

Source of Information

Title: Requirements Engineering and Management for Software Development Projects

Author: Murali Chemuturi

Link: <https://link-springer-com.ezproxy.otago.ac.nz/book/10.1007%2F978-1-4614-5377-2>

Title: The challenger app for social anxiety disorder: New advances in mobile psychological treatment

Author: Alexander Miloff*, Arvid Marklund, Per Carlbring

Link: <https://www.sciencedirect.com/science/article/pii/S2214782915300014>

Title: Accessibility-posters-set.pdf

Author: UK Home Office (Government Department)

Link:

https://github.com/UKHomeOffice/posters/blob/master/accessibility/dos-donts/posters_en-UK/accessibility-posters-set.pdf

Home Link : <https://hodigital.blog.gov.uk/>

Website: <https://www.helpguide.org/articles/anxiety/social-anxiety-disorder.htm>

Scrum Methodology

<https://www.brighthubpm.com/agile/129479-agile-method-1-scrum/>

Connor, K. M., Davidson, J. R. T., Churchill, L. E., Sherwood, A., Weisler, R. H., & Foa, E.

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Hedman, E., Furmark, T., Carlbring, P., Ljotsson, B., Ruck, C., Lindefors, N., & Andersson,

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Miloff, A., Marklund, A., & Carlbring, P. (2015). The challenger app for social anxiety

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Phan, K. L., Fitzgerald, D. A., Nathan, P. J., & Tancer, M. E. (n.d.). Association between

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Generalized Social Phobia. *Biological Psychiatry*, 59(5), 424–429.

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Sladky, R., Höflich, A., Küblböck, M., Kraus, C., Baldinger, P., Moser, E., ...

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and Orbitofrontal Cortex in Social Anxiety Disorder During Emotion Discrimination

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<https://doi.org/10.1093/cercor/bht279>

Assignment 1

Deliver a written report on what you are going to build, who is going to build it, how you are going to build it, which platforms your app will run on, and how long it will take to build. In particular, which disability are you supporting, how does that disability affect the user's ability to use your chosen device, and how are you going to support users with this disability in your app.

Deliverable: The Project Plan - No More Than Two Pages

Executive Overview

- To Create at the end

Introduction

- To Create at the end

Project description

- What are we making - explain in detail
 - Application to help those with different kinds of Anxiety
 - Generalised Anxiety Disorder (GAD)
 - **Social Phobias**

Others can be added later such as:

- Post Traumatic Stress Disorder (PTSD)
- Panic Disorder
- Obsessive Compulsive Disorder (OCD)

Main function of the app will be to aid users in remembering their steps to calm down. We will also provide a range of steps that others with the disorder found helpful, alongside a collection of information about the disorder and places to get help.

- Who are we making it for:
 - Mainly those with either GAD or Social phobias, however information regarding other types of Anxieties will be available as well as generalised calming exercises.

Features of the Application:

- General information page
- Links to pages with

Resource requirements

- Prices, schedules
 - Hardware
 - Three Laptops
 - Apple Watch
 - Iphone
 - Lab Computers
 - Software
 - Swift
 - Staff
 - Ethan, Nathan, Robert
 - Consumables
 - Coffee X 3 (So far)

Organization

- People and roles
 - Relates to minutes of meetings - Robert to do

- Professionals - Email Communication
 - Professor Neil McNaughon
 - Doctor Tamlin Conner

Project breakdown

- Breakdown of the SDLC
 - Requirement gathering and analysis - 33%
 - Design - 33%
 - Implementation or coding 17%
 - Testing 25%
 - Deployment 25%
 - Maintenance +100% Date
- Activities
- Milestones / Goal
 - Set some goals today
 - Hardware needed
 - Who is doing it?
 - What method PERT chart
- Deliverables
 - Documents
 - Pieces of Software

Risk analysis

- Possible risks, and solutions

Project schedule - PERT Chart

- Dependencies between activities
- Time to milestones
- Allocation of people to tasks

Project Planning

- Any idea if this fits in - see lecture slides

Monitoring and reporting

- How the project will be monitored
 - Summary of Notes / Meetings
 - Meeting 11th March 2018 - Input Here
 - What flow method do we want
- When reports are to be delivered
 - Write down assignment due dates here

Conclusion

Market Research Draft

By Nathan Laing

Target audience:

According to the Ministry of Health (NZ), ~6 % of New Zealanders suffer from some form of Anxiety disorder, and that while Māori and Pasifika people(s) are thought to be at a much higher risk (due to self-reported psychological stress), they had much lower reported rates than NZ Europeans. This suggests they may be less likely to seek help. Adults from 20-30 were also at high risk. This is where a free and easily accessible app could have a significant impact on both NZ European and Māori/Pasifika young teens and adults struggling with anxiety disorders.

With professional therapy being extremely expensive and inaccessible to many, there is a market to provide quality information and treatment to those unable to afford it. In recent years, cognitive behaviour therapy (CBT) has been shown to be extremely effective and has exploded in popularity as an alternative to pharmacological drugs (Mayo-Wilson et al., n.d.). This treatment which classically required an expensive expert, can now also be done online (Hedman et al., 2011). In particular apps which utilise mini challenges for users to complete and the use of gamification of social interaction have been found to be effective in reducing social anxiety (Miloff, Marklund, & Carlbring, 2015). Our app should aim to provide a similar service along-size relevant information on where users can find help, judge-free social contact and talk with other people who have been through a similar experience.

Distribution/Marketing:

We have been in contact with the University of Otago's Professor Neil McNaughton who works in the field of anxiety and stress. He has agreed to have email correspondence with us, helping to only include features that would be helpful to actual patients with social anxiety disorder (SAD). We plan to deploy our app through the app store as a free self-help app. This will make it widely and easily assessible to anyone. To market our app to students, we can contact groups such as Silverline Otago, OUSA or the Critic. If any of these are successful we can try and arrange a meet-up feature for local users.

Questionnaire:

To help gauge where users sit on the spectrum of SAD, we can implement a questionnaire. The one most useful in this scenario is the Social Phobia Inventory (SPIN) test (Connor et al., 2000), a well-known, user friendly psychological test for SAD. There are 17 questions and

each one is answered on a scale of 1-5. A score of over 19 indicates a high likelihood of having the disorder. There is also another test called a mini-SPIN which is a 3-item version of the spin, with a reported accuracy of 90% (Connor, Kobak, Churchill, Katzelnick & Davidson, 2001). We could use this as an initial questionnaire or take the ideas from the core questions and use them to improve our marketing.

Stages of Anxiety around an event:

The amygdala, a key player in the fear response, has been found to be overactive in people with SAD causing negative social stimuli to become exaggerated (Phan, Fitzgerald, Nathan, & Tancer, n.d.). In conjunction with communication problems with the prefrontal cortex (Sladky et al., 2015), this creates a destructive cycle of increasing anxiety.

People with SAD often experience a common progression of feelings as events draw closer, occur and end. Initially there is the anticipatory stage in which contemplating the event makes them feel anxious. It is at this point which people often start to imagine and obsess over the many ways in which the social event could go wrong. This in turn makes them more anxious which leads to more worrying. So before any social contact has occurred many will isolate themselves to avoid the scary situation.

The anticipatory stage often results in people feeling very worried/anxious about the event as it starts. Since they are in a state of heightened social anxiety they are far more likely to focus on being judged by others and focus on how anxious they feel. This often prevents them from noticing things such as social cues of acceptance from others which would calm them down. This heightened anxiety also causes noticeable physical changes such as sweating, shaking, rapid heart rate, stuttering and more. These changes often confirm in the person's mind their own social incompetence and loss of control over the situation. To try and hide these behaviours and cope with the situation many will avoid attention and rely on alcohol or drugs. This can often worsen the situation as social performance can easily deteriorate with the addition of alcohol and/or drugs and self-isolation.

Once the event has ended the anxiety will often not go away. People suffering from SAD tend to replay situations in their head over and over obsessing about things they said wrong or what other people thought of them. They are far more likely to conclude (due to their own negative bias) that the social situation was far worse than it was leading them to be more likely to avoid similar situations next time or to be more anxious if they do end up going.

General tips and last thoughts:

Most of the anxiety is fuelled by delusions about not being socially good enough or thinking

that people will not want to talk to them or judge them. Positive reinforcement and reminders that people don't judge others that quickly or harshly are thought to help a lot in promoting SAD sufferers to engage in social contact.

Summary of Meeting = 11/03/2018

When / Where is the next Meeting

25th March 2018 - Next Meeting - AMENDMENT

18th March 2018

Next Meeting

Psychology Department / Mental Professional - 1 Priority Scale

Pert Chart - 2 Priority Scale

General Research - 4 Priority Scale

Report Output - 3 Priority Scale

Risk Analysis

General Layout - 5 Priority Scale

Summary of Meeting = 18/03/2018

Key Dates for Everyone

Brainstorm Session for All sections on whiteboard

Reminder to keep log of resource sources!!

When / Where is the next Meeting

Monday 2nd April 2018

Next Meeting

Reporting into Readable Format - 1 Priority Scale **ROBERT**

Data Collection - 1 Priority Scale **NATHAN - Delegates / Takes Charges**

Basic Design of Application - 1 Priority Scale **ETHAN**

Summary of Meeting = 08/04/2018

Setting up Github

- Report
- Microsoft Project

Ethan upload Copy to Github

Ethan and Nathan - Finalise Report by end of 08/04/2018

Ethan to Delegate - Tasks

Agreement Next Meeting 22/04/2018

Summary of Meeting = 22/04/2018

