

VIRTUAL PET COMPANION â USER MANUAL

- â **Version:** 1.0 (November 2025)
 - â **Audience:** FBLA judges, student presenters, and demo participants
 - â **How to share:** Export this Markdown to PDF (e.g., 'npx @marp-team/marp-cli docs/user-manual.md --pdf') or print directly from Cursor.
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WELCOME

The Virtual Pet Companion blends fun pet care with real-world financial literacy. Students adopt a digital friend, earn and spend coins responsibly, and receive AI-powered coaching that adapts to their play style.

This guide walks end-users through the full experienceâ from signing up to advanced analyticsâ so you can comfortably present or evaluate the app during FBLA competition.

SYSTEM REQUIREMENTS

- â¢ Modern desktop browser (Chrome, Edge, Safari, Firefox) with JavaScript enabled.
- â¢ Optional microphone for voice command prototypes (Next-Gen Lab).
- â¢ Stable internet connection to sync with Supabase (works offline in limited mode).
- â¢ Screen reader support tested on macOS VoiceOver and NVDA.

GETTING STARTED

1. **Visit the app** using the deployment URL or ‘<http://localhost:5173>’ in development.
2. **Create an account** via Email/Password or Supabase magic link (if enabled).
3. **Verify your email** (Supabase handles this automatically).
4. **Complete onboarding:**
 - Choose species and breed.
 - Customize colors and name.
 - Confirm starting personality quiz (optional).
5. **Land on the dashboard** where your pet is animated and core stats are visible.

HOME & NAVIGATION

- â¢ **Header Bar:** Displays coins, notifications, theme toggle, and quick actions.
- â¢ **Floating Action Buttons:** Shortcuts to feed, play, clean, and rest screens.
- â¢ **Sidebar / Drawer:** Access shop, analytics, mini-games, settings, and help.
- â¢ **Status Chips:** Live meters for hunger, happiness, cleanliness, energy, and health.
- â¢ **Toast Notifications:** Provide instant feedback (e.g., ‘+15 coins earned!’).

CARING FOR YOUR PET

Each care action adjusts multiple stats and leaves a record in the AI diary.

Action | Description | Impact | Cooldown

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Feed | Serve meals or treats selected from inventory. | Increases hunger, happiness. | 5 minutes

Play | Launch quick activities (fetch, puzzles). | Boosts happiness, can lower energy. | 3 minutes

Clean | Bathe or groom. | Raises cleanliness and health. | 10 minutes

Rest | Put pet to sleep or schedule naps. | Restores energy; slight hunger loss. | Dynamic

Tips:

â¢ Combine actions with shop purchases (e.g., vitamins) to supercharge recovery.

â¢ Keep an eye on the AI recommendations sidebar for mood-specific advice.

AI COMPANION FEATURES

The AI service observes stats, diary entries, and care history to guide players.

â¢ **Mood Analysis:** Scores happiness, health, energy, cleanliness, and hunger to classify the current mood (Happy, Hungry, Tired, Sad, Sick).

â¢ **Personality Profile:** Deterministically assigns traits (e.g., Playful, Gentle) that tweak stat decay rates.

â¢ **Notifications:** Issues warnings for low stats or congratulates strong routines.

â¢ **Natural Language Commands:** Enter phrases like "Give Luna a long nap" to trigger recommended actions.

â¢ **Health Forecast:** Predicts upcoming risks with a short summary and contributing factors.

â¢ **Mini-Game Difficulty:** Suggests gentle, standard, or advanced challenges based on care performance.

All AI insights are generated locally through the app/services/ai_service.py stubs and can be swapped with a live OpenRouter integration for extended demos.

FINANCE & BUDGETING

Students learn real budgeting by earning and spending responsibly.

- â¢ **Wallet Overview:** Displays balance, lifetime earned/spent, and budget warnings.
- â¢ **Earn Screen ('/earn'):** Complete chores, lessons, or streaks for coins. Each activity includes a description reinforcing financial vocabulary (allowance, income, savings).
- â¢ **Shop ('/shop'):** Buy consumables, toys, and health items. Categories correspond to Needs vs Wants for easy discussion with judges.
- â¢ **Inventory:** Track owned items and their quantities. Use items during care actions.
- â¢ **Transactions Ledger:** Filterable list of expenses/income with timestamps.
- â¢ **Leaderboard:** Friendly competition showing top savers and care scores (aggregated from transaction metadata).

Encourage players to set weekly savings goals and monitor the AI â budget warningsâ for coaching moments.

MINI-GAMES & CHALLENGES

Mini-games reinforce decision making and reaction skills while rewarding coins.

- â¢ **Fetch Game:** Timed clicks to catch treats; showcases adaptive difficulty.
- â¢ **Puzzle Game:** Drag-and-drop logic puzzles that emphasize planning.
- â¢ **Reaction Game:** Reflex challenge with progressive speed.
- â¢ **Memory Match:** Card-matching exercise to improve focus.
- â¢ **DreamWorld:** Guided meditation for mindful rest; pairs with energy restoration.
- â¢ **NextGen Hub:** Prototype space for future AR, weather-based care, and social play.

Each mini-game grants coins, experience points (XP), and diary entries consumed by AI analytics.

ANALYTICS & REPORTS

Navigate to /analytics to review dashboards:

- â¢ **Daily Overview:** Line and bar charts for stat changes, coins earned/spent.
- â¢ **Weekly Summary:** AI-generated suggestions, goal progress, and streak badges.
- â¢ **CSV Export:** Download data for spreadsheets or judge review.
- â¢ **AI Insights Panel:** Summaries pulled from mood, personality, and care-style analysis.
- â¢ **Health Timeline:** Visualizes how rest, play, and nutrition interact over time.

Pro Tip: Demonstrate exporting CSV, then open it in a spreadsheet to show real-world applicability.

ACCESSIBILITY & INCLUSIVITY

- â¢ **Theme Toggle:** Light/Dark and high contrast modes.
- â¢ **Color-Blind Safe Palette:** Verified with Tetracolor and WCAG AA compliance.
- â¢ **Keyboard Navigation:** All interactive elements include focus rings and shortcuts (documented on '/help').
- â¢ **Reduced Motion:** Disables parallax and intense animations for sensitive users.
- â¢ **Screenshots & Audio:** Tooltips provide text equivalents for sound cues.

NEXT-GEN INNOVATION LAB

Discuss these future-facing concepts during your presentation:

- â¢ **Voice Commands:** Prototype interface for â Hey Companion, feed Spark!â (integrates with AI parser).
- â¢ **AR Sessions:** Placeholder cards for projecting pets into augmented reality.
- â¢ **Weather Reactions:** Pulls live weather (mocked) to influence pet mood.
- â¢ **Social Pings:** Concept for exchanging care packages with classmates.

These features demonstrate vision beyond the core requirement and invite judge questions.

TROUBLESHOOTING & FAQS

****Q: My stats are not updating.****

A: Ensure you are online. If the offline banner is visible, stats cache locally and sync once reconnected.

****Q: I forgot my password.****

A: Use Supabase's password reset link from the login page.

****Q: The AI responses feel repetitive.****

A: That's expected with the deterministic stub. Enable OpenRouter in .env for live responses.

****Q: Why is the shop empty?****

A: Run the seed script (scripts/seed_competition_data.sql) or confirm Supabase migrations were executed.

****Q: Can multiple pets be managed?****

A: Currently limited to one pet per profile to simplify analytics. Roadmap includes multi-pet support.

GLOSSARY

↳ **Coins:** In-app currency earned via activities and spent in the shop.

↳ **XP (Experience Points):** Progress measure unlocking achievements.

↳ **RLS (Row Level Security):** Supabase feature ensuring users access only their data.

↳ **Supabase:** Backend-as-a-service providing Postgres, auth, and storage.

↳ **OpenRouter:** Optional AI gateway for advanced language model responses.

****Need presenter tips?**** Pair this manual with docs/presentation-deck.md and docs/demo-script.md to deliver a confident FBLA demo. Good luck! ☺