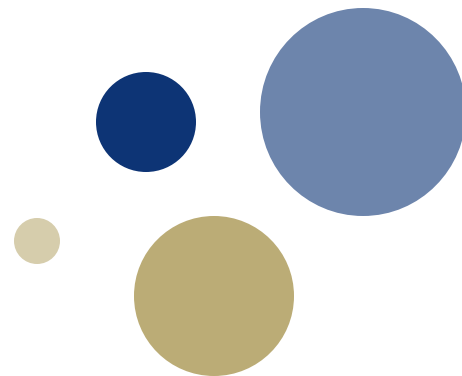




Norwegian University of
Science and Technology



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Presented by:

Haakon Gunleiksrud

Mathias L. Mohus

Intro

- All information should be available in the "Exercise 2 – Task description and evaluation criteria" file on BB
- Any questions on BB or send it to the TAs
- Delivery 1: New Features, by 14th of March 11:59 PM
- Delivery 2: Report, by 21nd of March 11:59 PM
 - Whole repository, including features
 - Test scripts, including acceptance test
 - Report describing how you've done the tasks, and the results of the tests

Purpose of the exercise

- This exercise is designed to let you
 - practice software development in the DevOps environment
 - white-box testing approach
 - black-box testing approach.



DevOps development

- Use the repository on:
<https://gitlab.stud.idi.ntnu.no/aasmuha/tdt4242-base>
- Set up your own CI/CD environment
 - GitLab is recommended (gitlab.stud.idi.ntnu.no)
 - Detailed guide is in README.md
 - You decide this yourself
 - You have to write in the report how the environment was used

Task 1: Implement peer-group requests (5p)



- Implement the new features proposed by your peer-group in exercise 1
 - If the proposed features are not suitable, too small or too large, you will shortly receive notice of which features you are to implement.
- Write in the report how you use the DevOps environment in development
- Communication with the customer (peer-group) to ensure the features are properly implemented

Task 2: Statement coverage (5p)

- Write test scripts to get full statement coverage of:
 - Class UserSerializer
 - Entire workout permissions file
- Implemented using the DevOps
- Results should be included in the report



Task 3: Black box testing (7p)



- Testing boundary values in the:
 - Register page
 - View/edit exercise page
- 2-way domain test on register page
- Integration test of newly implemented features
- Black-box test scripts of FR5

Task 4: Acceptance test (3p)

- Get the project from your peer group and check for bugs in the new features
 - Can be manual or automatic
- New features needs to be done and available to your peer group by 14th of March 11:59 PM
 - Give the peer group enough time to perform the acceptance test and include it in the report

Task 5: Data flow AU of gallery method (5p)

- Function: RetrieveWorkoutImages in gallery.js
- Requires that every definition of a variable is checked against every use of that variable
- Should be integrated into the CI/CD DevOps environment.
 - The purpose is to let you be familiar with the test automation of the DevOps environment. If you find any bugs in your testing, you should include them in your report.

Evaluation criteria 1/2

- Task 1:
 - The proper function of the new features. As the implementation needs feedback from the peer group. If a group does not give active feedback to the peer group of the implementation, we may deduct 2 points from that group. (5 points)
- Task 2:
 - Full statement coverage of the two functions with automated test scripts (5 points)

Evaluation criteria 2/2

- Task 3:
 - Proper test scripts of the black-box testing (7 points).
- Task 4:
 - Proper acceptance tests of the features delivered by your peer group (3 points)
- Task 5:
 - Data flow test methods with the AU strategy (5 points)
- **Note: You should deliver the report and provide a link to your repository with your new code. The code should also contain all test scripts.**

Setting up the DevOps environment



- In depth guide to setting up the CI/CD for Heroku/GitLab in the README on GitLab
- You can use other services for your CI/CD pipeline and hosting the website, but there is no guarantee that we're able to provide help if you are unable to get it working