

Course code: DS4800_2025 VÅR

Course name: DS4800, INNOVASJON OG PROTOTYPING

Assessment type: A-F

Date of examination/hand out- and hand in date: 9.1.2025 – 30.4.2025

See WISEflow for the exact time.

Permitted exam materials and equipment: Everything used in the course

File format: PDF and other relevant file formats needed

Number of pages (suggestion):

- **Part 1: 2,000 to 3,000 words**
- **Part 2: 1,000 to 2,000 words**
- **Part 3: 3,000 words**
- **Part 4: Maximum 15-minute presentation**

Plagiarism detection: All exam papers, including bachelor's and master's theses, will be checked for plagiarism. You can read more about this in the guidelines on citing sources (referencing), plagiarism, and formal assignment submission requirements.

HØYSKOLEN KRISTIANIA – DS4800 – Innovasjon og prototyping – Written group take-home exam

General information:

- Start uploading your exam paper/file ahead of time, as it may take a long time to upload
- Exam papers must be handed in on Wiseflow by the specified time of the submission date to be processed for assessment.
- Before submitting, remember to check that all files can be opened and that every file is included. You should check the saved files on several machines before submitting them in Wiseflow.
- Incorrect file format or lacking documents may result in the submission not being passed or assessed.
- The total file size of the entire exam paper/file must be at most 5GB in zip format or 5MB in PDF format.

Introduction to the exam

The DS 4800 exam is a group assignment consisting of a take-home exam. Each group can consist of 2 to a maximum of 5 students. Students form their groups. The response must be submitted on WISEflow by the set deadline of April 30th. See WISEflow for the exact time.

The take-home exam counts 100% of the grade in the subject.

To receive a grade in the subject, the group must submit the response within the deadline, and all participants must have participated equally.

The exam consists of four parts: part 1, part 2, part 3 and part 4. All parts should be submitted as one complete assignment. Parts 1, 2, and 3 should be delivered as one combined PDF document. Any appendices and other information you wish to include can be added as attachments to the response or separate files. Part 4 can be delivered as a separate file/presentation or an external link. If it is added as an external link, it is your responsibility to ensure that this link is accessible during the examination of your delivery. Please try to use formats that are easy for the examiner to access.

Part 1 – The idea and fit - Written response

Imagine that your group is working on innovation and has developed a new product you want to realize. From the lectures and the subject, we have learned that innovation is more than just launching a product and expecting it to do well. Research, knowledge, and development are required to produce the final and correct product.

In the first part of the assignment, the group should come up with a fictional product that you want to develop and launch. The group decides what the product should be and how it works.

Describe how the group has worked to arrive at the final product proposal. The answer should also briefly describe the product and how it works.

A good response must compare your service or product to those already on the market and show how you have worked during the process. What distinguishes your product or service from what already exists on the market?

To describe this process, it is expected that at least one of the five characteristics of innovation (chapters 1 to 6 in 'The Innovator's DNA') has been used. Emphasis is placed on how the characteristics are utilized. It is better to explain how one is used than to use all five without making sense.

In addition, the final product is expected to be produced using at least one, but preferably several, of the methods described in the textbook. The methods chosen should be described and explained.

A prototype of the product should also be included. The group can choose how to develop and present the prototype.

Delivering a progress plan and market plan is not expected or required.

The length of part 1 of the response should be between 2,000 and 3,000 words but can exceed this, not including the table of contents and references.

Some examples of products for inspiration:

- Fitness or health app
- Pedometer
- Light and heat control of the house
- Weather forecast
- Camera app
- Internet banking
- Music and video player
- Messaging app
- Time tracking
- Travel planner
- Payment service

Part 2 – Simplified Business case - Written response

Every product needs a business case presented to the company to secure funding and resources. This task requires you to demonstrate your understanding of the essential components of a business case while effectively communicating your ideas.

Your business case must address the following key topics:

- 1. Goal:**
 - a. Clearly define the primary objective of the project or initiative.
 - b. Explain how achieving this goal aligns with broader organizational or business objectives.
- 2. Problem or Need:**
 - a. Identify the problem or need that your business case seeks to address.
 - b. Provide evidence or context to justify why this issue is significant.
 - c. Link it to relevant areas covered in part 1
- 3. Concept:**
 - a. Describe the proposed solution or initiative in detail.
 - b. Explain how this concept addresses the problem or fulfills the need.
 - c. Link it to relevant areas covered in part 1
- 4. Development Time:**
 - a. Estimate the time required to develop and implement the proposed solution.
 - b. Outline key phases or milestones in the development process.
- 5. Business Dependencies:**
 - a. Identify internal or external factors that could impact the success of the project.
 - b. Consider resources, stakeholder involvement, or market conditions.
- 6. Business Case (Justification):**
 - a. Provide a compelling argument for why the project should be undertaken.
 - b. Include potential benefits, return on investment, or other factors that support the business case.

The length of part 2 of the response should be between 1,000 and 2,000 words but can exceed this, not including the table of contents and references.

Part 3 – Evaluation - Written response

The product must be user-tested before launching on the market, preferably in several rounds. In this part of the submission, the group should test the prototype developed in part 1 on relevant end-users. The group defines the number of participants they want to test the prototype with, but the chosen number must be justified.

Conduct a user test of the prototype and document the process the group followed.

- How did the group conduct the user test
- What questions were asked of the participants
- What feedback did the group receive from the test participants

Based on the feedback, conclude and argue what the next steps for developing the product will be. You are not to perform these steps but document them for a hypothetical further development.

The length of this response is not defined, as most of it will consist of tables and responses. The textual response should be around 3,000 words but can be longer.

Please attach a welcome letter and signed consent forms for all participants in a separate section called Appendices in the response. These documents are also connected to the exam assignment.

Part 4 – Presentation - Video

In part 4 of the assignment, you are to record a presentation of your work, as you would have presented the assignment to external parties. Remember to include the process and the results from the written response, as well as a description/demonstration of the product you have come up with.

A good presentation will typically be structured so that the content you present can be understood by an audience that has yet to read the written response.

The presentation can most easily be recorded as a Zoom recording, where you play a PowerPoint presentation and speak over it.

The length of the presentation should be 15 minutes at maximum.

Example of a template/layout for written submission

The group can use the template below to organize their written submission for parts 1 and 2. Please note that the template is just an example and is not mandatory. Both part 1 and part 2 are required to be included in a single document for the final response.

1. SUMMARY OF THE DOCUMENT

Provide a summary of the document that highlights the critical points. The summary should give enough information to cover the content of the document, but where the reader must read the entire document to get all the details.

2. TABLE OF CONTENTS

Table of contents for all the points in the document.

3. INTRODUCTION

Introduce the document and the solution you have chosen to address. Describe why there is a need for this solution as well as the purpose of the document.

4. PRESENTATION OF PREVIOUS SOLUTIONS/LITERATURE

Refer to previous solutions and relevant literature and point out what is good and bad here.

5. PRESENTATION OF SOLUTION

A written presentation of how the solution is intended to work and how it works. What is better with this solution than what was revealed in point 4?

This is where the prototypes are shown.

6. Business case

Present your Business case

7. IMPLEMENTATION OF USER TEST

Describe how you conducted the user test and present the test results.

8. CONCLUSION OF USER TEST

Use this section to conclude the result of the user test.

9. FUTURE IMPROVEMENTS

Provide a brief description of the next steps in the development process.

10. REFERENCE LIST

All references should be listed at the end of the document and cited according to Kristiania's current reference standard.

11. APPENDICES

Please attach a Welcome Letter and fill out the consent form. You can also attach other appendices you think should be included.

- End of assignment set -