Emotional Assistant

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Overview

- Initial idea
- Problems / Questions
- Expert interview
- Technical Progress
  - User Interaction Prototype
  - Use Case Scenarios

Initial idea

- **<u>Goal</u>:**

  Assist people who have recently experienced *Burnout* in reintegrating into their workplace

Initial idea

- Goal: Assist the user in reintegrating into workplace after burnout
- **TEK Model**

  (Training Emotionaler Kompetenzen nach Berking)

Initial idea

- Goal: Assist the user in reintegrating into workplace after burnout
- TEK Model
- **Character:**
  - React to user's mood via mimicry
  - "Kindchenschema": soothing appearance, and convey artificial agent's limited capabilities
- **Animal assisted therapy (AAT)**

Problems / Questions

- How should the pet behave?
- What behaviours might be counterproductive towards helping the patient?
- What kind of feedback should the character give?
- How does therapy with a burnout patient really look like?
- How does an actual therapist view our idea?

Expert interview

- Goal: Assist the user during time between inpatient and outpatient treatment (therapy)
- Support in psychoeducation and emotion regulation
- Integration of knowledge into everyday life
- Activate the patient
- Character
  - cute vs. cartoony
  - mimicking or not mimicking

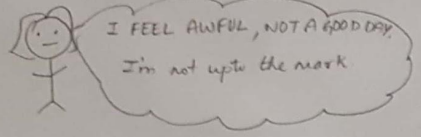
Incorporation of Interview suggestions

- More engaging interaction design: continuous presence of virtual character to improve engagement and relationship with character
- New feature: suggest small activities and give encouraging feedback
  - Leave emotionally sensitive topics to actual therapist
  - Give user the feeling of not being alone when time between real-life session increases
- Keep muscle and breathing relaxation sessions
- Increase focus on psychoeducation

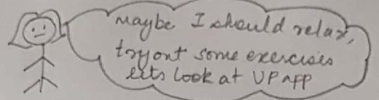
Technical Progress

- Emotion detection through voice characteristics
  - Using EmoVoice (implemented in SSI)
  - Not very accurate yet → Improve
- 3D avatar displayed through jMonkeyEngine, embedded in VSM
  - Possible to display characters and control through VSM
- Storyboards and prototypes for User Interaction

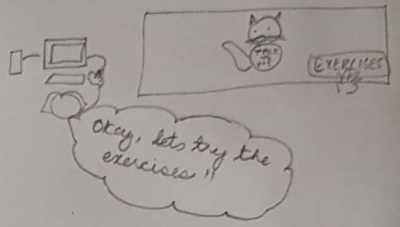
Storyboards

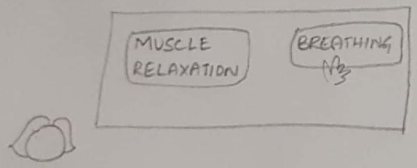


Alexandra, is upset & dejected that she's not in her A game.

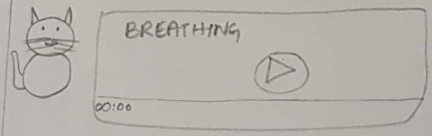


Alexandra is aware that the virtual pet app comes with exercises options & wants to try them



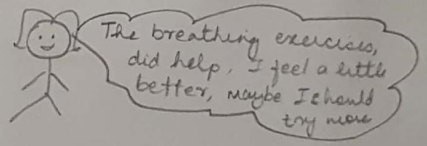


upon choosing exercises, Alexandra is presented with few exercises options.

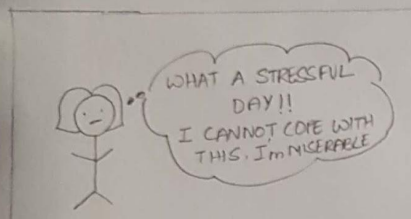


REWARDS

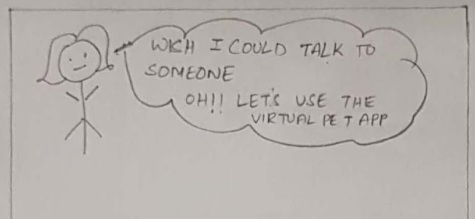
Alexandra chooses the exercise & corresponding exercise is played with pet assisting & finally rewards to win.



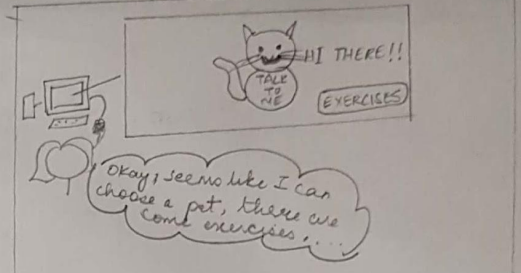
Alexandra feels relaxed & wants to try more. Getting rewards also makes her feel better.

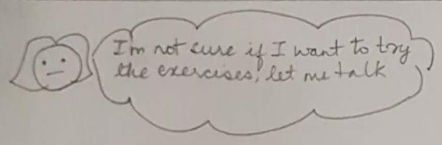


Alexandra, has a stressful & unproductive day, feels low & miserable.

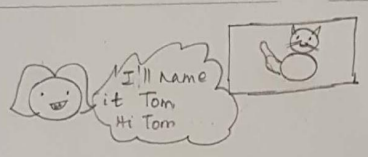


Alexandra, wants to talk to someone, mostly someone who doesn't judge her situation. She turns towards the Virtual Pet for assistance



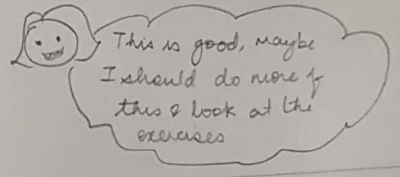


Alexandra, open the Desktop App. Virtual pet and find the options the App offers, which is talk to the pet or try few exercises.



Alexandra, names her pet & talk to the pet

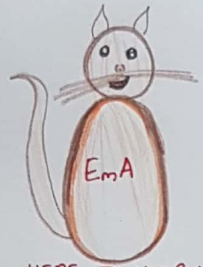
Tom listens to Alexandra & emotes basic emotions, like attentive ears, wagging tail, purr...



Alexandra, likes the talking session & would like to do it often & maybe try the exercises.

Lo-Fi Prototype

①



HERE TO HELP YOU

②

TIP OF THE DAY

TALKING SESSION

INFORMATION

2a

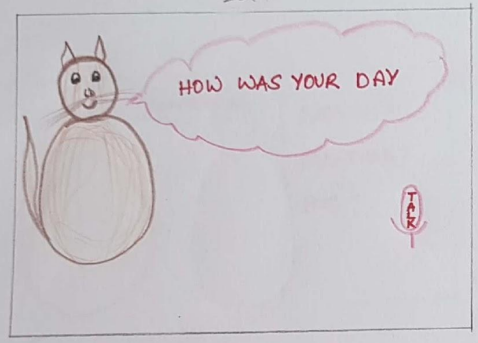
TIP OF THE DAY

PMR EXERCISES HELP MUSCLES TO RELAX

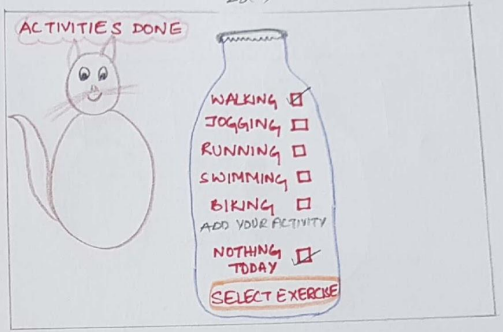
2b

WELCOME TO TALKING SESSION

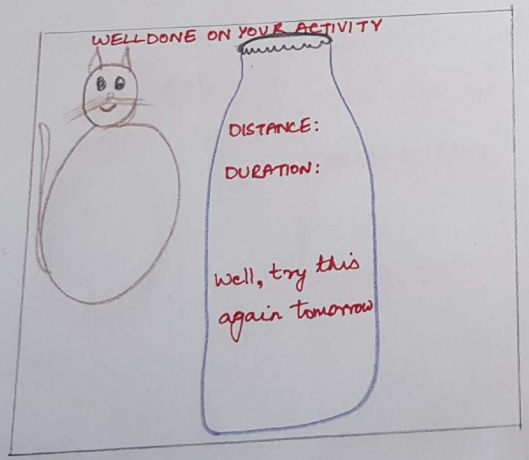
2b(i)



2b(ii)

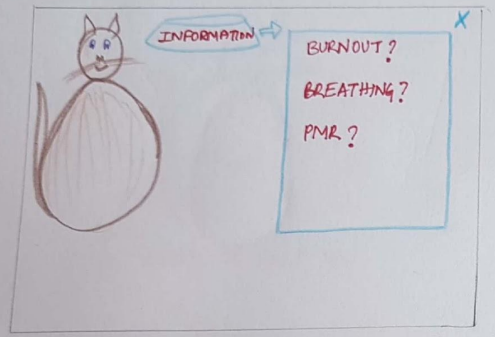


2b(ii)a

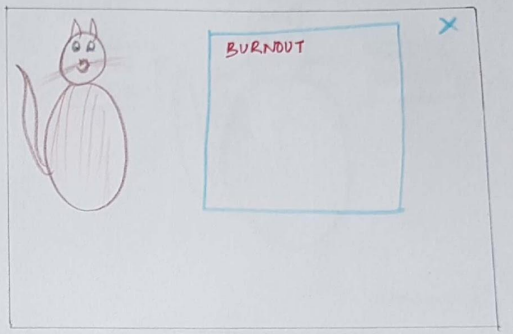


2b(ii) b

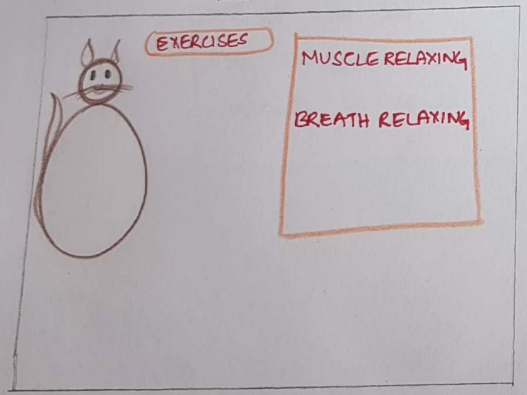
2 C


INFORMATION
BURNOUT ?
BREATHING ?
PMR ?

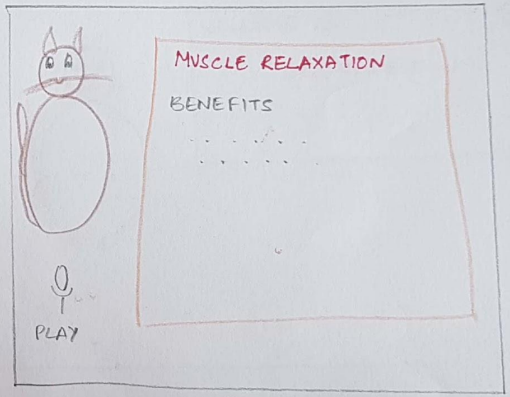
2 c(i)


BURNOUT

2 d


EXERCISES
MUSCLE RELAXING
BREATH RELAXING

2 d(i)


MUSCLE RELAXATION
BENEFITS
PLAY

Use Case Scenarios

1: Muscle Relaxation

Primary Actor: User

Goal: User completes the muscle relaxation exercise.

Preconditions:

- The system is running properly.
- User has done with introduction part.

Scenario:

1. The user opens the Emma application on his system.
2. The user selects the Muscle Relaxation mode.
3. The user follows application timer and instructions.

Exceptions:

EX 1.1. The system is not running properly.

Priority: High priority

Frequency: High

Use Case Scenarios

2: Breath Relaxation

Primary Actor: User

Goal: User completes the breath relaxation exercise.

Preconditions:

- The system is running properly.
- User has done with introduction part.

Scenario:

1. The user opens the Emma application on his system.
2. The user selects the Breath Relaxation mode.
3. The user follows application timer and instructions.

Exceptions:

EX 1.1. The system is not running properly.

Priority: High priority

Frequency: High

Use Case Scenarios

3: Track Positive Activities

Primary Actor: User

Goal: Track the user's activities.

Preconditions:

- The system is running properly.

Scenario :

1. The user opens the EmmA Application
2. Chooses the activities which the user has done for the day

.

Exceptions:

EX 1.1. The system is not running properly.

Priority: High priority

Frequency: High

Thank you for listening