Requirements and Specification Document
for
TheraComm

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1 Abstract

Having to meet up face-to-face with a therapist can be inconvenient for patients. It can be uncomfortable for some patients. Some patients may only have a limited amount of time to spare. As a result, patients will have to manage their issues themselves. TheraComm is an iOS-based mobile application that provides patients a convenient way to communicate with their therapist. TheraComm incorporates the core features of an email system and a chat system. Thus, allowing the patient to not only communicate with the therapist but also have communication in real time.

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2 Introduction

2.1 Background

Depression and anxiety are common and disabling disorders in post-secondary students in Saskatchewan, with higher prevalence rates than in the general adult population. Some students seek treatment, but many do not for various reasons including limited time, concerns about privacy and stigmatization, and preference to self-manage symptoms. Students who do seek services at post-secondary institutions in Saskatchewan often face long waiting lists or may only receive a limited number of sessions. Access to cognitive behaviour therapy (CBT), which is known to be effective for depression and anxiety, is especially limited in this population, as high demand and constrained resources often only allow for a few sessions per student

Transdiagnostic internet-delivered cognitive behaviour therapy (ICBT) is potentially a convenient method for students to access care for depression and anxiety. In transdiagnostic ICBT, clients receive access to the same information and skills as traditional face-to-face CBT as online lessons. Depression and anxiety are both targeted in transdiagnostic ICBT which helps to ensure multiple concerns are addressed in an efficient manner. This is important given that depression and anxiety are often comorbid. Research shows that transdiagnostic ICBT is effective at reducing symptoms of depression and anxiety, and there is also evidence that the findings of research trials translate into clinical settings. Most commonly, ICBT is delivered with brief weekly therapist assistance (~20 minutes) via the telephone or secure email.

2.2 Purpose

Recently, a transdiagnostic ICBT program for depression and anxiety (the Wellbeing Course) was tailored specifically to post-secondary students (the UniWellbeing

Course). The UniWellbeing Course has now been offered to over 800 students. In its current format, the UniWellbeing Course consists of 4 core lessons with the first three lessons having homework assignments. Students also have access to case stories and additional resources as needed (e.g., resources related . In order to facilitate treatment completion, students receive automated emails and have brief weekly contact with a clinician via email or phone. Results are highly encouraging, with 63% of students completing the full course, 11% 3 out of 4 lessons, 13% 2 lessons and 13% 1 lesson. Significant improvements in anxiety and depression have been found along with high levels of satisfaction with the course. It has been identified that prior to treatment, it is critical for students to be introduced to the course, comfortable with the treatment approach, and willing to practice and develop skills. While the above results are encouraging, the purpose of this project is that the application used to deliver ICBT could be improved to better engage younger users.

2 Project Scope

So, in order to better engage younger users, we are creating a phone application that for their UniWellbeing Course which is currently being done with a web-based application. Our goal is for this phone application will have all the current features and functionalities of the web-based application and the phone application will be across multiple platforms which include iOS, Android, and Windows; however, we will not have enough time to do all this. So after we discussed with our clients, what we intend to do is we will be creating an iOS-based application which includes the email features of their web-based application and . The following are the project requirements we received from our client:

1.1 Email Messaging Requirements

- Present user with a login prompt (user/password)

- Using the combination above, obtain valid API token.

- Show list of messages to the client. Each message in the listing would have: subject, from/to fields, portion of the message body, urgent/system label (if applicable).

- View particular message: Show all of the above in addition to the full body of the message.

- Navigate between folders (Inbox, Sent, Drafts).

- Save a draft message

- Update draft message

- Send a message (new or one that was drafted earlier)

- Delete a message

- Display any broadcast messages

- Ability to dismiss broadcast messages (if dismiss-able).

- In general, application needs to handle errors appropriately when requests were not successful.

1.2 Chat Messaging Requirements

- Send Message

- Delete Message

- Chat History

- Typing Indicator

- Enable one-to-one conversation

- Encrypted traffic

- View Chat List

- Push Notifications

- Read Cursors

- Display if user is online/offline

1.3 Additional Requirements

- Folder management (add, edit, remove) folders for client

- Message management: e.g. move messages between folders, mass delete of messages

- Show current or past program enrolments.

- Let client respond to next survey that is due (this could be very challenging requirement)

- Let client browse course materials

- Staff member can login using username/password.

- Listing of messages and folder management (as above)

- Display current caseload (list of active clients)

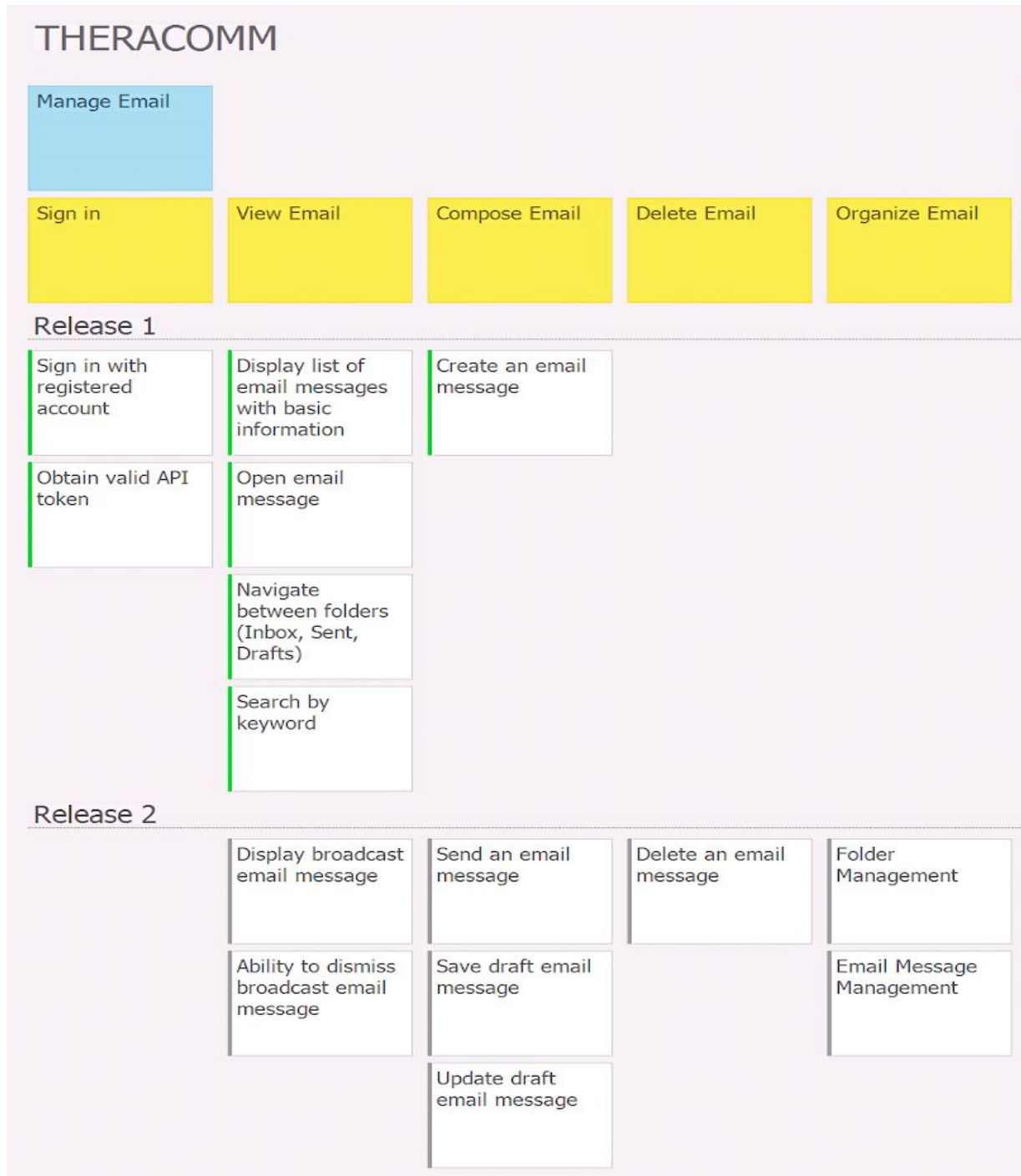- Display a particular client's case file.

3 Project Timeline

		SEPTEMBER				OCTOBER		
PROJECT WEEK	1	2	3	4	1	2	3
PHASE ONE			Project Requirements					
PHASE TWO								
PHASE THREE								
PHASE FOUR								

	NOVEMBER				DECEMBER			
4	1	2	3	4	1	2	3	4
		Study API						

	JANUARY			FEBRUARY				
1	2	3	4	1	2	3	4	1
	Email Component Development and Testing							
					Chat Component Development and Testing			

	MARCH			APRIL			
2	3	4	1	2	3	4
Bug Fixing and Project Presentation							

4 User Story Map

THERACOMM

Manage Email

Sign in	View Email	Compose Email	Delete Email	Organize Email

Release 1

Sign in with registered account	Display list of email messages with basic information	Create an email message		
Obtain valid API token	Open email message			
	Navigate between folders (Inbox, Sent, Drafts)			
	Search by keyword			

Release 2

	Display broadcast email message	Send an email message	Delete an email message	Folder Management
	Ability to dismiss broadcast email message	Save draft email message		Email Message Management
		Update draft email message		

Chat with other				
Notification	View other users	View Message	Compose Message	Delete Message

Release 3

via application	Display list of users	Display list of chat messages	Create a chat message	Delete a chat message
	Display if user is online/offline	Open chat message	Send a chat message	
		Chat History	One-to-one conversation	
		Read Cursors	Encrypted traffic	