Android Timer Application

Department of Computer Science
Aalborg University
Selma Lagerlöfs Vej 300
DK-9220 Aalborg Øst
Telephone +45 9940 9940
Telefax +45 9940 9798
http://cs.aau.dk

Title: Timer Application
Subject: Android Systems
Semester: Spring Semester 2012
Project group: sw602f12

Participants:
Kristian Kolding Foged-Ladefoged

Rasmus Hoppe Nesgaard Aaen

Simon Blaabjerg Frandsen

Supervisor:
Ulrik Nymann

Number of copies: X

Number of pages: X

Number of appendices: X Pages

Completed: X

Synopsis:

This project is about the development of...

Preface

This project has been produced in the spring of 2012 in the sixth semester of the software engineering study at Aalborg University.

Contents

Part I

Introduction

In this part there will be an introduction to the project, including background knowledge about the target platform, and knowledge about autism. There will be an analysis of the problem followed by a system definition of the whole multi project, and the specific group project.

CHAPTER 1

Analysis

Through meetings with Mette Als Andreasen, an educator at Birken, a special kindergarten for children with autism, we have learned a lot about children with autism, and the importance of having access to well-designed communication tools.

At Birken they often use hourglasses, and other kinds of timers, in different sizes and colors to visualize the progression of time to the children. The children will then associate the color and size of an hourglass with the time it represents, and specific timers are always used when they are performing specific activities, i.e. they always spend 30 minutes on eating lunch.
Mette Als Andreasen also explained how they use pictograms to communicate with the children. They have a scheme for the day, where all their daily activities are listed in pictograms, so the children can always go to their schemes and see what they are going to do next. Also activity instructions are listed with pictograms, i.e. in the bathroom there is a scheme showing how to wash hands.
The pictograms used at Birken comes from a licensed piece of software called *Boardmaker*[1]. To use the pictograms, the educators have to choose and edite them on the computer, print them out, cut them out in small squares, and laminate them. After that they can be put to use either on the schemes or by showing them when needed.

In general the guardians need a lot of different tools all the time, and the tools are not very practical to transport. Therefore it would be practical to

have a digital version of the timers and pictograms, so they would only have to bring one tablet, where all the needed tools are available. This leads to the system definition of this subproject, which is found in the next section.

CHAPTER 2

System Definition

The application we are developing is targeted for android tablets running Android 3.2. The use space is institutions and homes of autistic children.
The application is meant as a tool, such that parents and educators can visualize time in a way customized for each child by changing color schemes, symbols, forms, and save this information in profiles stored on a server. The visualization is formed as a full-screen timer, which can be customized to be shown as an hour glass or a stop watch.
Furthermore the guardians should be able to add pictograms to the timer view, to show them what they are going to do while the time is running, and what they are going to do when the time has run out.

Tail

Part II

Development

Head

CHAPTER 3

Design

CHAPTER 4

Implementation

Nice...

CHAPTER 5

Test

Tail

Part III

Discussion

Head

5.1 Conclusion

Tail

Part IV

Appendix

Appendix

Bibliography

[1] DynaVox Mayer-Johnson. Boardmaker software. http://www.mayer-johnson.com/boardmaker-software/, 2011. Last visit: 03-05-2012.