Smartphone Application for eTherapy

Presenter: Guanzhong Wang
Supervisors: Prof. Tom Gedeon
           Dr. Sabrina Caldwell
Obsessive-compulsive Disorder

- Obsessive
- Compulsive
Introduction

• Clients
Application Overview

- Graphical Interface
- Content Management
- Data Communication with Database
- Data Analysis
Project Process

- Development Environment Investigation
- Software Program
- Test
Structure

• 1. Environment
• 2. Development
  • Graphical User Interface-XML
  • Java
  • Backend
  • Integration
  • Data Flow
• 3. Test and Result
• 4. Conclusion and Future Work
Development Environment

- **Frontend and Integration**
  - Android Studio
  - XML (Extensible Markup Language)
  - Java

- **Backend**
  - PHP (Hypertext Preprocessor)
  - MySQL
User Interface - XML

Reducing Your Anxiety
- Relaxation and Breathing Exercises
- Exposure Exercises and Realistic Thinking Training
- Physical Exercise

The following section will take you through some relaxation and breathing exercises designed to help you manage your anxiety.

My Aims and Progress

John

Severity from 0 to 100

Enter Username to Check Symptom History

Enter Date and Severity to Make Change

<table>
<thead>
<tr>
<th>Date</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/12/2017</td>
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<tr>
<td>02/12/2017</td>
<td>60</td>
</tr>
<tr>
<td>03/12/2017</td>
<td>50</td>
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<tr>
<td>04/12/2017</td>
<td>40</td>
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<td>10</td>
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<td>01/02/2017</td>
<td>5</td>
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</table>
Java

- Widgets and Activity Connection
- Data Analysis
- Data Transmission
Backend

- Generate webview for frontend
- Generate unique ID for user
- Communicate with database
Integration

- XML files with Java files
- Java files with Backend files
Integration

XML File
- arrange layout
- set static content
- set static widgets

set widgets and activity interface for java file

set connection between widgets and activities

transfer data to widgets and activities

JAVA File
- frontend data analysis
- algorithm implementation

send request

response to request

user side

Database
- set data in tables

retrieve data from database

send data to database

Backend File
- analyse data from database
- algorithm implementation

server side
Data Flow

- User to Database
- Database to User
Test and Results

Test Results in Different Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Marks</th>
<th>Full Marks</th>
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<tbody>
<tr>
<td>GUI Style</td>
<td></td>
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<tr>
<td>Function Linkage</td>
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<tr>
<td>Functionality</td>
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</table>

Test Results in Different Application Part

<table>
<thead>
<tr>
<th>Part</th>
<th>Marks</th>
<th>Full Marks</th>
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<tbody>
<tr>
<td>Treatment Content</td>
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<tr>
<td>Exposure Hierarchy</td>
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<tr>
<td>Symptom Severity</td>
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<tr>
<td>Server Side</td>
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Conclusion and Future Work

- A smartphone application for etherapy with full functionality in treatment, exposure hierarchy and symptom severity
- More beautiful interface and more kinds of functions
Thanks