Event App – Detailed User Stories (Organizer & Invitee)

This document captures user stories, acceptance criteria, edge cases, and notes for implementation & hosting (PythonAnywhere). Stories are grouped by epics that map to the features visible on the provided screenshot (Home/Dashboard with event cards, organizer badge, attendee counts, Modify, FAB to add, bottom navigation for Home, Past Events, Notifications, My Profile).

Personas & Roles

Persona: Organizer

- **Profile fields**: first name, last name, display name, email (verified), phone (optional, E.164), profile photo/avatar, timezone, locale, country, city, default event location, notification preferences (email, push/web, SMS), preferred time format (12/24h), account status (active/suspended), privacy settings (show city, show full name).
- **Capabilities**: create/modify/cancel events; set capacity & RSVPs; invite attendees; manage roles; edit event description/time/location; view attendee list & statuses; message attendees; clone events; view analytics (RSVPs over time); manage waitlist; export guest list; manage reminders; transfer ownership.

Persona: Invitee (Attendee)

- **Profile fields**: first/last name, display name, email (required to RSVP), phone (optional), timezone, locale, dietary/accessibility notes (optional), notification preferences, avatar.
- **Capabilities**: receive invites; view event details; RSVP (Yes/No/Maybe); manage +1 (if allowed); add to calendar; view organizer profile; message organizer; view directions/map; see other attendees (if privacy allows); join waitlist; update RSVP and profile settings.

System Roles

- **Anonymous Visitor**: can view public events by link but must sign in to RSVP (configurable).
- **Moderator/Admin (optional future)**: can manage reported events/users.

Role-based access control (RBAC) will govern permissions across endpoints and UI actions.

Epic A: Authentication & Onboarding

A1. Sign Up / Sign In - *As a visitor*, I want to create an account using email/password so that I can organize or RSVP to events. - **Acceptance Criteria** - Can sign in/up with email; verification email sent on signup. - Password rules: ≥8 chars, 1 upper, 1 lower, 1 number; rate-limited. - On first login, user is prompted to set display name, timezone, and avatar. - Error states surfaced (wrong password, unverified email).

A2. Session Management - *As a user*, I want my session to persist securely so that I stay logged in across visits. - **Acceptance**: HttpOnly secure cookies; CSRF tokens for form posts; inactivity timeout (e.g., 30 days remember-me).

A3. Password Reset - *As a user*, I can request a password reset via email.

Epic B: Home/Dashboard – "Your Events"

B1. View events I organize - *As an organizer*, I want to see cards for events I created with key info. - **Acceptance** - Card shows: title, short description, date, start–end time (formatted per profile), city/country (e.g., SG, KL), organizer badge ("Organized"), capacity display `current/limit` (e.g., `1/15`, infinity if none), organizer avatar, action buttons (Modify, Manage Attendees). - Cards sorted by next start time (soonest first) by default; sticky grouping by upcoming vs today. - Past events suppressed from Home (appear under Past Events). - Timezone is user's profile TZ; hovering or tapping shows event's local TZ.

B2. View events I'm invited to - *As an invitee*, I want to see my invited events in the same list but with an "Invited" or "Going"/"Maybe" badge. - **Acceptance** - Card badge reflects my RSVP: Invited, Going, Maybe, Not Going. - Capacity indicator still visible; if waitlisted, show "Waitlisted".

B3. Filter/Sort events - *As a user*, I can filter by role (Organizing / Invited / All), location, and date range; sort by Start Time or Recently Updated.

B4. Empty state - *As a new organizer*, I see an empty-state CTA to create my first event with the + FAB.

B5. Load more / pagination - *As a user*, additional events load on scroll or via "Load More" (page size configurable).

B6. Quick actions on card - *As an organizer*, I can tap **Modify** to edit the event; I can tap capacity to open the attendee list. - *As an invitee*, I can RSVP inline from the card (dropdown or buttons) without opening details.

B7. Accessibility - Cards are keyboard navigable; ARIA labels for icons (calendar, clock, location, attendees).

Epic C: Event Creation & Management

C1. Create an event - *As an organizer*, I can create an event from the + Floating Action Button. - **Fields**: title (required), description (markdown supported), date, start/end time, timezone, location (free text + map optional), capacity (optional), visibility (Public/Private/Unlisted), allow +1s, RSVP options (Yes/No/Maybe), waitlist (on/off), auto-approval, reminders schedule, cover image, tags. - **Acceptance** - Validation on required fields; start < end; timezone defaults to organizer profile. - On save, event appears in "Your Events" with the "Organized" badge.

C2. Edit/Modify an event - *As an organizer*, I can edit event details via **Modify** on the card. - **Acceptance** - Changes versioned; attendees notified of significant changes (time/location) with diff summary. - Editing capacity adjusts waitlist automatically (promote in FIFO order).

C3. Cancel or Duplicate event - *As an organizer*, I can cancel (with optional message) or duplicate an event. - **Acceptance** - Cancel hides from public listings; attendees receive notification and calendar update. - Duplicate clones fields and invites (optional), sets new date/time.

C4. Manage visibility & sharing - *As an organizer*, I can get a shareable link and set if event is discoverable.

C5. Timezone handling - The event stores canonical timezone; invitees see times normalized to their profile timezone with a toggle to view in event's local timezone.

Epic D: Invitations & RSVPs

D1. Invite attendees - *As an organizer*, I can invite attendees by email upload (CSV) or manual entry; optional personal message. - **Acceptance** - Duplicates and bounces handled; invites sent with deep links; pending invitees listed with status.

D2. RSVP flow - *As an invitee*, I can RSVP from the invite email or event page (Yes/No/Maybe), optionally add a note and +1 details. - **Acceptance** - If capacity reached and waitlist enabled, selecting Yes puts me on waitlist. - I can change RSVP up to organizer-defined cutoff. - Calendar (.ics) attachment included for Yes/Maybe.

D3. Guest limit & waitlist - *As an organizer*, I can set a capacity and enable waitlist with auto-promotion. - **Acceptance** - Capacity display reflects `confirmed/limit`; waitlisted count shown; promotion sends notification.

D4. Public RSVP (optional) - *As an organizer*, for public events I can allow anyone with the link to RSVP; email verification recommended.

D5. Communication - *As an organizer*, I can message all attendees or a segment (Going/Maybe/Waitlist/No) with updates.

Epic E: Attendee Management

E1. View attendee list - *As an organizer*, I can view attendee statuses and contact info. - **Acceptance** - Columns: Name, Email, RSVP, +1 count, Timestamp, Notes, Check-in (for day of), Actions (promote/demote/waitlist/remove).

E2. Capacity & counters - *As an organizer*, I see real-time counts on the event card (`1/15`), including +1s.

E3. Export & import - *As an organizer*, I can export the attendee list to CSV and import updates.

E4. Check-in (future) - *As an organizer*, I can mark attendees checked-in during the event; QR code optional.

Epic F: Notifications

F1. In-app notifications (bell in nav) - *As a user*, I see a badge count for unread notifications. - **Events triggering notifications**: new invite, RSVP confirmations/changes, event updates, capacity reached, waitlist promotion, organizer messages, reminders. - **Delivery**: in-app + email; SMS optional.

F2. Notification center - *As a user*, I can view, mark as read, filter by type, and clear notifications.

F3. Reminders - *As an invitee*, I receive reminders 24h and 1h before start (configurable by organizer).

Epic G: Past Events

G1. View past events - *As a user*, I can see a list of my past events via the bottom nav. - **Acceptance** - Cards similar to Home but labeled "Past"; include links to export attendees or duplicate event.

G2. Feedback (optional) - *As an organizer*, I can request post-event feedback via a simple survey.

Epic H: User Profile (My Profile)

H1. View & edit profile - *As a user*, I can edit profile fields listed in Personas. - **Acceptance** - Avatar upload/ crop; timezone picker; language/locale; notification toggles; privacy options (hide surname to invitees, hide attendee list).

H2. Organizer info on cards - *As an invitee*, I can tap the organizer chip/avatar on a card to view their public profile (name, avatar, short bio, verified badge).

H3. Account deletion - *As a user*, I can export my data and delete my account (GDPR-compliant).

Epic I: Navigation & Shell

I1. Bottom navigation - *As a user*, I can navigate between Home, Past Events, Notifications, and My Profile. - **Acceptance** - Active tab highlighted; state preserved when returning from a detail page.

I2. Floating Action Button (FAB) - *As an organizer*, tapping the + opens the Create Event form. - *As an invitee* without organizer privileges, tapping + prompts to request organizer access or starts a personal event (if allowed).

Epic J: Search & Filters (future)

J1. Search my events - *As a user*, I can search by title, description, location, organizer.

J2. Location & date filters - *As a user*, I can quickly filter to cities (e.g., SG, KL) and date ranges.

Epic K: Security, Privacy, and Compliance

K1. Privacy controls - *As an organizer*, I can set whether attendee list is visible to other attendees.

K2. Data protection - Passwords hashed (Argon2/bcrypt), PII encrypted at rest (where feasible), audit logs for admin actions.

K3. Rate limiting & abuse - Throttle login, invites, and messaging; CAPTCHA on spikes.

K4. Audit logs (admin) - Track critical changes: event edits, capacity changes, cancellations.

Gherkin-style Scenarios (selected)

Scenario: Card shows correct badges and counts

```
Given I am logged in as Jax (Organizer)
And I have an upcoming event "TTYY" with capacity 15 and 1 confirmed attendee
When I view Home → Your Events
Then I see a card for "TTYY"
And it shows badge "Organized"
And it shows attendee count "1 / 15"
And the Modify action is available
```

Scenario: Invitee sees RSVP and capacity

```
Given I am invited to "Happy Wedding" with capacity 100
And my RSVP is "Maybe"
When I view Home
Then the card shows badge "Maybe"
And the attendee count reflects confirmed attendees only
And I can change my RSVP inline to Yes or No
```

Scenario: Waitlist promotion

```
Given an event with capacity 1 is full and waitlist is enabled
And I am #1 on the waitlist
When someone changes their RSVP from Yes to No
Then I am auto-promoted to Confirmed
And I receive an in-app and email notification
```

Scenario: Timezone display

```
Given the event time is stored in Asia/Singapore 17:30–19:30
And my profile timezone is America/Los_Angeles
When I open the event card
Then the time renders in my local timezone
And I can toggle to view the event's original timezone
```

Scenario: Edit capacity promotes waitlist

```
Given 3 people are waitlisted
When the organizer increases capacity by 3
Then all 3 are promoted in FIFO order
And attendees are notified
```

API & Data Model Sketch (for development)

Core Entities

- **User**: id, email, password_hash, first_name, last_name, display_name, avatar_url, phone, timezone, locale, country, city, preferences (JSON), role, created_at, updated_at, status.
- **Event**: id, owner_id, title, description_md, start_dt (TZ-aware), end_dt (TZ-aware), timezone, location_text, city_code, country_code, visibility, capacity, allow_plus_ones, rsvp_cutoff_dt, cover_url, tags[], created_at, updated_at, status.
- **Invite**: id, event_id, invitee_user_id (nullable until claim), email, token, status (pending/accepted/ declined/waitlisted), rsvp (yes/no/maybe), plus_ones, note, timestamps.
- **Notification**: id, user_id, type, payload (JSON), read_at.
- **Checkin (future)**: id, event_id, user_id, checked_in_at.

Derived counts

- `confirmed_count` (includes +1s if allowed)
- `waitlist_count`

PythonAnywhere Hosting Notes

- **Runtime**: Flask or Django app served via WSGI on PythonAnywhere; use a free tier for dev, paid for custom domain/SSL and higher limits.
- **Database**: MySQL (PythonAnywhere offers managed MySQL) or PostgreSQL via external service; use SQLAlchemy/Django ORM.
- **Static assets**: Collected and served via PythonAnywhere static files config; use a build step if using React front-end (or server-rendered templates with HTMX/Alpine as lightweight option).
- **Background jobs**: Use PythonAnywhere Tasks (scheduled) or a lightweight external worker (e.g., CloudAMQP + worker dyno alternative) for email sends and waitlist promotions; for dev, simulate via cron-like scheduled tasks.
- **Email**: Use an SMTP provider (e.g., SendGrid/Mailgun) for invites, verifications, and notifications.
- **Storage**: PythonAnywhere file storage or external S3-compatible bucket for avatars/cover images.
- **Environment**: keep secrets in PythonAnywhere environment vars; enable HTTPS; set CSRF and session cookie `Secure` and `HttpOnly`.

Non-functional Requirements (NFRs)

- **Performance**: Home loads first 10 upcoming cards in < 800ms P95; pagination or infinite scroll thereafter.
- **Availability**: 99.5% for MVP; graceful degradation when email provider is down.
- **Security**: OWASP Top 10 mitigations; input validation & output escaping; rate limits.
- **Accessibility**: WCAG 2.1 AA for color contrast & focus states.
- **Internationalization**: i18n-ready with translation keys for labels (Organized, Modify, etc.).
- **Observability**: request logging, error reporting (Sentry), basic metrics (RSVP conversion, email bounce).

Definition of Done (per story)

- Unit tests for core logic; integration tests for RSVP and capacity/waitlist; UI tests for card render & actions.
- Security review checklist completed.
- Accessibility checks pass.
- Documentation: API schema and admin runbooks.

Backlog & Next Steps

- Implement Epics in order: A → B → C → D → E → F → G → H → I.
- Seed data and fixtures for SG/KL example.
- Add map integration (OpenStreetMap) and .ics calendar generation.
- Add organizer analytics (basic chart of RSVPs over time).

End of document.