Therapy Support App
Group 9

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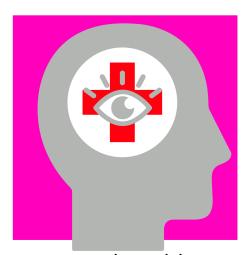SN: 250735158

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COMPUTER SCIENCE 4471 A
FALL - 2022

My Mental Health App

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TODO:

1. Business requirements related to problem's root cause

2. Examples:

   (a) Accurate monthly sales forecast which will help us increase our sales

   (b) need to generate monthly report that indicates sales

   (c) notifications to account executives when a customer opens a problem ticket

3. Varies based on process model

4. Expected:

   (a) Shippable product

   (b) some documentation

   (c) lessons learned

   (d) Why we chose one thing and not another

   (e) If we switched from one platform to another (if we switched)

5. stakeholders:

   (a) identify asap

   (b) anyone who has any relation to the project

   (c) external - anyone who has an influence including people who write certain libraries and so on (include instructor and TA as external stakeholders)

   (d) internal - programmers, maintainable, customers, users, etc [double check this point's list]

6. success/acceptance criteria:

   (a) measurable terms of the project's outcome for the end user, customer, stakeholders, etc.

   (b) cost

   (c) timeline

   (d) Business requirements

   (e) scope

   (f) acceptance criteria: (can be only a few)

       i. conditions the software must fulfill

Contents

1 Problem Definition

Therapists and patients encounter many challenges during the therapeutic process. There are a number of small yet persistent problems for therapists revolve around their patients' self-management between sessions. This software's intention is to help patients in doing so. Among the many problems, the following stand out (in the order of important:)

1. mood tracking between sessions

   (a) numerical (including descriptions of the numeric values, to increase clarity)
   (b) statistical (based on numerical inputs)
   (c) descriptive ("gloomy", "sad", etc)

2. Medication management

   - Inventory
   - Persistence (taking medications as required)

3. Symptoms

   - Medical (unrelated to the patients diagnosed)

2 Project Objective

2.1 General objective guidelines

Patients should be able to generate a report about their mood and medication for their therapy session in one to three clicks between each therapy session.

Therapists should be able to see their patient's mood and medication reports in one to two clicks between each therapy session.

1. Learning the process of project development through application of knowledge acquired during the Computer Science 4471A Course.

2. The creation of an intuitive and user friendly self-management mobile app (Android and/or i/OS).

3 Stakeholders List

- Patients - Internal stakeholder

- Therapists - External stakeholder

3.1 Internal Stakeholders

external - anyone who has an influence including people who write certain libraries and so on (include instructor and TA as external stakeholders)

internal - programmers, maintainable, customers, users, etc [double check this point's list]

1. Patients (main users)

2. Therapists (users by proxy, potential users if a therapist-side interface is implemented)

3.2 External Stakeholders

1. Legislation and public policy (for example security of medical information)

2. Governing bodies (such as the CRPO - The College of Registered Psychotherapists of Ontario)

3. Instructor and TA

4 Success/Acceptance Criteria for each Stakeholder

4.1 Patients

- As a user, I want to be able to store my mood on a particular day.

- As a user, I want to be able to rate my mood on a particular day on a scale of 1 to 10.

- As a user, I want to be able to store my medication details such as the medication, dosage, date, and doctor.

- As a user, I want to be able to store when I take my medication.

- As a user, I want to be able to have an organized collection of mood and medication reports for my therapy visit.

- As a user, I want to be able to create a statistical report about my ratings on moods.

4.2 Therapist

- As a user, I want to be able to look at my patient's reports in an organized manner.

- As a user, I want to be able to see the medication list stored on the application.

5 Chosen Design Patterns

1. **State** Accounts' state[**?**]

2. **Visitor** Output formatting[**?**]

3. **Strategy** graphs (possibly multiple, first one will be line plot)[**?**]

4. **Singleton** Interface[**?**]

5. **Additional creational pattern** for different 'screens' (interfaces)[**?**]

6. **Bipolar UK's Mood Tracker (app):** Our new Mood Tracker app can make it much easier to record your daily mood, medications, emotions and how much sleep you've had[**?**]

6 Use case diagram(s)

7 Selected Use case Descriptions only two descriptions

8 Sequence diagram(s) for the selected use case for descriptions

9 System Architecture

1. **Repository architecture**: For medication database

2. **Event driven architecture**: for reminders

3. **Pipe and filters architecture**: for statistical analysis and graphs

4. **Component based architecture**: for the whole system, especially for the user interface.

10 Detailed Class diagram(s)

11 State-machine diagram for the whole system, if possible

12 Entity Relationship Diagram (Data modelling)

13 GitHub Link

https://github.com/Jon-AL/4471—Therapy-Support-App

14 Conclusion

15 References

1. **MyTherapy (app):** Your personal pill reminder and medication tracker app[**?**]

2. **Bipolar UK's Mood Tracker (app):** Our new Mood Tracker app can make it much easier to record your daily mood, medications, emotions and how much sleep you've had[**?**]

main
Project WBS
Task Assignment Matrix
Sample of commits on the selected version control system
things we want to do

1. docker

2. gant chart

3. Reminder system

4. Privacy

5. Minutes