# Fordypningsprosjekt

by

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*"A quote"*

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NTNU - NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

# *Abstract*

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Master of Science

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The Thesis Abstract. . .


**Keywords:**    *BLOPP, Asthma*

# Acknowledgements

We would like to thank ...

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# Abbreviations

**NTNU**   **N**orwegian **U**niversity of **S**cience and **T**echnology

**BLOPP**   **B**arns **L**egemiddel**OPP**levelser

*To Pikachu!*

# Chapter 1

# Introduction

This chapter will give an introduction to the study. It will state the purpose, motivation, research questions and the research method for this study.

## 1.1  Purpose

The purpose of this study is to evaluate the CAPP, GAPP and Karotz Applications created by Aaberg, Aarseth, Dale, Gisvold and Svalestuen [Insert reference]. The evaluation will be done through usability testing done on all three applications. The results of these inital tests will then be used to improve the applications for a newer version. We will also plan a thorough testing of the applications.

## 1.2  motivation

According to NAAF("The Norwegian Asthma and Allergy Association") 20% of the Norwegian popularity has or have had asthma at the age of 10, and 8% of the adult popularity suffer from asthma. Many of these children find it unpleasant to use their medicine, as they often don't understand why the medicine must be taken [Should have a reference]. This often results in parents applying the medication incorrectly, apply the wrong treatment, or even forget to give the medication to their children.

## 1.3  Research Questions

The main goal for this study is to evaluate the CAPP, GAPP and Karotz application, and identify the usability problems in these systems. Structuring the goals into different

research questions will help this study with the evaluation of the goal. The goal has been composed into these questions:

**RQ1:** **Which Pokemon is really the coolest?** Silly question. Snorlax of course.

**RQ2:** **What will I have for lunch today?**

This evaluation should be done through user testing and feedback from future users of the applications. The testing will give information on how well the ...

## 1.4 Research Method

# Chapter 2

# Background

This chapter will give a brief introduction to the history behind the BLOPP project [insert reference] and the CAPP, GAPP and Karotz applications.

## 2.1   BLOPP Project

Barns Legemiddelopplevelser is a project group ...

## 2.2   CAPP/GAPP/Karotz

A description of CAPP/GAPP/Karotz as of now.

## 2.3   Existing products

On the two biggest application stores, Google Play and iOS AppStore, it exists a couple of similar applications to the one we have in mind. Among those we have looked into, is Huff and Puff [1] , Asthma Logger [2] , Kids Beating Asthma [3] and Asthma Monitor [4] . Common for all applications is that they have one specific aim. For instance, Huff and Puff wants to teach children in general about asthma. Asthma Logger logs treatments, and Kids Beating Asthma have some game elements, but none of these games are able to play during medication.

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[1] Google Play : Huff And Puff
[2] Google Play : Asthma Logger
[3] Google Play : Kids Beating Asthma
[4] Google Play : Asthma Monitor

| Application | Positive | Negative | Gamification elements |
|---|---|---|---|
| Huff And Puff | <ul><li>Decent quizzes from introduction to more experienced users</li><li>Can play sounds if children cannot read</li><li>Has asthma-specific word games, puzzles, etc.</li></ul> | <ul><li>Poor navigation models</li><li>Quiz is too generic, for instance asks what doctors call this and that.</li><li>The games is not exactly what we look for, as they cannot be played while undergoing a treatment</li></ul> | YES |
| Asthma Logger | <ul><li>Possibility to send journal on email specified by user. May forward this to doctor.</li><li>Really intuitive application</li><li>Shows dozes taken the last couple of days</li></ul> | <ul><li>Only has one generic medicine (does not state which medicine, for instance Ventoline) or dosage (?)</li></ul> | NO |
| Kids Beating Asthma | <ul><li>Informative and simple</li></ul> | <ul><li>Many software bugs and crashes regularly</li></ul> | NO |

### 2.3.1 Conclusion and evaluation

The main ideas we want to take further in our application is the email-sending system of
Asthma Logger and the quiz-aspect of Huff And Puff. In general, it is a really good idea
to be able to send your own journal on email, for instance to yourself. If we combine this
with possibility to send this journal to the doctor, we have a great time saving tool. Let's
say that Ole has been feeling bad for a while, and has been good at making journal for

when he has taken his medicine. He can then schedule an appointment with his doctor, and send his journal on email to the doctor. When he arrives to his appointment, the doctor already knows how many times he has taken medicine the last days and can easier give advice based upon these facts.

As for the quiz, we have concluded that this is a great way to inform children. Namely by letting them playing around with the application and gathering knowledge on this basis.

# Chapter 3

# Results and Discussion

This chapter will go through the findings from this study and summarize the results to answer the research questions from Section [INSERT REFERENCE]

## 3.1  Evaluation

## 3.2  Research Method

# Chapter 4

# Conclusions

# Appendix A

# An Appendix

# Bibliography