UI/UX Design Assignment 01

PT Client Manager

An Interface for a Person I Admire — Coach Asanka Armstrong

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Interface design · Prototype · Feedback · Iteration

1. Introduction

This document presents **PT Client Manager**, an interface designed for **Coach Asanka Armstrong**, a personal trainer I admire. The assignment brief asked me to design an interface for a single person I admire that would allow that person to *view their daily schedule*. PT Client Manager meets the core requirement by giving the coach one glanceable dashboard of his day, while layering on the extra features he genuinely uses every day: client record management, a workout library, nutrition logging and body-metric history.

The prototype is a fully working, single-file responsive web application. It was designed around the design principles studied in the module — Jakob Nielsen's ten usability heuristics, Ben Shneiderman's Eight Golden Rules of Interface Design, and colour-blind-friendly design — and it was refined through an honest-feedback pass and a pilot usability test.

2. The User — Coach Asanka Armstrong

Field	Description
Role	Owner-operator of a small personal-training practice in Colombo — coach, scheduler and admin in one.
Environment	Mostly on his phone between sessions; rarely sits at a desk.
Personality	Disciplined and personalised; motivated by visible progress; prefers speed over frills; likes structure and routine.
Daily reality	Back-to-back sessions from early morning, paperwork squeezed between clients, evenings for meal planning.
What he values	One quick overview; fast logging while coaching; trustworthy numbers (BMI, body fat).
Limitations shaping the design	Limited time — logging must take seconds; mobile-first, one-handed use; human short-term memory (7±2 chunks) — options visible, not recalled; errors must be easy to undo.

3. Assignment Purpose

The core requirement of the brief is *"view their daily schedule"*. PT Client Manager's Dashboard answers this: the trainer sees his day at a glance — which client, which session, and what is coming next — plus a one-tap "Log New Entry" action he can perform between clients. Additional features were layered on because a good interface must hold value beyond the minimum: an app the user stops opening is a failed app (Introduction to HCI module).

• **Core:** today's timetable of client sessions; upcoming workouts and rest days; one-tap "Log New Entry" after a check-in.
• **Added features (allowed by the brief):** client management with progress bars; workout library (day, level, duration); nutrition meals with macros; BMI / body-fat history.

4. The Interface — Five Screens, One Consistent Shell

PT Client Manager uses one consistent application shell: a sidebar on desktop and a bottom navigation bar on mobile, so all five destinations are always visible (recognition over recall — nothing is memorised). The screens below are the actual working prototype.

4.1 Dashboard

The Dashboard is the coach's home screen. A greeting shows immediate status, followed by stat cards for Weight, BMI, Body Fat and Muscle Mass with trend sparklines. A dual-line chart plots weight against body fat over the last six months using distinct stroke styles (solid vs dashed) so it remains readable without colour. Recent check-ins and weekly goals (workouts, calories, water, sleep) keep every meaningful number within one glance, and the "Log New Entry" action is pinned as the primary button.

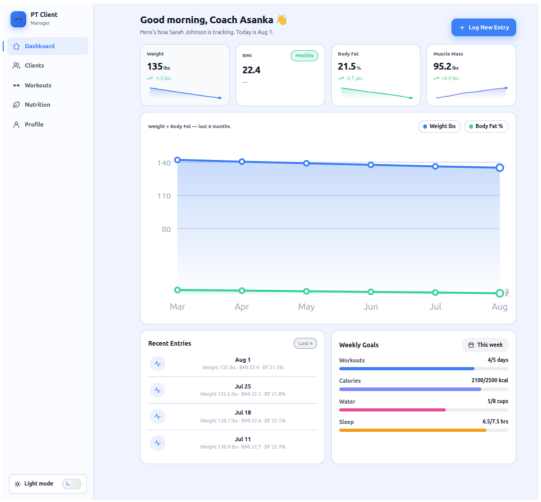


Figure 1 — Dashboard screen (prototype)

4.2 Clients

The Clients roster lists the active roster with avatar initials, status badges, goal tags, session counters and progress bars. Summary chips report active clients, total sessions and the average goal completion. Each client opens a detail view with real-time search filtering on the roster.

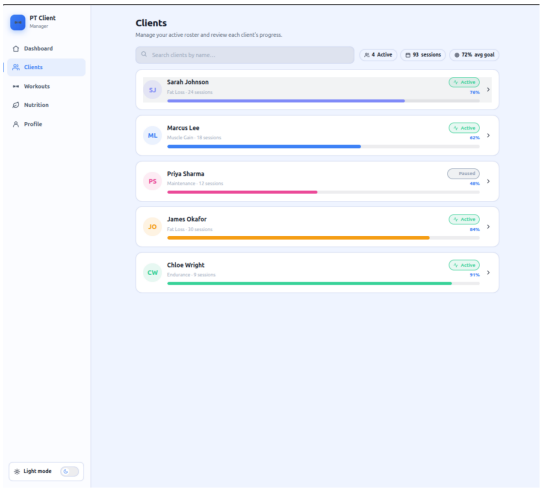


Figure 2 — Clients screen (prototype)

4.3 Workouts

The Workouts screen presents a Monday-to-Sunday day strip with rest days, then a programme library of the week's sessions — Upper Body Blast, HIIT Cardio Circuit, Lower Body Power, Core & Mobility and Full Body EMOM — each card showing the day, duration, calories and set count. Summary cards give total weekly volume and estimated calories across the five sessions.

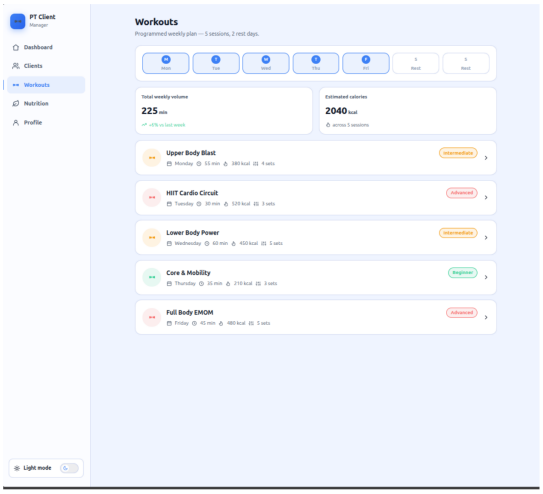


Figure 3 — Workouts screen (prototype)

4.4 Nutrition

The Nutrition screen tracks the daily macro breakdown against an 1,800 kcal goal with a calorie ring, and lists the day's meals — Breakfast, Lunch, Snack and Dinner — as balanced rows with calories and macro values. An "Add Meal" sheet validates its six fields before saving and a toast confirms every save.

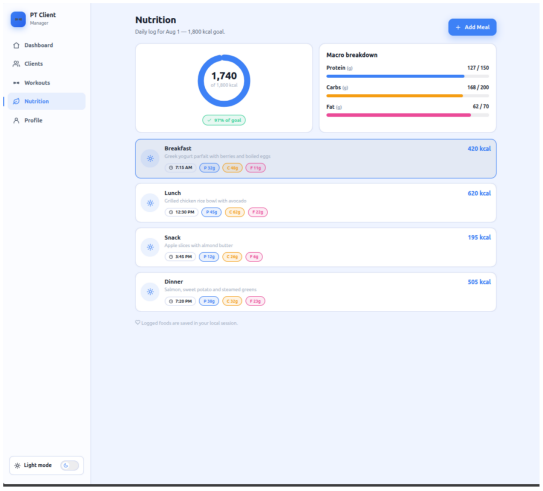


Figure 4 — Nutrition screen (prototype)

4.5 Profile

The Profile screen holds the coach's account and preferences: profile summary and certifications (NSCA, ACE, CrossFit Level 1, Precision Nutrition), performance metrics (client retention, session completion, goal achievement), appearance settings including the light/dark theme toggle, and settings for schedule, privacy and notifications.

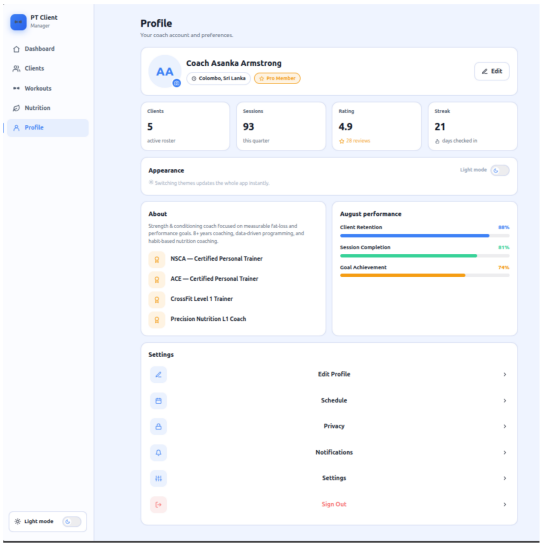


Figure 5 — Profile screen (prototype)

5. Design Theory Applied

Principle (module)	How it is implemented
Visibility of system status (Nielsen 1)	Status pills carry icons plus colour; pressed states; toasts confirm every save.
User control & freedom (Nielsen 3)	Every sheet has a close ×, an Escape-key handler and Cancel; success states auto-close.
Consistency & standards (Nielsen 6)	One atomic component set (Pill, Bar, Card, Button) reused on every screen.
Error prevention (Nielsen 4)	Destructive actions ask for confirmation; sliders constrain values before logging.
Recognition over recall (Nielsen 7)	All five destinations always visible in sidebar / bottom nav — nothing is memorised.
Informative feedback (Shneiderman 3)	Sub-second tap response; progress bars cover waits of one second or more (0.1 s / 1 s / 10 s rule).
Internal locus of control (Shneiderman 7)	The user commands, the system obeys — no surprise session time-outs.
Colour-blind-friendly (Colours module)	Colour never alone: status = icon + label + colour; solid vs dashed chart strokes; avoids green+red and blue+purple pairs.

5.1 Design System

• **Atoms** (reused interface parts): Pill, Bar, Sparkline, Toggle, IconBtn, StatusChip.
• **Molecules** (combinations): StatCard, ClientCard, MealRow, ChartCard.
• **Colour:** minimal six-colour core palette; primary emerald #10B981 for actions; status colours always paired with an icon and a label.
• **Layout:** responsive 12-column feel with an 8pt spacing grid, radii 10–20 px, and an 11–20 px type scale (Golden-Ratio typography).
• **Feedback:** live BMI / body-fat / muscle-mass computed while sliders move; explicit success screen after a check-in; toasts after every save.

6. UI & UX Design Tools Used

Tool	Purpose
Figma	Core design tool — shared colour/text styles act as design tokens; components with variants and auto-layout.
Mobbin	Pattern research — studied bottom-nav, status pills and bottom sheets; borrowed the "icon + label + colour" convention.
Balsamiq	Low-fidelity wireframes — rapid layout and flow tests of the five screens, shared for early feedback.
Zeplin	Design hand-off — documented colours, spacing and components as one living record.
Also referenced	Material Design (tokens), Bootstrap 4.5 (responsive grid), Golden-Ratio Typography calculator.

7. Prototyping Methodology

The prototype followed the throw-away to evolutionary approach taught in the Prototyping lecture. Concept layout was first tested with paper low-fidelity wireframes to validate the five-screen structure quickly and cheaply. The working prototype then evolved into a high-fidelity, fully interactive application — a single self-contained HTML file (React from CDN, no build step) that behaves like the final system and keeps improving (evolutionary prototyping).

8. Evaluation, Feedback & Iteration

Because the subject (Coach Asanka) was not accessible for a full study, the brief's alternative path was followed: honest feedback was gathered from a peer designer and a pilot usability run was performed with one participant completing a real task — *"Log today's check-in for Sarah."* The evaluation targeted the module's usability attributes: learnability, speed of operation, robustness, recoverability and adaptability.

Finding	Fix applied
Theme toggle in the mini header fired twice (nested buttons).	Replaced the wrapper with a switch and stopped event propagation.
Repeated gradient IDs rendered SVG fills inconsistently.	Made every gradient/pattern ID unique.
Modal looked like a dialog on small screens.	Converted to a bottom sheet on phones while keeping the centred dialog on desktop.
Reading DOM state right after a click could race React's commit.	View assertions now wait for a tick before checking state.

After the fixes, Dashboard, Clients, Workouts, Nutrition and Profile were all re-verified: navigation, the logging flow, drill-down/back and the chart all work with no error nodes.

9. Version History

Version	Stage	What changed
V0.1	Concept	Admired person chosen (Asanka Armstrong); low-fi paper wireframes of the five-screen layout.
V0.2	Tools	Figma component set and tokens drafted; Mobbin pattern research; Balsamiq flow test.
V0.3	High-fi prototype	Single-file functional app built (React + Babel from CDN); dark/light themes and atomic components.
V0.4	Feedback round	Peer review + pilot task run; three fixes applied (toggle, SVG IDs, mobile sheet).
V0.5	Deliverables	Deck consolidated to 11 slides; documents produced; deck and app share the same palette and naming.

10. Conclusion

PT Client Manager demonstrates that effective interface design is driven by a deep understanding of a single real user. By starting from Coach Asanka's daily reality, the interface addresses the brief's core requirement — viewing the daily schedule at a glance — and enriches it with the features he genuinely needs. The design applies the module's core theory (Nielsen's heuristics, Shneiderman's Golden Rules, colour-blind guidelines), was built through the taught prototyping methodology, and was refined with honest feedback and a pilot usability test. The result is a consistent, colour-safe, mobile-first interface that is fast to use precisely between two training sessions.