steps
 - 1. Get Java code for a novel REST service, test it
 - 2. Containerize it, writing a Dockerfile
 - 3. Implement a **Command** class in *daemon* to integrate it
 - 4. Swarm it, using a compose-file
 - Delivery: imagename, dockerfile+composefile, screenshots
- To pass exam
 - Step 1 + 2 at minimum
 - Step 3 showstopper? Do Step 4 then.

Grading

- If you solve all/most of the exam exercise, you get your group's grade
- If you deliver a blank piece of paper / demonstrate too little proficiency in using course curriculum, you will fail.
- If you show some proficiency, but with several defects in skills and/or knowledge, I will lower the grade.

Point to Grade Conversion

Current State of Affairs

- Total points possible: **945**
 - 535 of which are mandatory (57%)
 - 325 of which are crunch evaluated
- So MAX is:
 - 325 on Crunch
 - 620 in BS
- Grading
 - **475** is cutting point for failing (~ half of all points)
 - **470** points is 'accept range' (from 475 – 945)
 - Which is then split into intervals:
 - 02 (10%), 4 (20%), 7 (40%), 10 (20%), 12 (10%)


Grade Distribution:
02 (10%), 4 (20%), 7 (40%), 10 (20%), 12 (10%)

At the moment

- At this early moment in time, looking at BS, you are doing well

Final Calculated Grade Class Statistics

Number of submitted grades: 15 / 16


Minimum:  87.59 %

Maximum:  97.93 %

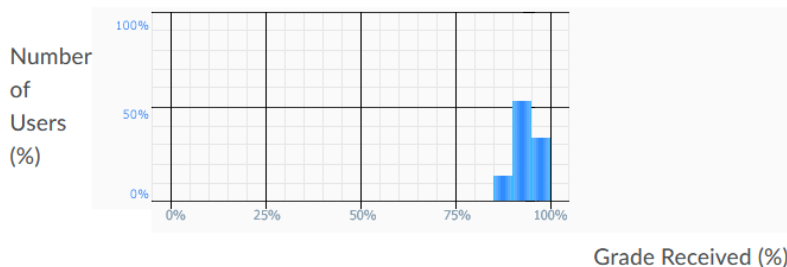
Average:  93.79 %

Mode: 93.79 %, 97.93 %

Median: 93.79 %

Standard Deviation: 3.52 % 

Grade Distribution



- Review BS/web for when the last chance to submit is...
- If you miss mandatory exercises...
 - Some are BS and some are Crunch exercises
- ... then be sure, I will poke you
 - Ensure I can reach you – I only have your AU mail box



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Questions?



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Good Luck / Have Fun