Noroff
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Computer Network Defence 2024/25
Assessment 2 - General Feedback
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Introduction

This document serves as general feedback for the Assessment 2 for the UC3CND course for 2024/25. The purpose of this document is to provide general feedback on the assessment. All question components (especially those auto graded) have been carefully reviewed, and moderated for where any additional grades can be assigned.

> 📖 Information relating to the *Konteeksamen* structure, format and preparation can be found in section 3 on page 5.

1 Assessment 2 - 25%

This assessment was a prepared question evaluating candidates practical ability to execute scripting and utilise various systems tools as used in the course. The question was released in advance. Details can be found on Moodle &. This assessments accounts for 25% of the final course grade, with the remainder being attributed to Assessment : Online examiantion.

Mark Allocation

Marking was undertaken using a combination of automated testing , and subsequent manual inspection. Elements such as style, completeness and readability of code were manually assessed. High level composition of the grade was based on:

- Accompanying PDF 25%
- Prepared Script 75%

Grading Notes

Issues hindering execution were addressed, and where necessary further manual checks were carried out. A major issues was that with few exceptions K1 was ignored, resulting in script failures. Adjustments were made to the grading framework work around this.

General Feedback

72% of Students registered for the course (80% of those eligible) submitted for this assessment. Percentages are based on the number of attempts made. It is expected that the remainder will make an attempt at the *Konteeksamen*. This is a higher proportion of non-submissions than has been seen in previous years, despite a notably longer preparation period. In general, students did well in this task. There were some exceptional answers, which demonstrated attention to detail, and some strong evidence of testing and error handling. It is worth noting at approximate 25% of submissions were missing at least one components specified in the task sheet. This was unfortunately detrimental to the overall grade for the assessment in many cases.

Common Issues Identified

- Failing to read instructions carefully. Very few people dealt with K1 correctly.
- A large number of candidates omitted the IOC validation and inspection
- There is a notably broad misunderstanding about directories on the filesystem and what happens when the X bits are removed.
- Many of the scripts that performed poorly, do not appear have been tested/validated (and/or) contained items that clearly did not work
- Hard-coded paths/filenames/usernames caused problems. These should have been easy to catch prior to submission
- A surprising number of candidates submitted scripts, and files that were incorrectly named, of the wrong type, or corrupt (and signed as such).
- A notable number of scripts had invalid signatures.
- There is a disconcertingly broad misunderstanding about how the system crontab operated. This could be lined to a lack of testing.
- A concerning misunderstanding seems to be present for a number of students. This is that changing a files extension doe snot change the underlying file structure e.g. renaming a .txt file to .pdf does **not** suddenly make it a pdf, that can be read by a PDF viewer. Similarly, renaming a .py file to .sh doe snot make it a bash script.

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Component Feedback

PDF Generally these were well formatted with evidence of student having followed the requirements and providing the necessary detail, in a clearly laid out readable manner. Some unfortunately were blank submissions, or exhibited minimal effort, lacking the required components. Relating to content, it was a little disappointing to see a large number simply cut and pasted resources form tutorials /system man pages, rather than considering the purpose and rationale for the document. It is clear that in some cases the instructions provided had not been tested.

Script While several scripts were exceptionally well done, a key feature that came though in many was the lack of attention to detail. In some cases this was misspellings of variables, incorrect paths, hardcoded elements that had not been commented out, or even commands that did not exist. Debian based systems do not use `rpm` but several scripts tried to make use of this tool. There is evidence of LLM tools having been used, but in many cases this is most apparent due to the errors present in the outputs which should have been caught in testing, and with application of some sanity checks. Error checking generally was an area which could be improved. This starts with the basics of checking the parameters passed are present, something few scripts did.

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2 Assessment Overview

This section provides a high-level overview of the class performance as a whole for the course.

- Grading has been manually checked and moderated. In all cases where overall grades were on symbol boundaries, these have been reviewed by the examiner and moderator.
- The averages are calculated over the results for students who attempted the question.
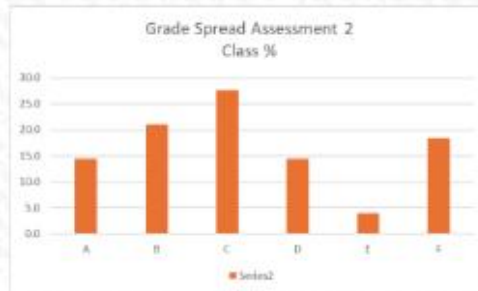- An overview of class performance for the examination can be seen on FSweb.

Figure 1: Enter Caption

In *general* those candidates that were unable to attain a passing grade, did not attempt a significant portion of the task. The plot above excludes non submissions/deferrals. If you have not attained a passing grade, you **should** request feedback so as to better prepare for the next attempt.

2.1 Assessment Outcome

The average grade achieved for this Assessment is C. This is however brought down significantly by a small number of poor performances, with over two thirds of the class attaining a C or higher. There was a very strong divide in the performance, with a notable portion of the candidates that did very well, clearly having spend considerable time and effort in the development of the submitted answer. There were some exceptional answers. The other notable group failed to make an attempt or submitted incomplete material.

2.2 Feedback

Individual feedback can be provided, and must be requested in writing via **email** (click here) within **5 working days** of the grade release. Feedback will be provided in an appropriate format for the student, this may include: an interactive video session, or in writing at the discretion of the course lead.

3 Konteeksamen

Should you not attain a passing grade for the primary assessment, or are unable to take this assessment due to a valid leave of absence, you will have an opportunity to take the *Konteeksamen* in February. The format and style of this examination will closely follow the primary assessment. The essence will however remain the same, with requiring flow control, logic and processing of data. It will **not** be the same examination repeated.

The *Konteeksamen* version of this assessment assumes you have made a full and proper attempt in the primary assessment. There are a number of differences which will need to be implemented, but it is largely the same in scope and approach as in the primary assessment. As such you should be able to re-use much of the work previously done. The specification will be released on Moodle to those who have registered for the Konteeksamen by **27/01/2025**. The Konteeksamen opportunity for this assessment will be due at **08h00 on 17/02/2025**, during the scheduled Konte period in the Spring Semester. The *Konteeksamen* will be available to those who have registered for it. *Konteeksamen* dates were detailed in the original 🔗 course assessment documentation.

The strategy for the *Konteeksamen* is to have a very similar structure as used for the primary assessment. The examination will be based on the fact that a full attempt has been made in the course - this includes the completion of tutorials and the primary assessments. Given this, candidates should have the basis of much of the material already developed. This in turn will allow for sufficient time to implement meaningful adjustments within the preparation period.

Any queries as to eligibility and/or registration for the *Konteeksamen* must be directed to NUC administration via the *support portal*.

💡 **Preparing for the *Konteeksamen***
Should you be needing to take the *Konteeksamen*, the best form of preparation is reviewing your submission for the primary assessment. In your preparation of the new submission task, take care to test carefully and ensure you are completing the requirements both on a case by case basis, and as a whole when integrated. Take any feedback received, along with the general feedback in this document , and use it to identify areas where you need to spend more time focussing on.