ArkEdventure 2027

The families' single place for the whole trip — before and during travel. Flights, hotel, finance, itinerary, and announcements carry equal weight; no one area is the app.

BRD FOR BUILDING HERE — BY Muse

$0 STACK • CLOUDFLARE PAGES

Trip: Ark Montreal Edventure 2027 — April 13–20, 2027 • Vancouver (YVR) ↔ Montreal (YUL)

Audience: 17 flight families (58 families signed up on the school form overall)

Document: Business Requirements Document (BRD) v1.0 — November 20, 2026

Prepared for: Franky Ip (organizer / collector) — to build in this workspace

Planners / editors / sources: Madam Adina Priel (principal), Carmen Wong (bookings & sign-up sheet), Franky Ip, Gladys Li (planner — responsibilities to be confirmed)

Status: Ready to build Phase 1. Hotel confirmation and day-by-day itinerary are TBD — see Open Questions.

How to use this document

This BRD is the build spec. Section 4–8 define each content area with acceptance criteria the finished page must pass. Section 9–10 define who can see and edit what. Section 13 is the phased plan Muse will build against, with a Definition of Done. Appendix A is the single source of truth: every date, amount, and confirmation number in the app must trace to it. Anything not in Appendix A is marked **TBD / to confirm** in the app — it is not invented.

Build constraint that shapes everything: No spend at all. Hosting, deployment, and any data store must stay on free tiers already in use (Cloudflare Pages). No paid APIs, no paid plugins, and no per-family accounts in V1. Access is gated by one shared family password (see §11) — the password itself appears nowhere in this document or in the site's code.

Contents — 1 Purpose | 2 Audience & stakeholders | 3 Scope | 4 Flights | 5 Hotel | 6 Finance | 7 Itinerary | 8 Announcements | 9 Roles, permissions & privacy | 10 Update workflow | 11 Non-functional, tech stack & password gate | 12 Risks, assumptions & open questions | 13 Phased plan & Definition of Done | Appendix A Verified facts

1 Purpose — one place, not a scrolling chat

Problem today. Trip updates go out by WhatsApp group message. That works for a single announcement, but families cannot find an old message, check a balance, or confirm a flight time without scrolling or asking again. Flight confirmations are forwarded by Carmen, money is collected by Franky, and decisions from the principal arrive through separate threads. There is no durable, shared reference.

Purpose of ArkEdventure2027. Give every family one link they can open on their phone at any time to answer, in under 30 seconds: *When do we fly? Where are we staying? What have we paid and what is still due, and when? What are we doing each day? What is the latest announcement?*

SUCCESS LOOKS LIKE

- Families stop asking in WhatsApp for information already published — they check the app first.
- Every amount and date in the app matches Appendix A exactly; no second version of the truth.
- When something changes (flight time, balance due date, itinerary), one edit in the app + one short WhatsApp pointer replaces a long correction thread.
- By March 12, 2027 (Porter balance auto-charge and name-list deadline), every family has seen their final balance and deadline in the app.

WHAT SUCCESS IS NOT

The app does not collect money, change bookings, or replace the school's own permission forms and communications. It publishes verified information clearly. Payments remain by Interac e-transfer as today; bookings remain with the airlines and the school.

2 Audience and stakeholders

Group	Who / how many	What they need
Flight families (primary)	17 families with seats on the group flights. Each family = student + any travelling siblings / parents as signed up.	Their flight times, their deposit paid, their balance owing and due date, hotel, daily plan, latest announcements.
Wider sign-up group	58 families signed up on the school form overall. Not all are on the group flights.	General trip information (dates, hotel, itinerary, announcements). Flight-finance detail that does not apply to them must be clearly labelled as flight-group only.
Students	Grade 5 students, including Jacques Ip (Family 12).	Age-appropriate itinerary view — what happens each day, meeting points, what to bring. No finance detail needed in the student view.
Principal	Madam Adina Priel	Approves official announcements and itinerary; fronted the Flair deposit (see Finance).
Trip contact	Carmen Wong	Forwards airline confirmations and the sign-up sheet; source for booking changes.
Organizer / builder	Franky Ip	Built the deposit tracker, collected deposits, issued cheque No. 095; builds and maintains this app.
Planner	Gladys Li	Planner. Parent of Max Falk (Family 15). Specific planning responsibilities to be confirmed.

Language: English as primary (school communications are in English). Keep sentences short and plain — many families read on phones and English may not be the home language (Cantonese is spoken in several homes). Avoid jargon; spell out abbreviations on first use.

3 Scope

IN SCOPE — V1

- Password-gated information hub with 5 areas: Flights, Hotel, Finance, Itinerary, Announcements — no trip content is visible until the shared family password is entered (see §11)
- Home / dashboard that surfaces: trip countdown, next deadline, latest announcement, and quick links to each area
- Per-family finance summary (deposit paid / balance) as already shared in the WhatsApp group — see Privacy (§9)
- Mobile-first pages that work on a phone after one shared-password entry — no per-family login or account
- Print-friendly trip summary (flights + hotel + emergency contacts once confirmed)
- Content editable by the organizer without a code deploy for announcements and itinerary updates (see §10)

OUT OF SCOPE — V1

- No online payments, e-transfer buttons, or payment processing
- No booking, seat selection, or name-change requests through the app
- No per-family logins or accounts — access is by one shared family password only (see §11)
- No private messaging, comments, or chat inside the app (WhatsApp remains the discussion channel)
- No photo sharing / uploads from families in V1
- No push notifications — announcements are pulled (families check the link) + a WhatsApp pointer when something important posts
- No email-update subscription in V1 — it is a Phase 2 item (see §14), not built in Phase 1
- No collection of children's personal data beyond names already on the sign-up sheet and already shared with the group

Scope guardrails

- **No invented content.** If a fact is not in Appendix A, the page shows “To be confirmed” with the owner who will confirm it — never a plausible placeholder presented as fact.
- **No spend.** Any feature that needs a paid service is out of scope by definition, however useful. Note it under Future Ideas, do not build it.
- **One trip only.** This app is for April 13–20, 2027. It is not a general school-trip platform. Reuse is a bonus, not a requirement.

Future ideas (not in V1 — record only, do not build without Franky's go)

Packing checklist per day; rooming list (only if the principal approves sharing it); offline copy for travel day; French phrase card for students; post-trip photo link (external, school-approved only).

Information architecture

Page	Route (proposed)	Answers
Home	/	What is happening next? What changed?
Flights	/flights	When, which airline, which confirmation?
Hotel	/hotel	Where are we staying, check-in/out, contact?
Finance	/finance	What was collected, what is paid, what is still due?
Itinerary	/itinerary	What are we doing each day?
Announcements	/announcements	What is the latest official update?

Navigation is a simple top bar / bottom tab bar on mobile with those six labels, in that order. No hamburger-only navigation — parents must see all sections without hunting.

4 Content area — Flights

Families' most-checked page. It must show both legs exactly as booked, with no mixing of meeting estimates and confirmed facts. The September 26 meeting estimate ($150 deposit, balance ~March 23) is superseded for flights by the October confirmations — the app shows confirmed figures only, and labels the March 23 date as the *final payment collection target* in Finance, not as the airline charge date.

	Outbound	Inbound (return)
Flight	Porter Airlines PD 372	Flair Airlines F8 107
Route & date	Vancouver (YVR) → Montreal (YUL), Tue April 13, 2027	Montreal (YUL) → Vancouver (YVR), Tue April 20, 2027, 08:30–11:10
Confirmation	KC8MMN	F997NW
Group size	56 seats	35 seats on the paid deposit (34 family seats + 1 extra — see Finance)
Money	Total $17,013.78 — deposit $4,200 paid; balance $12,813.78	Total $10,253.86 — $5,126.93 paid; $5,126.93 balance due
Key date	Balance auto-charged March 12, 2027; passenger name list also due March 12, 2027	Balance due date to confirm with Flair / principal — show as TBD until confirmed in writing

Principal's travel note (show on Flights page): Madam Adina flies outbound with the group on Porter (her $75 seat is covered by families — see Finance) and arranges her own return. Do not list her as a passenger on the Flair return.

ACCEPTANCE CRITERIA — FLIGHTS

— Both legs display airline, flight number, route, date, and confirmation number exactly as in the table above.

— Outbound balance ($12,813.78) and auto-charge date (March 12, 2027) are shown together — never the amount without the date.

— Any schedule time not confirmed in Appendix A shows as “Time to be confirmed — check back” rather than a guessed time. Only the Flair 08:30–11:10 time is confirmed for display.

— A “Last verified” date appears under the flight details, updated whenever Carmen forwards a new confirmation.

— Page states in plain language: arrive-at-airport guidance is TBD until the school publishes it — no invented check-in time.

5 Content area — Hotel

Known: Marriott Peel, Montreal — named in the September 26, 2026 school meeting notes. **Not known:** no hotel booking confirmation is on file yet. The app must be honest about that distinction; a named hotel is not a confirmed booking.

Field	Status for V1
Hotel name	Marriott Peel — from meeting notes, Sep 26, 2026 MEETING NOTE
Address, phone, check-in / check-out times, rooming, breakfast, cost per family	TBD / TO CONFIRM — display as “To be confirmed by the school” until a written confirmation is received
Confirmation number	TBD — do not publish until received; never publish a confirmation that exposes other guests' details

ACCEPTANCE CRITERIA — HOTEL

- Hotel page names Marriott Peel with the source label “Per Sep 26 school meeting — confirmation pending.”
- Every unconfirmed field shows TBD, not a copied web-search result presented as the booking. A general map link may be added only if labelled “hotel location (general)” and verified.
- When confirmation arrives, the page is updated in the same workflow as §10 and the “confirmation pending” label is removed in the same edit — the two states never coexist.

6 Content area — Finance

Every figure below is already reconciled in the deposit tracker. The app republishes that reconciliation; it does not recalculate it differently. Finance is one of five equal areas — factual and complete, not the centre of the app.

> **Deposit collection — complete.** $9,180.88 from 17 families, completed Oct 21, 2026 (a day before deadline). Remitted to Adina Priel by cheque No. 095, Oct 21, 2026.

How the per-family deposit was built

Component	Rate	Notes
Porter outbound deposit	$75.00 per seat	Family deposits $4,125.00 (55 family seats)
Principal's Porter seat — family share	$2.88 per child	$75.00 shared by children headcount (26 children); rounded per family in the tracker
Flair inbound deposit	$146.49 per seat	Family deposits $4,980.88 (34 seats)
Per-family total	**$227.88 – $891.73**	By seats/children. Ex: Family 10 Destiny Chen $670.24; Family 12 Jacques Ip $228.13.

Reconciliation the app must show (per Carmen Wong)

- **Porter:** $4,125.00 + $75.00 principal cover = **$4,200.00 paid — reconciles exactly.**
- **Flair:** Adina paid **$5,126.93** for 35 seats. Families collected for 34 seats = $4,980.88. Difference **$146.05** = one extra seat (Christopher Bong, returns on group flight); per Carmen, Flair is to adjust. **Do not claim the collection covers the full Flair deposit paid.** Show $146.05 as open.
- **Totals:** deposits paid $9,326.93 vs. $9,180.88 collected/remitted — difference is exactly the $146.05.

What is still due

Item	Amount / date
Porter balance (group)	$12,813.78 — auto-charged March 12, 2027. Per-person balance in the confirmation: $228.82.
Flair balance (group)	$5,126.93 — due date TBD to confirm.
Final payment collection from families	Target about March 23, 2027 (20 days before departure, per Sep 26 meeting). Exact per-family final amounts: TBD — publish only after Franky reconciles them in the tracker. Do not derive them on the web page.
Hotel / other trip costs	TBD — no amounts on file yet. Finance page reserves a section, shows TBD.

ACCEPTANCE CRITERIA — FINANCE

- Collection total ($9,180.88), cheque number (095), payee (Adina Priel), and completion date (Oct 21, 2026) appear together in one summary block.
- Per-family table lists all 17 families with amount and Paid status — the same amounts already shared in the WhatsApp group updates. Totals foot to $9,180.88 on the page.
- The $146.05 Flair item is shown as open, with owner (Flair adjustment, via Carmen / Adina) — never netted away silently.
- No bank details, e-transfer references, or sender names are published (§9) — status and amount only. Future per-family balances appear only after they exist in the tracker and are verified by Franky.

7 Content area — Itinerary

No day-by-day itinerary is on file yet. Ship the known frame (dates, flights, hotel) with a structure ready to fill — unpublished days show “Details to be confirmed by the school,” not invented activities.

Day	Known frame	Detail status
Tue Apr 13, 2027	Travel day — Porter PD 372, YVR → YUL; hotel check-in (TBD)	TBD meeting point & time
Wed Apr 14 – Mon Apr 19	In Montreal — school program days	TBD daily activities, meals, free time
Tue Apr 20, 2027	Return — Flair F8 107, 08:30 YUL → 11:10 YVR	TBD checkout & pickup plan

> **Ottawa parent day trip — undecided.** Show only as “Under consideration — not confirmed” if the school wants it visible. Never as scheduled or bookable until confirmed. Owner: Adina / Carmen.

Each published day must carry

Date + title, meeting time/point, activities in time order, meals, what to bring/wear, supervising adults if provided, return-to-hotel time, and a “changed” marker with date when edited after publication.

ACCEPTANCE CRITERIA — ITINERARY

- All 8 days (Apr 13–20) have a row/section from launch, even if the detail is TBD — no missing days.
- No activity, venue, time, or price appears unless it came from the school (Adina / Carmen / official handout). Web-search suggestions are not itinerary facts.
- Ottawa trip, if shown, carries the “not confirmed” label in the heading itself, not only in body text.
- On a phone, today’s day (during the trip) is reachable in one tap from Home (“Today in Montreal”).

8 Content area — Announcements

Announcements are the app's replacement for “important WhatsApp message that scrolls away.” WhatsApp still sends the pointer (“New announcement in ArkEdventure2027 — final balances posted”); the app holds the durable text.

Announcement format

Field	Rule
Title + date/time posted	Required. Times in Pacific Time (PCT) before departure, with Montreal local time added during the trip week where relevant.
Category	Flights / Hotel / Finance / Itinerary / General / Action required
Action required + deadline	If families must do something, the first two lines state what and by when. Example pattern: “Pay final flight balance by [date] — see Finance.”
Body	Short paragraphs, bullets for lists. Same plain style as the school's messages — no marketing language.
Pinned	At most 2 pinned at once (next deadline + latest critical change). Older pins move to the archive automatically when unpinned.

ACCEPTANCE CRITERIA — ANNOUNCEMENTS

— Announcements list is reverse-chronological; pinned items stay on top and on Home.

— Each announcement shows who issued it (School / Adina, Carmen, or Franky — organizer) — no anonymous posts.

— Corrections are published as a new announcement that references the one it corrects; the original is marked “Updated — see [date]” rather than silently edited.

— Launch content includes at least: (1) welcome / how to use the app, (2) deposit collection complete + thank-you (17 of 17 paid a day early), (3) next deadline explainer (March 2027 balances). Drafts need Franky's approval before publishing.

9 Roles, permissions, and privacy

Who can do what

Role	Can view	Can edit / publish
Family (reader)	All published pages, only after entering the shared family password. No individual account.	Nothing. No comments, no uploads.
Franky Ip Organizer / builder / admin	All published + drafts	All areas. Sole publisher for Finance figures (must match tracker). Maintains the site and the link.
Carmen Wong Trip contact	All published	Supplies flight / booking updates to Franky to publish. Does not edit the site directly in V1 — single publisher keeps one version of the truth. (Revisit if update volume grows.)
Madam Adina Priel Principal	All published	Approves official announcements, itinerary, and hotel information before publication. Supplies Flair / hotel confirmations.
Gladys Li Planner	All published	Planner — responsibilities to be confirmed; no direct editing in V1 (Franky remains sole publisher). Parent of Max Falk (Family 15).

Single-publisher in V1 is deliberate: the deposit collection worked because one tracker held the truth. Multiple direct editors would recreate the WhatsApp problem inside the app.

Privacy — what each family can see

VISIBLE TO ALL FAMILIES (BY DESIGN)

- Flights, hotel (once confirmed), itinerary, announcements
- Finance summary: group totals, what was collected, what the group still owes the airlines
- Per-family deposit amounts + Paid status — **already shared openly in the WhatsApp group updates** during collection, so republishing them changes no family's exposure
- Family display names as in the tracker (e.g. “10 - Destiny Chen”)

NEVER PUBLISHED

- E-transfer sender names, references, memos, bank / account details, or payment screenshots
- Email addresses, phone numbers, or home addresses of any family
- Children's full legal names beyond what the sign-up sheet already uses in the group, medical / dietary / passport details, rooming with personal notes
- Airline confirmation passenger lists, or any document image containing personal data
- Franky's, Adina's, Carmen's, or Gladys's personal contact details beyond what the school already publishes
- The shared family password itself — never in any page, file, code, repository, or this BRD (see §11)

- **Search engines:** set noindex so the site does not appear in public search results.
- **Takedown:** Franky can unpublish any page within one edit if a family or the school raises a privacy concern; the concern and action are noted in the update log (§10).

ACCEPTANCE CRITERIA — ROLES & PRIVACY

— A pre-launch privacy check passes: no item from the “Never published” list appears on any page, in any image, or in any downloadable file.

— Finance page wording states that amounts shown are the group amounts already shared in WhatsApp updates.

— Site carries noindex and no analytics that collect family data.

— Password gate passes the acceptance criteria in §11 — correct password grants access, a wrong one does not, and a direct link to an inner page does not bypass the gate.

10 Content-update workflow

Most errors in a trip app are not coding errors — they are a wrong amount or an old flight time published confidently. This workflow is the control.

1. **Source arrives.** Airline confirmation (via Carmen), school notice (Adina), hotel confirmation, or tracker change (Franky). Save the source; note its date. A WhatsApp rumour is not a source.
2. **Draft.** Franky drafts the change (new announcement + edit to the affected area page). Figures are copied from the tracker / confirmation, never retyped from memory.
3. **Verify.** Check: amounts foot, dates include weekday + year, confirmation numbers character-for-character, TBD labels removed only where the source actually confirms the field. For Finance, re-read the tracker row after drafting.
4. **Approve (when required).** Official itinerary, hotel, and school announcements need Adina's (or Carmen's, for booking facts) go-ahead. Finance republication of tracker figures needs no new approval — the tracker is the approval.
5. **Publish + timestamp.** Publish, update the page's “Last verified / Last updated” line, and log the change (date, area, what changed, source).
6. **Point from WhatsApp.** One short WhatsApp message with the link for anything families must act on. Minor typo fixes need no pointer.

Change type	Target turnaround	WhatsApp pointer?
Flight time / date change, deadline change	Same day the confirmation is received	Yes — always
New announcement from school	Same day	Yes
Finance balance published	Only after tracker reconciliation is signed off by Franky	Yes, with deadline stated
Itinerary detail added	Within 2 days of school handout	Once per batch, not per day-row
Typo / formatting	Next edit pass	No

11 Non-functional and technical requirements

Requirement	Spec for this build
Cost	$0 total, ongoing. Cloudflare Pages free tier for hosting/deploy. No paid domain required in V1 (use the Pages subdomain); a custom domain is optional only if already owned. No paid APIs, fonts, images, or analytics.
Platform — “building here”	Built by Muse in this workspace and deployed with the advanced Cloudflare Pages deploy, which bundles the Worker (*_worker.js*) that runs the password gate — a static-only deploy is **not** sufficient for V1, because it attaches no Worker and the gate would not run. Source lives in the project repo so any fix is a redeploy, not a rebuild. Full stack in §11 (continued) below.
Mobile-first	Designed at ~390px first. Readable without zoom (body 16px+ on web), tap targets 44px+, no horizontal scroll, no hover-only content. Tested at 390px, tablet, and desktop widths before launch.
Simplicity for parents	Max 3 taps from Home to any fact. Plain headings that match how parents ask (“What do we still owe?”). No jargon, no account creation, no app install.
Performance	Static pages, minimal JavaScript. Usable on hotel / airport Wi-Fi and mobile data. Images compressed; no auto-playing media.
Accessibility	Sufficient colour contrast, headings in order, meaningful link text, alt text on any image. Do not convey status by colour alone (Paid also says “Paid”).
Data	V1 content as structured files in the repo (e.g. one data file per area) so amounts/dates exist once and render everywhere they appear — a flight date edited once updates Home, Flights, and Itinerary together.
Availability / backup	Repo is the backup. Content log (§10) lets any page be reconstructed. No database in V1 — if volume ever suggested one, that is a decision point for Franky (see §11, Tech stack), not an assumed addition.
Dates & times	All dates America/Vancouver (PCT) unless labelled Montreal local. Always show weekday + month + day + year for deadlines. Never a bare “March 12” without the year and context.

11 (continued) Tech stack and password gate

Tech stack — building here on the existing $0 stack

Component	Choice	Role in V1
Hosting	Cloudflare Pages, free tier	Hosts the site on the Pages subdomain. No paid domain is required in V1.
Server-side gate & checks	Cloudflare Worker, as *_worker.js*, via the advanced Pages deploy	Runs the password gate and any server-side checks on every request. The advanced deploy is required — a static-only deploy attaches no Worker, so the gate would not run.
Trip pages & content	Static content in the project repository	Home, Flights, Hotel, Finance, Itinerary, and Announcements are static pages / data files, served behind the gate. Fast on a phone, with minimal JavaScript.
Password configuration	Secret configured at deploy time	The shared password is supplied separately by the owner (Franky) and set as a secret / environment configuration at deploy time. It is never part of the site's code or content (see gate rules below).

WHY THIS STACK FITS

- **Zero cost:** every component is a free tier Franky already uses. No paid service is introduced anywhere in V1.
- **Mobile-first:** static pages load quickly on hotel / airport Wi-Fi and mobile data, at phone width, with no app install.
- **Simple to update:** a content fix is an edit to the source, then a redeploy — not a rebuild or a migration.
- **A real gate, without paid auth:** the Worker checks the password on the server, so protection does not depend on hiding content in the browser.

INTENTIONALLY NOT USED IN V1

No database. No per-user accounts. No paid authentication service. No paid APIs, plugins, or analytics, and no purchased custom domain. Content lives as structured files in the repository (§11, Data), which is also the backup.

HOW CONTENT UPDATES WORK

Edit the source in the repository, verify the change under the §10 workflow, redeploy with the advanced Pages deploy, then verify on the canonical Pages domain: the site loads, the gate challenges a new visitor, and every area opens after the password is entered. Changing the password follows the same path — update the secret, redeploy, verify — with no code change.

> **Decision point — do not assume:** if any future component would need a service Franky does not already use for free (for example a database, per-user accounts, a paid auth service, or a paid domain), stop and flag it as a decision point for Franky before building it. It is not added by default, and the $0 rule still applies.

11 (continued) Password gate — specification

The site is gated. The password screen is the only public part of the site; everything behind it is for the trip families.

- **Whole site, no exceptions:** the gate applies to Home and to every area — Flights, Hotel, Finance, Itinerary, and Announcements — and to any file that carries trip content. No trip content is visible, and none is sent to the browser, until the password has been entered correctly.
- **One shared password:** a single shared family password for all families in V1. There are no usernames, no per-family passwords, and no accounts to create or recover.
- **Changeable by the owner:** Franky can change the password at any time by updating the deploy-time secret and redeploying (no code change). After the change is verified, the old password no longer works and the new password is shared with families through WhatsApp.
- **Failed attempts are handled safely:** a wrong or empty entry shows only a generic “incorrect password” message — no hint, no part of the password, and no trip content. The check runs on the server (in the Worker), not only in the page. Repeated failed attempts are delayed / rate-limited so guessing is not practical.
- **The password is never written down in the system:** the password value must **never** appear in this BRD, in the site's code, in the repository, or in any file, log, or screenshot. It is supplied separately by the owner and configured only as a secret at deploy time. Anyone building or deploying the site must not print it, log it, or copy it into a document.
- **Distribution:** families receive the password through the existing WhatsApp group, separately from this document. If the password is believed to have leaked, the owner changes it as above — the link alone is never enough to read the site.

ACCEPTANCE CRITERIA — PASSWORD GATE

— Entering the correct shared password grants access to Home and all five areas.

— Entering a wrong or empty password grants no access, shows the generic error, and reveals no trip content.

— The gate cannot be bypassed by a direct link: opening an inner page URL (for example Flights or Finance) without having entered the password returns the password screen, not the page content — on a first visit, on refresh, and in a new browser.

— Within the same browser session after a correct entry, moving between areas does not require re-entering the password on every page.

— Password-change test passes: after the owner updates the secret and redeploys, the old password fails and the new password works.

— Pre-launch secret check passes: a search of the BRD, the site code, the repository, and project files finds no password value anywhere.

12 Risks, assumptions, and open questions

Risks

Risk	Mitigation in this BRD
Stale flight info — schedule changes after publication	“Last verified” date on Flights; same-day update rule (§10); existing flight-status checks continue outside the app.
Flair $146.05 adjustment never comes through	Shown openly as an open item. If Flair refuses, Franky / Adina decide who absorbs it — the app updates Finance to the decided treatment, with an announcement. It is never quietly absorbed into family balances.
March crunch — Porter auto-charge (Mar 12), name list (Mar 12), and family final payments (~Mar 23) collide	Home surfaces the next deadline from January onward; Finance publishes per-family final amounts as early as the tracker allows.
Hotel turns out different from Marriott Peel meeting note	TBD labelling (§5) means a change is a confirmation, not a correction of a false claim.
Link or shared password spreads beyond the group	Whole-site password gate (§11) + noindex + “never published” list (§9). The link alone does not open the site. If the password is believed leaked, the owner changes the deploy-time secret, redeploys, and shares the new password via WhatsApp.
Families keep relying only on WhatsApp and miss app updates	Every important publish gets a WhatsApp pointer (§10). The app replaces storage, not the nudge.

Assumptions

- 58 sign-ups / 17 flight families as of this BRD; if the flight group changes, Finance and Flights are updated from the tracker / new confirmation, not by editing totals by hand.
- Amounts are in Canadian dollars (CAD) throughout.
- Adina and Carmen continue as the authoritative sources for bookings and school decisions.
- Families have a phone browser and WhatsApp — no other software is assumed.

Open questions — answer before the phase noted

#	Question	Owner	Needed by
Q1	Hotel confirmation: address, check-in/out, rooms, cost, confirmation no.?	Adina / Carmen	Phase 1 content freeze
Q2	Flair balance due date (exact) and will Flair adjust the $146.05 Chris seat?	Carmen / Adina → Flair	Phase 2
Q3	Day-by-day itinerary + meeting points/times for Apr 13 and Apr 20?	Adina (school)	Phase 2
Q4	Ottawa parent day trip: happening? Date, cost, sign-up method?	Adina	Phase 2
Q5	Per-family final flight balances and exact collection deadline in March?	Franky (tracker)	Phase 2
Q6	Emergency contact + day-of contact method to publish during the trip?	Adina	Phase 3
Q7	Share the link and shared password beyond flight families (all 58) or flight families first?	Franky + Adina	Launch

13 How families actually use each area — before and during the trip

ArkEdventure2027 is not a finance tool with trip pages attached. Finance matters before departure; on the road, flights, hotel, itinerary, and announcements matter more, hour by hour. Each area below is specified to the same depth, for the moment a parent actually opens it.

Area	Before the trip (at home)	During the trip (Apr 13–20, in Montreal)
Flights	Check dates, times, confirmations; plan airport arrival; note Mar 12 balance/name-list deadline.	Travel-day card on Home: today's flight, meeting point, “arrive by” time (once school confirms it). Return-day view on Apr 20 shows checkout + airport transfer in one place with the flight.
Hotel	See where the group stays, plan drop-off / contact, note check-in expectations.	Hotel address + phone tappable to call / open maps; “back to hotel” directions from itinerary venues; lost / late procedure once the school provides it (TBD).
Finance	Confirm deposit paid; see final balance and deadline; plan the March payment. This is the primary finance moment — after final balances are settled, Finance becomes a receipt/archive.	Families should rarely need Finance in Montreal. It stays available as a record, but Home during the trip leads with Today, Hotel, and Announcements — not money.
Itinerary	Preview each day, arrange work / care for siblings, pack for planned activities.	The most-opened area on the trip. Home shows “Today” first: times, meeting point, what to bring, meals, return to hotel. Tomorrow is one tap away for planning the night before.
Announcements	Catch deadline reminders and changes without scrolling WhatsApp.	Same-day changes (weather, timing, meeting point) post here + WhatsApp pointer. Pinned announcement on Home is the first thing a parent checks each morning.

Equal-weight design rules

- Home gives all five areas equal entry points. During Apr 13–20, Home re-orders itself: Today (Itinerary) → Announcements (pinned) → Flights (today's leg) → Hotel → Finance. Before the trip, Home leads with Next Deadline + Latest Announcement + countdown, with all five equally reachable.
- No area requires more taps than another. No area is hidden in a submenu.
- Acceptance for launch is per-area (Sections 4–8) — the app is not “done” if Finance passes and Itinerary is still a placeholder of TBD rows without the Today view working.
- On-trip usability test (Phase 3): a parent, on a phone, standing in the hotel lobby scenario, can find (a) today's meeting time, (b) hotel phone, (c) today's flight or return plan, and (d) the latest announcement — each in under 30 seconds, without help.

> **Design implication:** Build the itinerary Today view, hotel contact actions, and travel-day flight card with the same care as the finance table. They are not “content to fill in later” — they are core product for the week families are actually travelling.

14 Phased build plan

Phase	Build	Exit gate
Phase 1 — Core hub Build first	Cloudflare Pages site on the §11 stack (advanced deploy, Worker *_worker.js*, whole-site password gate), Home + all 5 area pages with Appendix A facts; Finance with completed deposit table + reconciliation; Flights with both legs; Hotel with TBD labelling; Itinerary frame (8 days); Announcements with 3 launch posts. Mobile nav, noindex, privacy check.	All §4–8 acceptance criteria that do not depend on TBD confirmations pass at 390px, and the password-gate criteria in §11 pass. Link shareable with Franky for review.
Phase 2 — Complete the picture	Fill hotel confirmation (Q1), Flair due date / adjustment outcome (Q2), full itinerary (Q3), Ottawa decision (Q4), per-family final balances (Q5) as each source arrives — via §10 workflow, one area at a time. **Plus: email-update subscription for families (see below).**	Each filled area re-passes its acceptance criteria; no TBD label remains on a field the source has confirmed. Email subscription passes its acceptance criteria below.
Phase 3 — Trip-ready	Today view, travel-day cards, print-friendly summary, emergency contact (Q6), on-trip usability test, final WhatsApp launch message with the link.	Usability test in §13 passes; print summary checked on paper; Franky + Adina sign off to share the link (Q7).

Phase 2 item — Email-update subscription

Families can subscribe for email updates so a published update reaches them without checking the site or scrolling WhatsApp. This is Phase 2 only — it is not built in Phase 1, and Phase 1 ships without it.

- **Subscribe:** a form on the site asks for an email address only. No account, no password, and no other personal information is collected.
- **Storage:** a Worker stores the subscribed addresses in Cloudflare KV or D1, on free tiers. Only email addresses are stored.
- **Sending:** when an update is published, subscribers are emailed through a free sending service — Oracle Email Delivery free tier (about 100 emails per day) as the first choice, with Resend free tier as the backup. Sender setup (approved sender, SPF/DKIM) is part of the Phase 2 build.
- **Consent and unsubscribe (CASL):** submitting the subscribe form is the consent record. Every update email carries a working unsubscribe link, and an unsubscribed address receives no further updates.

Acceptance criteria: a family can subscribe with only an email address; the address is stored and no other data is collected; a test update email arrives at a subscribed address and at no unsubscribed address; the unsubscribe link works and stops further emails; and the service stays at $0 on the free tiers above.

Phases are content gates, not date promises. Do not hold Phase 1 waiting for hotel/itinerary confirmations — ship the honest TBD version so families learn the link early.

Definition of Done — the whole app

— Every fact in the app traces to Appendix A or to a logged source received after this BRD (with date + source in the update log).

— All five areas pass their acceptance criteria (§4–8) at 390px, tablet, and desktop; no horizontal scroll; no placeholder presented as fact.

— Finance totals foot to the tracker ($9,180.88 collected); the $146.05 Flair item is correctly shown as open until Flair/Adina close it.

— Privacy check (§9) passes; site is noindex; $0 cost verified (no paid service in the deploy).

— Password gate (§11) passes on the live site: correct password grants access, a wrong one does not, a direct inner link does not bypass it, and no password value exists in this BRD, the code, the repository, or any project file.

— Deploy verified on the canonical Pages domain, via the advanced deploy with the Worker active: the gate challenges a new visitor, home loads after entry, all 5 area routes load, latest announcement renders — not just “deploy succeeded.”

— Franky has approved the launch announcements and the WhatsApp pointer message before the link is shared with families.

Appendix A — Verified trip facts (single source of truth)

Trip	Ark Montreal Edventure 2027, April 13–20, 2027. 17 flight families; 58 families signed up overall.
Outbound	Porter PD 372, YVR → YUL, Apr 13, 2027, conf KC8MMN, 56 seats. Total $17,013.78; deposit $4,200 paid; balance $12,813.78 auto-charged Mar 12, 2027; name list due Mar 12, 2027.
Inbound	Flair F8 107, YUL → YVR, Apr 20, 2027, 08:30–11:10, conf F997NW. Total $10,253.86; $5,126.93 paid by Adina Priel (MasterCard); $5,126.93 balance due (date TBD).
Hotel	Marriott Peel — Sep 26, 2026 meeting notes only. No confirmation on file. All other hotel fields TBD.
Finance	Deposits $9,180.88 collected from 17 families, complete Oct 21, 2026; cheque No. 095 to Adina Priel. Per family $227.88–$891.73 (Porter $75/seat + Flair $146.49/seat + $2.88/child principal-seat share). Final family payments target ~Mar 23, 2027. Flair $146.05 extra-seat item (Christopher Bong) pending Flair adjustment, per Carmen Wong.
Itinerary / Ottawa	No day-by-day itinerary on file — TBD. Optional parent Ottawa day trip — undecided — TBD.
People	Adina Priel (principal), Carmen Wong (bookings / sign-up sheet), Franky Ip (organizer / collector / builder), Gladys Li (planner — responsibilities to be confirmed; parent of Max Falk, Family 15).

All amounts CAD. If any fact above changes, update this appendix in the BRD's next version and the app in the same pass — the two never diverge.