

NOTE:

This is a **real-world** UAT Plan & Test Cases prepared and executed at **EngTG** by **Alan Tajbakhsh (Founder)**. It operationalizes our FRD into end-to-end, user-driven validation—covering timezone/DST booking, packages & wallet/ledger, payments (idempotency/webhooks), live classroom (RTC/reconnect/translator/whiteboard), RBAC, notifications/ICS, reporting, and compliance/audit. It set entry/exit criteria, defect severity, and sign-off for the MVP, and certified the timezone-aware booking, packages/wallet, and live classroom releases now in production. I'm sharing it as a reference artifact for practitioners running similar platform UAT.

UAT Plan — EngTG MVP (Booking, Packages/Wallet, Live Classroom, Portals)

1) Overview & Objectives

Validate that the MVP meets business needs and FRD acceptance criteria by having **real users (students, teachers, admins)** execute end-to-end scenarios in a production-like environment. Focus on:

- **Correctness** (timezone-aware booking, wallet/ledger, classroom join, notifications)
- **Usability** (clear flows, errors, and confirmations)
- **Compliance & Security** (RBAC, audit logs, privacy)
- **KPIs readiness** (funnel, attendance, utilization, revenue, quality)

2) Scope (Mapped to FRD)

- Scheduling & Booking (FR-101..105)
- Packages/Wallet/Ledger (FR-201..204)
- Payments (FR-301..302)
- Live Classroom (FR-401..404)
- Portals (FR-501..503)
- Notifications & Calendar (FR-601..602)
- Reporting (FR-701..704)
- Compliance & Security (FR-801..805)

3) Roles & Responsibilities

- **Product Owner (PO):** UAT sponsor, final sign-off
- **BA (Alan):** Test design, coordination, triage support
- **QA Lead:** Defect workflow, retest coordination

- **Teacher SMEs:** Availability, classroom validation
- **Student SMEs:** Booking, wallet, notifications validation
- **Admin SME:** Refunds, policy, reporting, audit logs
- **Dev/DevOps:** Fixes, environment support

4) Entry Criteria

- Stable **UAT environment:** [uat.engtg.com] with feature flags set as per FRD
- Seeded **test data** (users, packages, availability)
- Payments in **sandbox** (Stripe/Iyzico keys)
- Email/SMS test channels configured; **ICS** enabled
- Known issues list shared; blockers resolved

5) Test Environment & Data

Time & Zones for realism

- **Student S1 (Europe/Istanbul – no DST)**
- **Teacher T1 (America/New_York – DST)**
- **Teacher T2 (Europe/Istanbul)**

Seeded data

- S1 wallet: 20-class package, 180-day expiry
- S2 wallet: 0 (to test insufficient balance)
- T1 availability spanning a **DST boundary** (e.g., US fall back)
- A few **materials** for classroom tests
- Admin A1 with full RBAC

6) Schedule & Communication

- UAT window: [YYYY-MM-DD → YYYY-MM-DD]
- Daily stand-ups + defect triage: [time/Zoom link]
- Status comms: Slack/Email summary EOD

7) Defect Management

- Tool: [Jira project]
- Severity: **S1** Blocker, **S2** Major, **S3** Minor, **S4** Cosmetic
- Required fields: Steps, Actual vs Expected, Screenshots/Logs, Build, Environment
- Fix SLAs: S1 same day; S2 1–2 days; S3 3–5 days; S4 as scheduled

8) Exit Criteria

- 100% of **Must-Have** scenarios passed
- No open **S1/S2** defects; acceptable residual S3/S4 with plan
- PO, QA, Compliance sign-offs completed

- UAT report published with evidence links

Scenario Map (FRD ↔ UAT)

UAT ID	Scenario Title	FR References
UAT-01	TZ-aware availability search (IST student, NYC teacher) incl. DST	FR-101
UAT-02	Slot hold (15 min) & release on timeout	FR-102
UAT-03	Booking confirmation after payment; prevent double-booking	FR-103, FR-301
UAT-04	Join window -5/+10 enforcement	FR-104
UAT-05	Cancellation policy (free vs late) & wallet behavior	FR-105, FR-202
UAT-06	Purchase 10/20/30/50 package; invoice/receipt	FR-201
UAT-07	Wallet deduction on confirm; credit on free cancel	FR-202
UAT-08	Refund flow → gateway + ledger + audit	FR-203, FR-802
UAT-09	Payment idempotency & duplicate webhook handling	FR-301, FR-302
UAT-10	Classroom reconnect after network drop	FR-401
UAT-11	Word-click translator overlay	FR-402
UAT-12	Whiteboard & materials player	FR-403

UAT-13	Transcript feature flag ON/OFF + consent	FR-404
UAT-14	RBAC: Student/Teacher/Admin permissions	FR-801
UAT-15	Audit logs for key state changes	FR-802
UAT-16	DSRs: export/delete personal data (PII)	FR-803/804
UAT-17	Email/SMS reminders at T- 24h & T-1h; fallback	FR-601
UAT-18	ICS invites: timezone correctness & updates	FR-602
UAT-19	Reporting dashboards: funnel/utilization/revenue/ quality	FR-701..704
UAT-20	Accessibility basics (keyboard, contrast), i18n formats	NFRs

Detailed Test Cases

Format: ID • Title • Pre-conditions • Steps • Expected Result • Evidence • Priority

Scheduling & Booking

TC-101 — TZ-aware availability (IST↔NYC incl. DST)

- **Pre:** S1 logged in (Europe/Istanbul). T1 has slots around a US **DST change** (e.g., 2025-11-02).
- **Steps:**
 1. S1 searches for T1 on DST weekend.
 2. Note displayed local times (IST).

3. Compare with T1's native times (NYC) to ensure correct conversion and no overlaps/gaps.
- **Expected:** Slots render in IST correctly; no duplicated hour (fall back) or missing hour (spring forward).
 - **Evidence:** Screenshots; API response with UTC + UI listing.
 - **Priority:** Must

TC-102 – Slot hold 15 min & auto-release

- **Pre:** Open slot exists.
- **Steps:**
 1. S1 selects slot → proceeds to checkout.
 2. Verify slot hidden for other users.
 3. Wait 15+ minutes without paying.
- **Expected:** Slot status **Held** → **Open** after timeout; audit log entry.
- **Priority:** Must

TC-103 – Booking confirmation & double-booking prevention

- **Pre:** Two students S1, S2; same slot.
- **Steps:**
 1. S1 holds slot and pays.
 2. S2 attempts to pay for same slot during S1's process.
- **Expected:** Only S1 gets **Confirmed**; S2 receives "Slot unavailable" and **no wallet/charge** (or immediate refund if charge occurred); audit recorded.
- **Priority:** Must

TC-104 – Join window -5/+10

- **Pre:** Confirmed booking at 10:00.
- **Steps:**
 1. Join at **09:56** → allowed.
 2. Join at **10:11** → blocked unless Admin override true.
- **Expected:** Enforcement matches FR-104.
- **Priority:** Must

TC-105 – Cancellation policy & wallet behavior

- **Pre:** Policy: free cancel $\geq 12h$; late cancel $< 12h$.
- **Steps:**
 1. Cancel at T-24h → credit back 1 unit.
 2. Cancel at T-2h → **no** credit.
- **Expected:** Ledger entries reflect CREDIT vs no credit; notifications sent; reason logged.
- **Priority:** Must

Packages / Wallet / Ledger

TC-201 – Purchase package (invoice/receipt)

- **Steps:** Buy 20-class package with Stripe/Iyzico sandbox.
- **Expected:** Wallet +20; expiry set; **invoice/receipt** emailed; ledger APPEND.
- **Priority:** Must

TC-202 – Wallet deduction on confirm; credit on free cancel

- **Steps:** Book → confirm → verify **DEBIT**; free cancel → verify **CREDIT**.
- **Expected:** Ledger integrity; wallet balance consistent.
- **Priority:** Must

TC-203 – Refund flow

- **Steps:** Admin issues refund on a payment.
- **Expected:** Gateway refund success; **REFUND** ledger entry; audit log with before/after.
- **Priority:** Must

TC-204 – Ledger statements (student & admin)

- **Steps:** View ledger, filter, export CSV (admin).
- **Expected:** Chronological, typed entries with refs (Booking/Payment/Admin).
- **Priority:** Should

Payments

TC-301 – Idempotent charge

- **Steps:** Trigger two identical charge requests with same **Idempotency-Key**.
- **Expected:** Single charge recorded; second returns cached result.
- **Priority:** Must

TC-302 – Duplicate webhook handling

- **Steps:** Replay the same webhook event twice.
- **Expected:** State updated once; second ignored safely (dedupe by event ID).
- **Priority:** Must

TC-303 – Network retry w/ backoff

- **Steps:** Simulate timeout on first attempt.
- **Expected:** Retry succeeds; **no double charge**.
- **Priority:** Should

Live Classroom

TC-401 – Auto-reconnect

- **Steps:** Join, cut network for 10–20s, restore.
- **Expected:** Reconnect within [N] s; room/session preserved.
- **Priority:** Must

TC-402 — Word-click translator

- **Steps:** Select words in shared text.
- **Expected:** Translation overlay; telemetry anonymized; no PII leakage.
- **Priority:** Should

TC-403 — Whiteboard & materials

- **Steps:** Teacher uploads file; student views; annotate; stop share.
- **Expected:** Real-time sync; access bound to session.
- **Priority:** Should

TC-404 — Transcript feature flag

- **Steps:** With flag **OFF**, verify no transcript UI/storage. Turn flag **ON** (consent = required) and verify availability.
- **Expected:** Behavior strictly follows flag + consent; retention tag set.
- **Priority:** Should

Portals & RBAC

TC-501 — Student portal

- **Expected:** Access to booking, wallet, receipts; **no** admin features.
- **Priority:** Must

TC-502 — Teacher portal

- **Expected:** Availability & classes; **no** refunds/policy config.
- **Priority:** Must

TC-503 — Admin portal

- **Expected:** Users, bookings, refunds, policy, dashboards, **audit logs**.
- **Priority:** Must

TC-504 — Permission negative tests

- **Steps:** Student hits admin URL directly; Teacher tries refund endpoint.
- **Expected:** 403/redirect; no data exposure; audit event.
- **Priority:** Must

Notifications & Calendar

TC-601 — Email/SMS reminders (T-24h / T-1h)

- **Steps:** Book class >24h out; verify reminders at offsets; simulate primary channel failure.
- **Expected:** Correct timing; fallback channel used; timezone in body correct.
- **Priority:** Must

TC-602 — ICS invite & updates

- **Steps:** Accept ICS; reschedule; cancel.
- **Expected:** Calendar shows **local time**; updates propagate; join URL correct.
- **Priority:** Must

Reporting

TC-701 — Funnel dashboard

- **Pre:** Seed events to represent demo→purchase path.
- **Expected:** Metrics compute per spec; filters by time/student segment.
- **Priority:** Should

TC-702 — Utilization dashboard

- **Expected:** Hours available vs booked; peak/off-peak split matches seeded data.
- **Priority:** Should

TC-703 — Revenue & Refunds

- **Expected:** Gross, refunds %, chargebacks **match ledger/payments**.
- **Priority:** Should

TC-704 — Quality (NPS/ratings/practice)

- **Expected:** NPS calc visible; ratings & AI practice usage reflected.
- **Priority:** Could

Compliance, Security, Observability

TC-801 — Audit log coverage

- **Steps:** Perform booking, cancel, refund, policy change.
- **Expected:** Each has audit with actor, before/after, timestamp.
- **Priority:** Must

TC-802 — DSR Export/Delete (GDPR/KVKK)

- **Steps:** Request export; request deletion.
- **Expected:** Export includes PII; deletion anonymizes/flags as deleted; timelines recorded.
- **Priority:** Should

TC-803 — Observability smoke

- **Expected:** Errors/latency/queue depth visible on dashboards; alerts configured.
- **Priority:** Could

Regression Smoke Pack (post-fix quick check)

1. Book → Pay → Confirm → Wallet -1
2. Cancel (free) → Wallet +1, ICS update
3. Join within window → Classroom reconnect check
4. Refund → Ledger + Audit
5. RBAC negative: student tries admin URL
6. ICS timezone sanity (IST vs NYC)

UAT Evidence Checklist

- Screenshot(s) or short Loom/GIF
- API/log excerpt (for idempotency, audit)
- Test data IDs (booking_id, payment_id)
- Timestamp + timezone noted

Sign-Off

Summary: [Pass rate %, defects by severity, key risks, go-live readiness]

Role	Name	Date	Signature
Product Owner			
QA Lead			
Compliance			
BA (Alan)			

Appendix A — Test Data (sample)

- **Students:** S1 (IST), S2 (IST)
- **Teachers:** T1 (NYC), T2 (IST)
- **Packages:** P20 (20 units, 180-day expiry), P10 (10 units)
- **Bookings:** BK-DST-01 (spans DST), BK-NORM-01
- **Payments:** PAY-STR-001, PAY-IYZ-001
- **Refunds:** RF-001

Appendix B — KPI Event Seeds (for Reporting tests)

- demo_booked, demo_attended, demo_purchased, first_class_time
- class_started, class_no_show, class_canceled{reason}
- slot_opened, slot_booked, slot_canceled

- payment_succeeded, payment_refunded, chargeback_received
- nps_submitted, rating_submitted, ai_practice_used