Title:

Project title

Theme:

Theme

Project Term:

P6, spring 2012

Project Group:

sw60xf12

Students:

Name name
Name name
Name name
Name name

Synopsis:

Synopsis synopsis ....

Supervisor:

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Preface

Quotations are the words of another person along with a source. The source of the citation will either be in the text immediately before or after, or could potentially be incorporated into the quote as shown in the example below:

> " This is an example of a quotation. "

<div align="right">— X, p. Y</div>

References are references to sections, figures, code snippets, chapters or parts written elsewhere in the report. This could look like the following:

This is explained in Section X.Y.

Code examples are written in a special environment so they are easy to read and recognize. Examples can be seen in Code snippet 1. Whenever there is a sequence of three dots ("...") in a code snippet, it means that we have omitted some content, which is not important in that specific context.

```c
#include <stdio.h>

main()
{
    printf("Hello World");
}
```

Code snippet 1. Code example of a hello world program written in C.

Contents

List of Corrections

Part I

Introduction

Introduction 1

1.1 Motivation

As this is a student report written as part of a learning project, we are required to comply with the study regulation. The main areas of focus, according to the study regulation, are: multi-project management and quality assurance in the form of requirements analysis, requirements management, and testing. The goal is to create a comprehensive software system, across multiple project groups, in order to enhance our competences in analysis, design, implementation, and evaluation of software applications in regards to the system requirements. [5]

To create a comprehensive system that will be usable in real life scenarios, this project will build on top of a previous project and will also be built with the aim of having other students continue its development later. The project we are building on top of is aimed at creating a touch based tablet system to support children with autism and their guardians in every day scenarios.

1.2 Target Group

Autism is a spectrum disorder meaning that one can be little autistic or very autistic [4]. The autism spectrum can vary from people whom are chatty or silent, affectionate or cold, methodical or disorganized. Lisa Jo Rudy states [3] that:"if you've met one person with autism, you've met one person with autism".

The Autism Society of America defines autism [1] as follows: "Autism is a complex developmental disability that typically appears during the first three years of life and is the result of a neurological disorder that affects the normal functioning of the brain, impacting development in the areas of social interaction and communication skills. Both children and adults with autism typically show difficulties in verbal and non-verbal communication, social interactions, and leisure or play activities.

Autism is one of five disorders that falls under the umbrella of Pervasive Developmental Disorders (PDD), a category of neurological disorders characterized by severe and pervasive impairment in several areas of development."

Children with autistic spectrum disorder are usually very fixated in a single area, meaning that they can become so interested in an area that they completely forget or ignore the world around them. This fixation can be used by educators or teachers to motivate the children to learn, by including this area of interest into the learning process.

Children with autism may also have difficulties socializing with people, feeling empathy, and understanding other peoples feelings. Lastly children with an autistic spectrum disorder usually wants to structure everything, which is also an important aspect during the planning of their everyday.

1.2.1 Working with Children with Autism

People with autism are often more visual in their way of thinking [2]. Rather than thinking in language and text, they think in pictures or visual demonstrations. Pictures and symbols are therefore an essential part of the daily used tool of children with autism and the people interacting with them. Also, children with autism can have a difficult time expressing themselves by writing by hand or talk, and can often more easily use electronic devices, by either typing or showing pictures, to communicate with people around them.

Different communication tools for children with autism already exist, but many of them rely on a static database of pictures, and often these has to be printed on paper in order to use them as intended (see appendix .1). Other tools, such as hour glasses of different sizes and colors, are also essential when working with children with autism, and these tools are either brought around with the child, or a set is kept every place the child might go, being at an institution or at home. Because this need of many different tool exist, it is relevant to explore the possibilities in using android tablets with customized and customizable software as a tool for children with autism and the people working with them.

Part II

Analysis

Part III

Design

Part IV

Implementation

Part V

Epilogue

Bibliography

[1] ? Definition of autism, ?

[2] Temple Grandin. Teaching tips for children and adults with autism, December 2002.

[3] Lisa Jo Rudy. Teaching tips for children and adults with autism, June 2011.

[4] Lisa Jo Rudy. What are the different names for autism spectrum disorders?, July 2011.

[5] Aalborg University. Studieordning for bacheloruddannelsen i software. *URL: http: // www. sict. aau. dk/ digitalAssets/ 3/ 3331_ softwbach_ sept2009. pdf* . Last viewed: 2012-03-15.

Appendix

.1 Notes from Interview

This is notes from an interview with Mette Als Andreasen, an educator at Birken in Langholt, Denmark.

Når tiden løber ud (kristian har tage et billede):
Færdig - symbol
Gå til skema - symbol
Taget fra boardmaker

Kunne være godt hvis man kunne sætte egne billeder ind som start/stop symboler.

Rød farve = nej, stop, aflyst.

De har sådan et ur på 60 minutter hvor tid tilbage er markeret med rød, og så bipper den lige kort når den er færdig.
Det ville være fint hvis de kunne bruge sort/hvid til dem der ikke kan håndtere farver, men også kan vælge farver.

Stop-ur:
en fast timer på 60 minutter + en customizable som ikke ser helt magen til ud, som f.eks, kan være på 5, 10 eller 15 minutter for en hel cirkel.

timeglas:
skift farve på timeglassene, men ikke nødvendigvis gøre dem større. Kombinere med mere/mindre sand. Eventuelt kombinere med et lille digitalt ur, til dem der har brug for det, skal kunne slåes til og fra.

Dags-plan:
ikke særlig relevant til de helt små og ikke særligt velfungerende børn. Men kunne være rigtig godt til de lidt ældre.
En plan går oppefra og ned, og hvis der så skal specificeres noget ud til aktiviteterne, så er det fra venstre mod højre ud fra det nedadgående skema.

Til parrot:
Godt med rigtige billeder af tingene, som pædagogerne selv kan tage, eventuelt også af aktiviteter, så pedagogerne kan have billeder af aktiviter som de kan liste efter skeamet.

Der var mange skemaer rundt omkring, og der henviser det sidste billede i rækken til næste skema, som hænger f.eks. på badeværelset eller i garderoben.