

Kevin Quinn
CSE 403
Project Proposal

Psych Assistant: Summary

A clinical psychiatrist's toolkit for maintaining longitudinal records for psychiatric health. Psych Assistant provides an interface for psychiatrists and patients to record and access longitudinal records, and provide unique and customized feedback through a web interface. This provides a unique experience to offer a comprehensive location to allow mediated growth and understanding of psychiatric development for a wide variety of clients.

I have been working directly with a psychology professor and team of clinical psychology PhD students to understand the needs and desires that they have for a system like this.

Motivation

- There is a currently significant need for a secure and consistent system for recording off-site psychiatric sessions
- Provides an opportunity to work on a project that will be directly beneficial to many people.
- Open for increased functionality, and a chance to solve an interesting problem in scaling and security

Features

- Authenticated and secure login for clients and admins
- Unique Admin/client views
- Dynamic generation of graphs/charts for result display
- front end GUI to abstract MySQL queries for past records
- GET/PUT/Post requests for updating, recording and getting specific entries

Technologies

- Restful API
- MySQL
- .Net front end
- HighCharts data visualization

Challenges

- Data security, authentication
- Scaling for large inputs/large data sizes
- Unique customization on a client to client basis