

CH35 — QA Acceptance Tests (R1)

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Purpose: Provide a complete, feature-by-feature QA acceptance test suite for Handz V1 so a builder can validate the product with zero guesswork before App Store submission.

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| Doc ID: | HZ-V1-CH35_QA_Acceptance_Tests_R1 |
| Revision: | R1 (2026-01-02) |
| Status: | Draft |
| Depends on: | CH00, CH05, CH07, CH08, CH09–CH22, CH25, CH28–CH31, CH34 |
| Related: | CH36 Troubleshooting Playbook, CH37 Vibe Coding Prompt Pack, CH38 Milestones & Release Checklist |
| Supersedes: | — |
| Owned Decisions: | Test suite structure; release gating criteria; severity definitions for QA sign-off (implementation tooling remains) |
| Open Questions / Placeholder: | Automation tooling choice (Detox/XCUITest/etc.); exact device matrix (final iOS versions/devices); final default |

1. How to Use This Chapter

This document defines what “done” means for V1. Execute tests in the order below. Log every failure with a screenshot/screen recording, reproduction steps, expected vs actual, and the owning chapter reference (See: HZ-V1-CH##).

- Run Smoke Suite first after every build (10–15 minutes).
- Then run Feature Suites relevant to what changed.
- Before submission, run Full Regression (all suites) and verify all Release Gates pass.
- When a test references another chapter’s rule, do not reinterpret it—treat that chapter as authoritative.
 - Example: plan gating rules belong to CH08; if a test fails due to gating ambiguity, fix CH08 and bump its revision.

Acceptance format: Every test case includes (a) Preconditions, (b) Steps, (c) Expected Result, expressed as Given/When/Then plus UI copy/routing expectations.

2. Test Matrix (Devices, OS, Conditions)

V1 is iOS-only and portrait-only (See: HZ-V1-CH02). The minimum matrix below prevents surprises across common iPhone sizes.

| Category | Minimum Coverage (R1) |
|----------------------|---|
| iOS versions | Current iOS major version minus 1 (e.g., iOS 17–18 range) |
| Devices | Small: iPhone SE (2nd/3rd gen) • Standard: iPhone 14/15 • Large: iPhone 14/15 Pro Max |
| Orientations | Portrait only; verify landscape is either locked or displays a blocking message per CH02. |
| Connectivity | Good WiFi, Good LTE/5G, Poor/Flaky (packet loss), Airplane mode |
| Performance modes | Low Power Mode ON/OFF; Background app refresh ON/OFF |
| Locales (spot-check) | en-US (default), plus one non-English locale placeholder (See: CH32) |
| Accessibility | Dynamic Type (small/large), VoiceOver ON, Reduce Motion ON |

Network simulation: During regression, run at least one full Practice session in poor network conditions and one in offline mode to validate offline rules (See: HZ-V1-CH28).

3. Test Accounts, Plan States, and Seed Data

You must be able to test Guest, Free, Trial, and Pro behaviors deterministically (See: HZ-V1-CH08). Maintain a small set of preconfigured accounts.

3.1 Required Accounts

- GUEST-DEVICE (no account)
 - Fresh install; never signed in; used to validate guest restrictions and conversion prompts.
- FREE-NEW (free plan, empty library)
 - 0 saved flows; 0 custom moves; inbox empty.
- FREE-LIMITED (free plan at caps)
 - Saved flows = 2 (cap); Inbox items = 10 (cap); Practice credits = 0 (after using 3 monthly credits).
- TRIAL (7-day trial behaves as Pro)
 - Trial start timestamp controllable; verify conversion to paid or downgrade.
- PRO (active subscription)
 - Has uploads enabled; has at least 1 uploaded private video and 3 external links.

3.2 Standard Seed Data (create once; reuse)

- Default move pack
 - At least 120 essentials including defense/footwork families.
 - Include aliases: "Teep" and "Push Kick" as distinct canonical moves (locked decision).
- Demo flows (non-counting)
 - 1 simple linear combo (3 nodes).
 - 1 decision flow with 1 node branching into 3 responses.
 - 1 complex flow with at least 20 nodes, 25 edges, merges, and dangling paths.
- Import/share fixtures
 - 1 shared flow containing a custom move not present in receiver library (tests conflict handling).
 - 1 shared flow containing a standard move but with sender's custom notes (tests merge choices).
- Practice fixtures
 - A saved flow with at least 4 drillable paths (tests selection + reorder + multi-set timer).
 - A maintenance gameplan containing paths across 2 flows.

4. Smoke Suite (Run Every Build)

Goal: catch broken launches, navigation, auth, and the main value loop in under 15 minutes.

If any Smoke case fails, stop and fix before deeper testing.

SMK-01 — App launches to Welcome Gate

Given app freshly installed; device online

When launch app

Then Welcome Gate is visible; no crashes; primary CTA buttons visible; portrait lock enforced

Steps:

- Install app fresh.
- Launch app.
- Verify Welcome Gate renders within 3 seconds.
- Rotate device; verify portrait lock or intentional block UX.

SMK-02 — Apple/Email sign-in routes work

Given device online; FREE-NEW credentials available

When sign in with Apple OR email

Then user lands on Dashboard/Library entry; session persists on relaunch

Steps:

- Tap Sign Up / Log In.
- Complete Apple sign in (or email sign in).
- Terminate app, relaunch.
- Verify user stays logged in and returns to last relevant screen.

SMK-03 — Create minimal flow and save

Given signed in as FREE-NEW; default moves available

When create 2-node flow and tap Save

Then flow is saved to library; visible in list; editable; counts toward saved flow cap

Steps:

- From Library tap Create New Flow.
- Add first move from default moves.
- Add next move and connect.
- Tap Save.
- Return to Library and verify flow appears.

SMK-04 — Practice session completes and logs

Given signed in as TRIAL or PRO; at least one saved flow with 2+ paths

When start practice for at least 1 path and complete one set

Then practice summary shows; session appears in history; streak updates if applicable

Steps:

- Open a saved flow.
- Tap Practice.
- Select at least 1 path; start.
- Let timer finish OR tap Completed Set.
- End session; view summary; open History to verify log exists.

5. Feature Suite: Authentication, Guest Mode, and Account Lifecycle

Covers sign up, log in, guest restrictions, conversion prompts, logout, and account deletion request entry points.

AUTH-01 — Guest can explore but cannot save flows

Given fresh install; not signed in

When enter flow builder and attempt to save

Then user is blocked with clear CTA to create account; no local save occurs

Steps:

- From Welcome tap Try Without Account (Guest).
- Enter Create Flow.
- Build a 2-node flow.
- Tap Save.
- Verify blocking modal: saving requires account; offers Sign Up and Log In.

Notes: Decision lock: guests do not save flows even locally.

AUTH-02 — Guest restriction disclosure is shown upfront

Given fresh install; not signed in

When tap Try Without Account

Then app shows lightweight disclosure explaining guest limitations and benefits of account creation

Steps:

- Tap Try Without Account.
- Verify message includes: cannot save flows, cannot personalize move list, cannot practice, and will lose work if you leave.
- Continue into guest mode.

AUTH-03 — Email sign-up verification behavior

Given device online; email not used before

When sign up with email and follow verification flow

Then account becomes active only after verification; unverified users are gated appropriately

Steps:

- Sign up using email.
- Observe verification prompt/screen.
- Open verification link and return to app.
- Verify app unlocks signed-in experience.

AUTH-04 — Logout returns to Welcome Gate and clears local session

Given signed in as FREE-NEW

When user logs out from Settings

Then app returns to Welcome Gate; protected screens cannot be accessed via back navigation

Steps:

- Open Settings.
- Tap Log Out, confirm.
- Verify Welcome Gate.
- Attempt back navigation; verify no access without signing in.

6. Feature Suite: Navigation, Routing, and Screen Inventory

Validates that every page in the Screen Inventory exists, routes correctly, and has correct back behavior.

6.1 Navigation Rules

- Bottom tab selection persists across app restarts (if specified).
- Modal screens dismiss to the exact previous context (not default home).
- Deep links (share links) open to the correct viewer screen with correct gating.
- Back button never bypasses gating (e.g., cannot return to editor after logout).

NAV-01 — Every Screen Inventory route is reachable

Given signed in as PRO

When navigate to each screen at least once

Then each screen renders without crash; header titles match; back works

Steps:

- Navigate to Settings, Move Library, Move Detail, Create Flow, Flow Detail, Practice Setup, Practice Active, History, Inbox, Paywall.
- For each screen: verify title, primary CTA, and back behavior.

7. Feature Suite: Moves (Default Library, Aliases, Custom Moves, Revert)

Validates that the default move library is usable out of the box while remaining flexible across striking styles.

MOVE-01 — Default move list is present for new user

Given signed in as FREE-NEW

When open move selector

Then default moves are visible, searchable, filterable; user can select moves without creating any

Steps:

- Open Create Flow.
- Tap Add First Move.
- Verify default move categories/tags/families appear.
- Search for common moves (jab, cross, hook, teep/push kick).
- Select a move and verify it is inserted.

MOVE-02 — Aliases: Teep and Push Kick exist separately

Given signed in; default move pack loaded

When search for teep and push kick

Then both appear as distinct canonical moves; selecting either inserts that exact label

Steps:

- Search “teep”.
- Select Teep; confirm node label is Teep.
- Search “push kick”.
- Select Push Kick; confirm node label is Push Kick.

Notes: Locked decision: keep both as distinct canonical entries.

MOVE-03 — Create custom move with minimal fields

Given signed in as FREE-NEW

When create a custom move with just a name + tags

Then move saves and is selectable in flow builder

Steps:

- Open Moves page.
- Tap Add Move.
- Enter name: “Lead Check Hook”.
- Save.
- Return to flow builder and confirm move appears in selector.

MOVE-04 — Revert behavior is scoped (move-only, not whole library)

Given signed in as PRO; has edited a custom move

When use revert controls

Then only the selected move reverts; other moves unchanged

Steps:

- Edit custom move fields/notes.
- Tap Revert on that move.
- Verify move returns to prior state.
- Verify other moves remain unchanged.

8. Feature Suite: Flow Builder (Core Interactions)

Covers pan/zoom, sideways flow, adding nodes, branching up to 10, merges, dangling paths, replacing nodes, and reordering rules.

FLOW-01 — Pan/Zoom works without breaking node selection

Given signed in as PRO; open a complex flow (20+ nodes)

When pan and zoom around canvas; then tap nodes and edges

Then canvas pans/zooms smoothly; node taps still open correct menus; no accidental drags

Steps:

- Open complex flow.
- Pinch to zoom in/out.
- Pan around.
- Tap several nodes to open node actions.
- Drag a node; verify drag works when intended.

FLOW-02 — Branching limit: up to 10 outgoing branches

Owner: CH12 + CH30

Given signed in; open flow builder

When attempt to create 11th branch from same move

Then app blocks 11th branch with warning; first 10 persist

Steps:

- Create root move.
- Add 10 branches from root to 10 different moves.
- Attempt to add 11th branch.
- Verify limit messaging and no 11th edge created.

FLOW-03 — Merges allow multiple incoming paths

Given signed in; in flow builder

When create two different paths that merge into a single move node

Then node displays as shared destination; incoming edges preserved; no data loss

Steps:

- Create A→C and B→C.
- Verify C shows two incoming connectors.
- Edit C; verify both paths reference same node.
- Delete one incoming edge; verify other remains.

FLOW-04 — Dangling paths allowed

Given signed in; in flow builder

When delete a downstream node leaving an upstream node without continuation

Then flow remains valid; visually indicates terminal end; no crash

Steps:

- Create A→B→C.
- Delete C.
- Verify B is terminal.
- Save, reopen, verify structure persists.

Notes: User confirmed dangling paths are OK.

9. Feature Suite: Sequence Detail Editor

Validates optional sequence details between moves (the ‘how you got from A to B’ layer). Sequences are not required.

SEQ-01 — Sequence detail opens from edge control

Given signed in; flow has edge A→B

When tap the edge/sequence control

Then Sequence Detail Editor opens; saves and persists

Steps:

- Open flow with connected moves.
- Tap edge control.
- Enter transition notes.
- Save and close.
- Reopen and verify notes persist.

SEQ-02 — Sequence details are optional and do not block practice

Given signed in; edges without details exist

When start practice on a path using edges with no details

Then practice proceeds normally; optional details hidden/blank per spec

Steps:

- Create path with no sequence notes.
- Start practice.
- Verify no requirement for notes.
- Complete a set; confirm no error.

10. Feature Suite: Library, Sharing, Inbox, Imports

Covers flow listing, folders, flow detail actions, unlisted share links, inbox caps, and import conflict resolution.

LIB-01 — Flow-only search (V1)

Given signed in; user has at least 5 flows

When search by flow name

Then results update; move search is not present in this UI

Steps:

- Open Library.
- Type partial flow name.
- Verify matching flows only.
- Clear search; list returns.

SHARE-01 — Create unlisted share link and revoke it

Given signed in as PRO; flow exists

When create unlisted link then revoke

Then link opens viewer before revoke; after revoke shows revoked UX

Steps:

- Open Flow Detail.
- Tap Share → Create Link.
- Copy link; open on another device/browser.
- Verify view-only flow loads.
- Revoke link.
- Reload link; verify revoked message.

INBOX-01 — Free inbox cap = 10; view-only; cannot practice

Given signed in as FREE-LIMITED; inbox has 10 items

When receive/import another flow link

Then app blocks adding 11th item; user can still view existing; cannot practice inbox flows

Steps:

- Ensure inbox has 10 items.
- Attempt to accept new import.
- Verify warning and item not added.
- Open an inbox flow and tap Practice.
- Verify practice blocked for inbox items.

IMPORT-01 — Import conflict resolution choices

Given signed in as PRO; receive flow with sender custom move details

When accept import and choose handling option

Then receiver is prompted to keep details flow-only OR add as separate move; changes reversible

Steps:

- Open import with standard move but different sender notes.
- Accept import.
- Verify prompt shows differences and choices.
- Choose Flow-only; verify library unchanged.
- Repeat with another import choosing Add as separate move; verify both exist.

11. Feature Suite: Practice Mode (Setup, Active, Logging, Credits)

Practice is paywalled; Free receives 3 monthly practice credits usable only on saved flows (not inbox). Practice completes via timer end or Completed button. Actual duration is logged.

PRAC-01 — Practice setup: select paths across flows + reorder

Given signed in as PRO; has 2 flows with multiple paths

When choose paths from multiple flows and reorder them

Then order persists into active session; user can set timer and assumed reps

Steps:

- Open Practice Setup.
- Select 2 paths from Flow A and 1 from Flow B.
- Reorder to B first.
- Set timers/reps.
- Start session; verify first path is Flow B.

PRAC-02 — Early end behavior (Completed Set)

Given signed in as PRO; active session running

When tap Completed Set before timer ends

Then set ends immediately; logs show actual duration

Steps:

- Start set with 60s timer.
- After ~20s tap Completed Set.
- Verify set ends and rest begins.
- End session; verify log uses actual duration.

PRAC-03 — Free credits apply only to saved flows (not inbox)

Given signed in as FREE-NEW; has 1 saved flow, 1 inbox flow, and 1+ credit

When attempt practice on saved vs inbox

Then saved flow consumes credit; inbox remains blocked

Steps:

- Confirm credits available.
- Practice saved flow; finish short session.
- Verify credit decremented.
- Attempt practice on inbox flow.
- Verify blocked message.

PRAC-04 — Interrupted session saves as interrupted

Given signed in as PRO; active session

When end practice before finishing all paths

Then session saved as Interrupted with partial progress

Steps:

- Start session with 3 paths.
- Complete first path.
- End mid-second path.
- Verify summary marks Interrupted; history entry shows partial completion.

12. Feature Suite: Monetization (Trial, Paywalls, Restore)

Validates plan gating, trial behavior, upgrade/downgrade flows, and messaging. Pricing target: \$9.99/month with 7-day trial.

PAY-01 — Paywall triggers at correct moment (Practice)

Given signed in as FREE-NEW with 0 credits

When attempt to start practice on a saved flow

Then paywall appears; no session starts; user can dismiss safely

Steps:

- Ensure credits=0.
- Tap Practice on saved flow.
- Verify paywall appears.
- Dismiss; verify return to flow detail.

PAY-02 — Trial behaves as Pro; restore purchases works

Given signed in as FREE-NEW eligible for trial

When start trial then use Pro-only feature

Then practice works without credits; uploads available; restore works after reinstall

Steps:

- Start 7-day trial.
- Verify practice works.
- Attach an uploaded video to a move.
- Delete/reinstall app.
- Log in; restore purchases; verify entitlements.

13. Feature Suite: Offline, Storage, Safety/Abuse

Validates offline rules, link vs upload behavior, 2GB cap, and warning ladder escalation.

OFF-01 — Offline: view saved flows; editing draft-sync behavior

Given signed in as PRO; saved flow cached; device in airplane mode

When open flow, make edits, attempt save

Then app either queues draft sync or blocks with clear message; no silent data loss

Steps:

- Enable airplane mode.
- Open saved flow.
- Edit and tap Save.
- Observe offline UX.
- Disable airplane mode and verify sync completes cleanly.

STOR-01 — Uploads private-only; links shareable

Given signed in as PRO; flow has uploaded video on one move and external link on another

When share flow to another user/device

Then receiver can view link-based media; uploaded media marked unavailable/not shared

Steps:

- Attach uploaded video to Move A.
- Attach external link to Move B.
- Share flow link.
- Open as receiver.
- Verify Move B link visible.
- Verify Move A upload hidden/mark private.

SAFE-01 — Warning ladder triggers for caps/limits

Given signed in as FREE-LIMITED; at caps

When attempt actions beyond caps

Then soft warnings then hard block with upgrade CTA; messaging consistent

Steps:

- At saved flow cap (2), try to save third flow.
- At inbox cap (10), try import 11th.
- At branch max (10), try 11th branch.
- Verify each shows correct warning level and resolution.

14. Feature Suite: Export, Account Deletion, Accessibility, Analytics

EXP-01 — Export flows and logs succeeds and matches data model

Given signed in as PRO; has 2 saved flows and 2 logs

When export data

Then export succeeds; includes expected objects/fields; no missing required fields

Steps:

- Open Export screen.
- Select export type (flows + logs).
- Generate export.
- Verify file contains expected flows and logs.

DEL-01 — Account deletion path works

Given signed in

When initiate account deletion

Then app confirms; deletes; returns to Welcome; cannot sign in again

Steps:

- Open Settings.
- Tap Delete Account.
- Confirm.
- Verify returned to Welcome.
- Attempt login; verify deletion effect per policy.

A11Y-01 — VoiceOver labels and focus order on key loop

Given VoiceOver ON

When navigate welcome → create flow → practice → summary

Then all interactive elements labeled; focus order logical

Steps:

- Enable VoiceOver.
- Navigate Welcome CTAs.
- Create flow (add move, branch).
- Start practice; complete one set.
- Verify buttons and icons are labeled.

ANL-01 — Core analytics events fire once with correct properties

Given analytics visible in debug logs; signed in as Free

When perform core actions

Then events recorded once; include plan state; exclude sensitive content

Steps:

- Create and save flow.
- Create share link.
- Attempt practice (trigger paywall).
- Inspect analytics logs for duplicates and property correctness.

15. Performance, Stability, and Security Test Suites

15.1 Performance Stress Tests

- PERF-01 Large flow rendering
 - Load flow with 100 nodes and 150 edges; pan/zoom; no freezes > 250ms during interaction.
 - Open/close canvas 20 times; no progressive slowdown or memory leak symptoms.
- PERF-02 Practice timer stability
 - Run 30-minute session; timer drift minimal; background/foreground does not corrupt state.
 - Lock screen 2 minutes; return; session state correct.
- PERF-03 Lists and search
 - Library with 200 flows: search responds quickly after typing stops.
 - Move selector with 500+ moves: scrolling remains smooth.

15.2 Security & Abuse Tests

- SEC-01 Share token safety
 - Revoked tokens never resolve content.
 - Spot-check rate limiting / generic errors for invalid tokens.
- SEC-02 Media privacy
 - Uploaded media never accessible to non-owner (P0 if violated).
 - External links displayed safely (no auto-open).
- SEC-03 Entitlement bypass attempts
 - Free cannot start practice via deep link or hidden route.
 - Guest cannot access saved-flow editor via back stack.

16. Bug Severity, Triage, and Release Gates

| Severity | Definition | Release Impact |
|---------------|--|--|
| P0 (Blocker) | Crash, data loss, security/privacy breach, purchase failure, cannot sign in, cannot save before submission. | Must fix before submission. |
| P1 (Critical) | Core loop broken for a major plan state; severe performance issues. | Must fix before submission. |
| P2 (Major) | Important feature glitch with workaround; inconsistent copy; minor data mismatch preferred; ship only with sign-off. | Fairly preferred; ship only with sign-off. |
| P3 (Minor) | Cosmetic issues, typos, minor layout spacing. | May ship; batch for next revision. |

16.1 Release Gates (Checklist)

- Gate A — Smoke Suite
 - All SMK-* cases pass on Standard and Large devices.
- Gate B — Core Authoring
 - Create/edit/save flows works on Free and Pro.
 - Branching up to 10 works; merges work; dangling paths do not crash; sequences optional.
- Gate C — Practice & Logging
 - Practice sessions complete; early end works; interrupted logs correct.
 - Free credits gating works; inbox practice blocked for Free.
- Gate D — Monetization
 - Trial start works; restore works; paywall copy accurate.
- Gate E — Safety & Compliance
 - Warning ladder triggers correctly; no privacy leaks via sharing.
 - Export and account deletion work.
- Gate F — Accessibility Minimum
 - VoiceOver labels present on primary CTAs; Dynamic Type does not break key screens.
- Gate G — No Open P0/P1
 - P0 = 0; P1 = 0; P2 only with explicit sign-off.

17. Replit Build Prompt for This Chapter (CH35)

You are implementing HZ-V1-CH35 (QA Acceptance Tests) for the Handz V1 PRD Bundle.

Goal: Create a complete QA test suite artifact set (documents + optional automation scaffolding) that matches CH35 exactly.

Inputs: CH00 + CH35. Treat cross-references to other chapters as dependencies.

Deliverables:

- 1) A 'QA' folder containing:
 - smoke_suite.md (SMK-01..SMK-04)
 - feature_suites.md (AUTH/NAV/MOVE/FLOW/SEQ/LIB/SHARE/INBOX/IMPORT/PRAC/PAY/OFF/STOR/SAFE/EXP/DEL/A11Y/ANL)
 - regression_checklist.md (Release Gates A-G)
 - bug_report_template.md (Owner chapter, severity P0-P3, expected vs actual, repro steps)
- 2) Optional: automation scaffolding placeholders with TODOs referencing test case IDs.

Rules:

- Do not change product behavior; only encode the tests.
- Every test must include Preconditions, Steps, Expected Result, and Owner chapter reference.
- If any test requires a missing product rule, add a PRD_PLACEHOLDER block and stop.

Output: Commit the QA folder with commit message: 'Add CH35 QA acceptance tests'.

18. Troubleshooting Notes for QA (CH35)

Use this section when a test fails to narrow causes quickly. For deeper guidance, See: HZ-V1-CH36.

- Flow Builder feels laggy or taps misfire
 - Check gesture handler precedence (pan/zoom vs drag).
 - Check node re-render frequency; ensure state updates don't re-render entire canvas.
- Practice timer drift or incorrect completion
 - Verify background/foreground handling; ensure timer logs actual duration.
 - Check early-complete path (Completed Set) updates both UI and log correctly.
- Free user can practice inbox item
 - Verify entitlement checks include BOTH plan state and item source (saved vs inbox).
 - Ensure deep links cannot bypass gating.
- Share link shows private uploads
 - Treat as P0 privacy bug. Uploads must never resolve for non-owner; links are the only shareable media.
 - Check storage ACLs and API responses for viewer endpoints.
- Restore purchases inconsistent
 - Confirm restore updates entitlements immediately; clear cached plan state; re-fetch receipt if needed.