



## 2024 Fall Senior Design Presentation

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# Team Introduction



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# Company Introduction

- Psychology clinic in Fort Worth, TX
- Specializes in psychological assessment
- Focus areas
  - Attention-Deficit/Hyperactivity Disorder (ADHD)
  - Autism
  - Anxiety and Depression
  - Obsessive-Compulsive (OCD) and Related Disorder



# Problem Statement

Current Fort Worth PsychWorks' report creation process is **manual and time-consuming**, requiring psychiatrists to customize templates for each patient. This inefficiency limits patient capacity, increases administrative work, increases potential human errors, and reduces time for direct care.

**Psychworks Current Tables**

Domain (Measure)	Subtest/ Scale	Score1	%ile	Percentile			
				0-8 Very Low:	9-24 Low Av.	25-74 Average	75-100 High Av.
Phonological Processing (CTOPP)	<b>Phonological Awareness</b>	StS: 75	5				
	Elision	SeS: 10	50				
	Blending Words	SeS: 9	37				
	<b>Phonological Memory</b>	StS: 89	23				
	memory for Digits	SeS: 12	75				
	non word repetition	SeS: 8	25				
	<b>Rapid Naming</b>	StS: 102	55				
	Rapid Digit Naming	SeS: 9	37				
	Rapid Letter Naming	SeS: 11	63				

1Note: StS = Standard Scores (mean=100, SD=15); SeS = Scaled Score (mean=10, SD=3)

Client achieved a Full-Scale IQ (FSIQ) of **X**, classifying his overall ability as falling within the **Average range**. A standard score of **X** placed Client's score at the **X<sup>th</sup>** percentile; this percentile indicates that he performed as well or better than X out of 100 adults his age who were in the norming group. The results have a (95%) confidence interval, meaning that there is a (95%) chance that Client's true score falls within the range of **102-110**.

# Our Solution

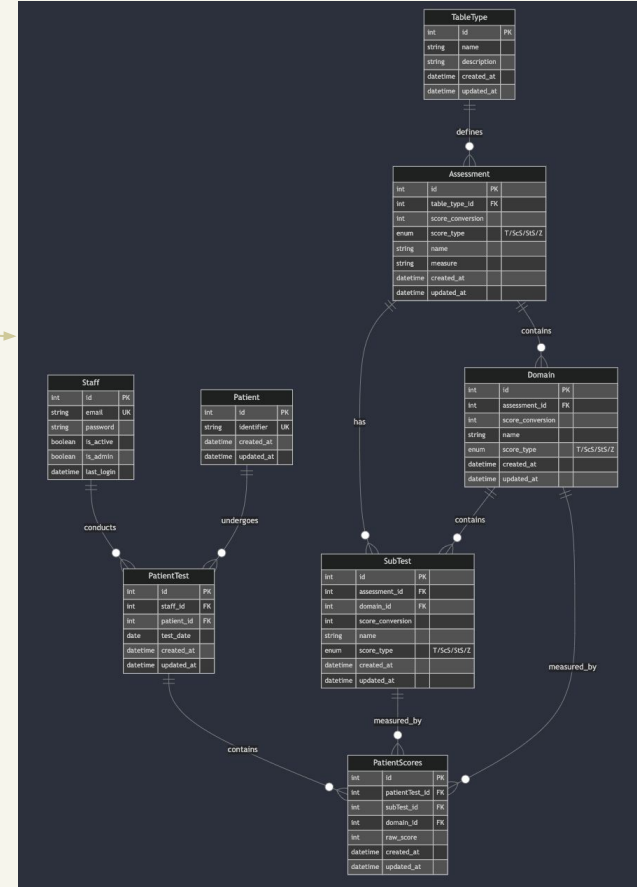
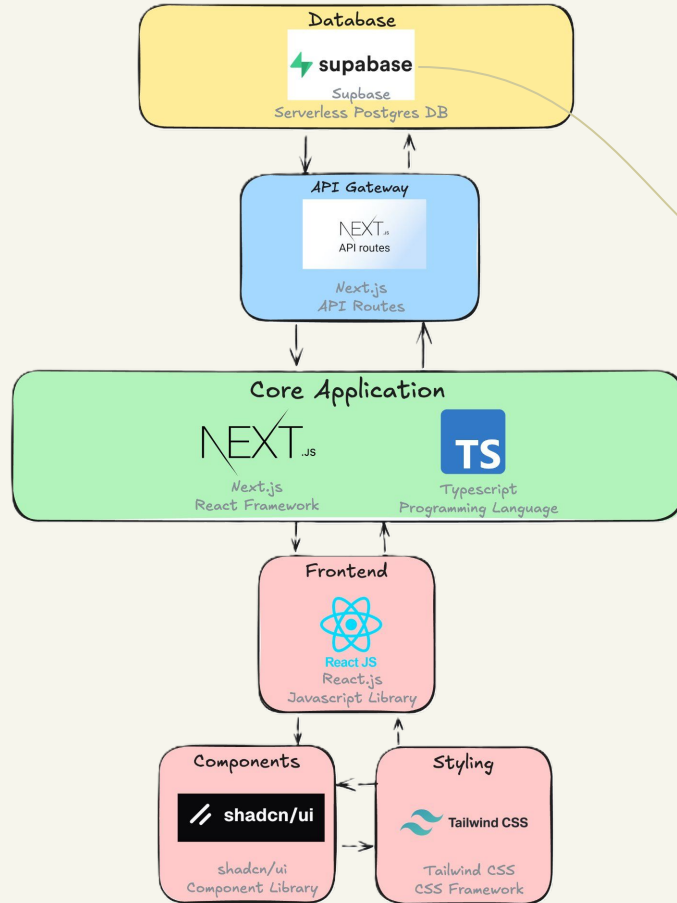
- **Automated Report Generation:** Streamline the report creation process by automating data entry and report generation based on customized templates.
- **Increase Patient Capacity:** Free up time for psychiatrists, allowing them to focus on patient care rather than administrative tasks.
- **Streamline Template Process:** Develop a set of flexible templates that adapt to specific patient needs and support various types of assessments.

## Report Template Text:

Client was administered the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS-Update). The RBANS is a brief, individually administered assessment utilized to measure an individual's neuropsychological status. [ ] His performance on the Immediate Memory Index, a measure of initial encoding and learning of complex and simple verbal information, fell within the [ ] (standard score = [ ]; [ ]th percentile). On the visuospatial/Constructional Index, a measure of basic visuospatial perception and the ability to copy a design from a model, Client's performance was within the [ ] (standard score = [ ]; [ ]th percentile). Client's expressive language functioning, measured by the Language Index, fell within the [ ] range (standard score = [ ]; [ ]th percentile). His attentional abilities (i.e., Attention Index), measured by tasks of simple auditory registration, visual scanning, and processing speed fell within the [ ] range (standard score = [ ]; [ ]th percentile). Last, on the Delayed Memory Index, a measure of delayed recall and recognition for verbal and visual information, Client performed within the [ ] range (standard score = [ ]; [ ]th percentile).

Domain (Measure)	Subtest/Scale	Score	%tile	Percentile			
				0-8 Very Low	9-24 Low Avg	25-74 Average	75-100 High Avg
	Phonological Awareness	StS: __		<div></div>			
	Elison	ScS: __		<div></div>			
	Blending words	ScS: __					

# Technology Stack

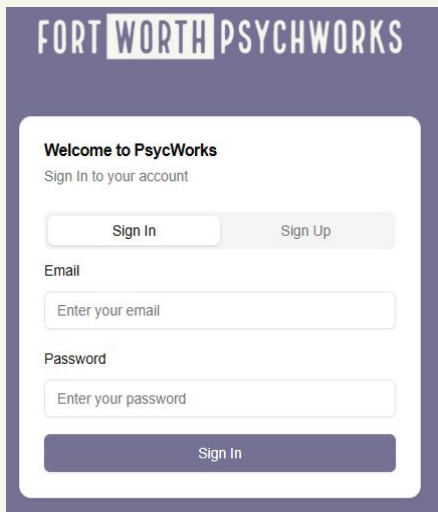


# Core Features

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## User Management

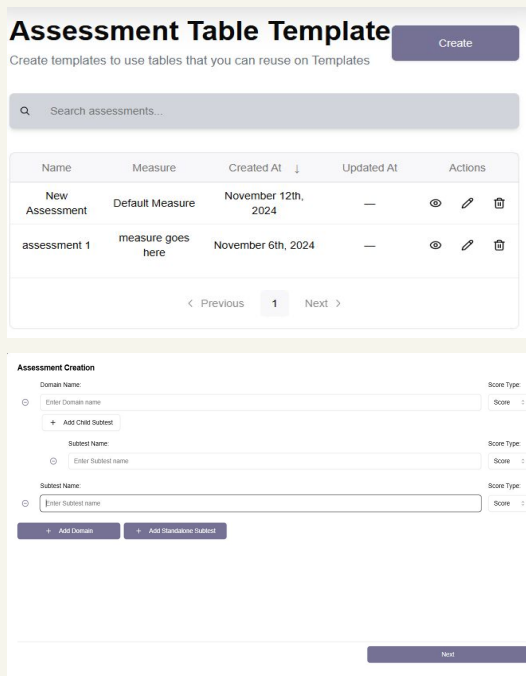
- Manage user authentication (sign in, sign up, sign out) with credentials securely stored in Supabase



The image shows a login and sign-up interface for 'FORT WORTH PSYCHWORKS'. It features a 'Welcome to PsycWorks' message and a prompt to 'Sign In to your account'. There are two buttons: 'Sign In' and 'Sign Up'. Below these are input fields for 'Email' and 'Password', each with a placeholder text 'Enter your email' and 'Enter your password' respectively. A large 'Sign In' button is at the bottom.

## Streamline Assessment Creation Process

- Simplify the process with customizable and reusable assessment templates



The image shows two screenshots of the assessment creation process. The top screenshot is the 'Assessment Table Template' interface, which includes a 'Create' button, a search bar, and a table of templates. The bottom screenshot is the 'Assessment Creation' form, which includes fields for 'Domain Name', 'Subject Name', and 'Score Type', along with buttons to 'Add Domain' and 'Add Standalone Subject'.

Name	Measure	Created At	Updated At	Actions
New Assessment	Default Measure	November 12th, 2024	—	👁️ ✎️ 🗑️
assessment 1	measure goes here	November 6th, 2024	—	👁️ ✎️ 🗑️

Assessment Creation

Domain Name:  Score Type:

+ Add Child Subject

Subject Name:  Score Type:

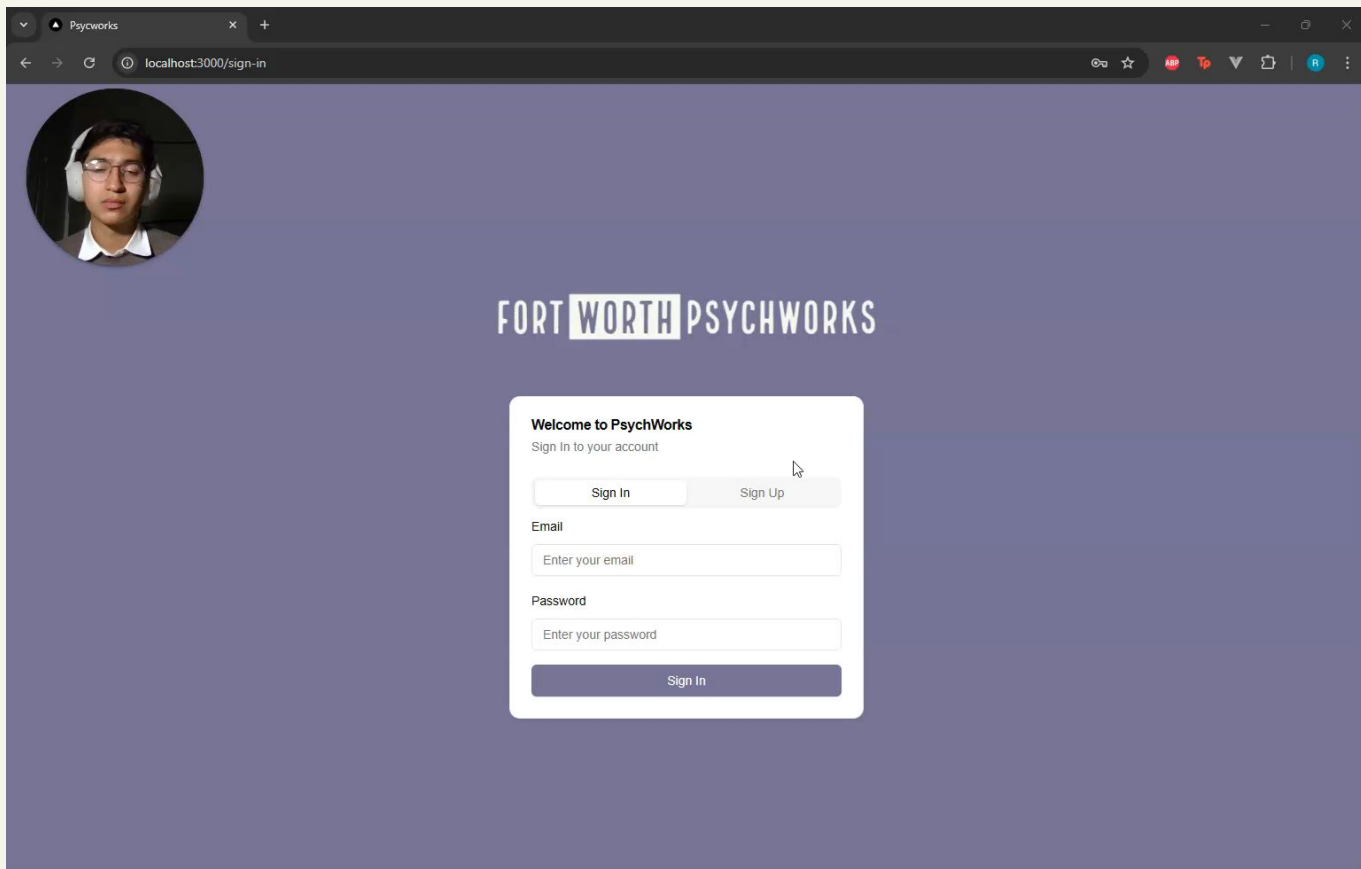
+ Add Domain + Add Standalone Subject

Next




# Demo

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Psychworks

localhost:3000/sign-in



FORT WORTH PSYCHWORKS

**Welcome to PsychWorks**  
Sign In to your account

Sign In Sign Up

Email

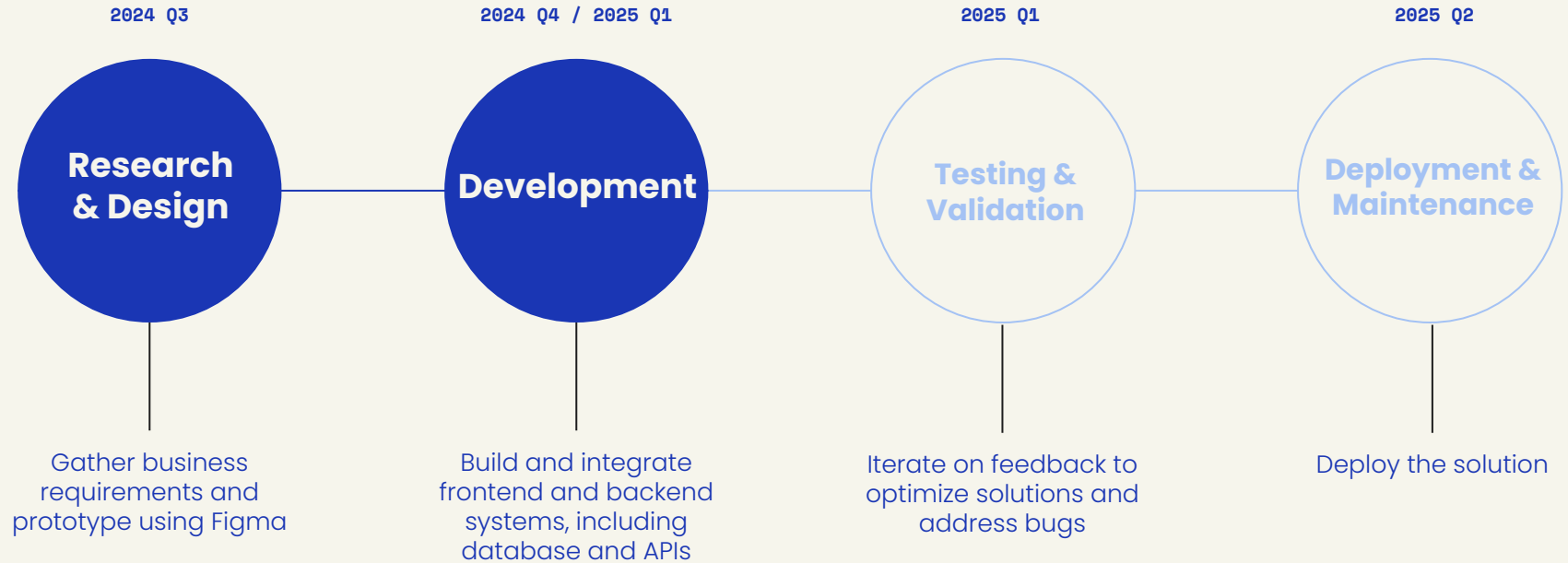
Enter your email

Password

Enter your password

Sign In

# Project Progress



# NEXT STEPS

Plans for Spring 2025

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## Report Generation

01

Enhancing functionality with support for generating psychological reports, including customizable templates to preload pre-designed tables for streamlined reporting

## Admin Panel

02

We are introducing admin account functionality to efficiently manage user access and remove outdated or unused templates

## AI Integration

03

AI integration for enabling intelligent patient data analysis

## Deployment

04

We plan to deploy our application using Vercel, a platform developed by the creators of Next.js. Vercel offers seamless integration with Next.js, enabling efficient and scalable deployment of applications

# Thank You

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