

NTNU - NORWEGIAN UNIVERSITY OF SCIENCE AND
TECHNOLOGY

Fordypningsprosjekt

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Declaration of Authorship

I, AUTHOR NAME, declare that this thesis titled, 'THESIS TITLE' and the work presented in it are my own. I confirm that:

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- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- Where I have consulted the published work of others, this is always clearly attributed.
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Abstract

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The Thesis Abstract...

Keywords: *BLOPP, Asthma*

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Abbreviations

NTNU **N**orwegian **U**niversity of **S**cience and **T**echnology
BLOPP **B**arns **L**egemiddel**OP**Plevelser

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 initial 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 population has or have had asthma at the age of 10, and 8% of the adult population 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 Pokmon is really the coolest?

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, Asthma Logger, Kids Beating Asthma and Asthma Monitor. 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.

Application	Positive	Negative	Gamification elements
Huff and Puff	<ul style="list-style-type: none"> • Decent quizzes from introduction to more experienced users • Can play sounds if children cannot read • Has asthma-specific word games, puzzles, etc. 	<ul style="list-style-type: none"> • Poor navigation models • Quiz is too generic, for instance asks what doctors call this and that. • The games is not exactly what we look for, as they cannot be played while undergoing a treatment 	YES
Asthma Logger	<ul style="list-style-type: none"> • Possibility to send journal on email specified by user. May forward this to doctor. • Really intuitive application • Shows dozes taken the last couple of days 	<ul style="list-style-type: none"> • Only has one generic medicine (does not state which medicine, for instance Ventoline) or dosage (?) 	NO
Kids Beating Asthma	<ul style="list-style-type: none"> • Informative and simple 	<ul style="list-style-type: none"> • Many software bugs and crashes regularly 	NO

Although neither applications serve all the purposes we wanted for CAPP and GAPP, they do have some useful elements. For instance, Asthma Logger allows for sending the journal to an email-address specified by the user. This implies that the user can send their journal to their own email, and forward this to their doctor, who can then respond to whether the child should get an appointment. This also simplifies the doctor's process when the child comes to his/her appointment, as much of the data needed is already on the doctor's computer.

In addition, both Kids Beating Asthma and Huff And Puff have some decent information, and have gamified the teaching of this information into quizzes, which is a good idea to incorporate into our own application.

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