

Title: Video game app for depression therapy.

Background: Serious games and serious game apps exist in the market for informative, therapeutic and diagnostic purposes for mental illness. While most games for mental illness are either designed based on Cognitive behavioral therapy or function as extensions of face-to-face therapy (e.g., reminders for upcoming appointments), very few mental illness treatment games are based on neuroscience. Currently, there are a few game applications available that use neuroscience based tasks to help mental illness patients, however these applications suffer from design issues. For example, neuroscience based tasks are generally dull and require patients to spend considerable time playing those for any improvement. I have been working on an app that uses such neuroscientific games for helping depression patients. I already have the prototype of the app and I have been testing it for usability.

Challenge: As a next step, I want to engage talented computer scientists to work with me as developers, for improving the app usability. The good news is that the app does not need to be designed from scratch, because the original code is already available. Here is a list of things I wish to achieve with the help of computer scientists:

- 1) Embed motivating messages, videos within the app.
- 2) Embed performance feedback in the app.
- 3) Make the app camera friendly i.e let the app take the user's picture and use that picture for display within the app for persuasive reasons.
- 4) Introduce audio instructions in the app.

All the features suggested here are based on psychological theory for enhancing usability. While these features are suggestions, I am open to creative ideas for improving the app.

Targeted deadline: Flexible.

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