

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

----- | ----- | ----- | -----

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 â€œGive Luna a long napâ€œ 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's budget warnings 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

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

â€¢ **XP (Experience Points):** Progress measure unlocking achievements.

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

â€¢ **Supabase:** Backend-as-a-service providing Postgres, auth, and storage.

â€¢ **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! ðŸŒŸ