

# Starlight Courier — Game Design Document (GDD)

**Game Type:** 2.5D narrative action-adventure with light stealth and traversal

**Elevator Pitch:** A cozy-tense courier adventure set in a neon, rain-soaked harbor city at blue hour. As **Aya**—with her chatty drone **Kilo**—you weave through night-market alleys, outrun corp patrols, and deliver sealed holographic parcels that change the lives of the people you meet.

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## 1) Vision & Player Experience

**Experience Goals** - *Flow*: satisfyingly snappy traversal with readable turns on wet streets. - *Tension → Relief*: moments of stealthy evasion punctuated by safehouse warmth. - *Cohesion*: consistent cel-shaded look, teal/magenta/amber palette, blue-hour rain. - *Agency*: route choice tradeoffs (fast/dangerous vs safe/slow) matter.

**Design Pillars** 1) **Readability First** — clean silhouettes, clear HUD, navigable paths. 2) **Deliveries Have Stories** — parcels nudge micro-narratives forward. 3) **Rain Is a Mechanic** — visibility, traction, sound, and cover all shift with rain. 4) **Lightweight Stealth** — detection cones, audio/noise, quick resets.

**Target Platforms / Audience** - PC (keyboard/mouse & controller). Stretch: Steam Deck. - Players who enjoy traversal, light stealth, and episodic micro-stories.

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## 2) Narrative & World

**Setting:** Port-city sprawl of **Aurelia Harbor**, packed night markets, cranes, rain haze, paper lanterns, holograms.

**Main Cast - Aya** — nimble courier; compassionate, competent, a bit impulsive. - **Kilo** — small companion drone; maps, quips, pings threats. - **Factions** — street vendors, dockers' union, corp security, neighborhood fixers.

**Theme:** connection under surveillance. Deliveries are trust-building acts.

**Story Frame:** Each shift is a linked set of deliveries. Small choices (who gets priority, which alley you risk) ripple into later missions via **Reputation** and **Rumors**.

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## 3) Core Loop & Meta Loop

**Minute-to-Minute (Core Loop)** 1) Accept a delivery → 2) Plan a route → 3) Ride/Run → 4) Evade patrols & hazards → 5) Deliver → 6) Score & Reputation → 7) Upgrade → 8) Next job.

```

flowchart LR
A[Accept Job] --> B[Plan Route]
B --> C[Traverse: Ride/Run]
C --> D{Encounters}
D -->|Patrol| E[Stealth/Evade]
D -->|Hazard/Weather| F[Adjust Pace]
E --> G[Deliver]
F --> G
G --> H[Score & Rep]
H --> I[Upgrade/Buy]
I --> A

```

**Session Meta:** complete 3–5 deliveries per shift; unlock new districts, rumors, and upgrades; meet a character; optional story beat.

## 4) Systems Design

### 4.1 Traversal (On Foot & Mag-Bike)

- **Speed (m/s):** walk 3.5, jog 5.0; bike cruise 9.0, boost 13.0 (2 s burst).
- **Acceleration:** bike 0.0→cruise in 1.0 s; drift on wet bricks reduces turning radius by 15%.
- **Traction:** rain intensity applies –10/-20/-30% traction tiers; puddles add slip chance (camera shake micro-feedback).
- **Stamina:** sprint drains; recover in cover/under awnings (+25% regen).
- **Boost:** consumes **Battery**; recharges slowly; can be recharged at kiosks.

### 4.2 Parcels

Each parcel has **Integrity** and **Priority**. Integrity decays on collisions; Priority controls time bonus.

```
{
  "id": "PX-2048",
  "type": "Fragile | Standard | TimeSensitive | Secure",
  "weightKg": 3.2,
  "size": "S|M|L",
  "integrity": 100,
  "deadlineSec": 420,
  "rewardBase": 85,
  "recipient": "NPC_ID",
  "specialRules": ["no_damage_bonus", "secret_drop"]
}
```

**Integrity Loss:** minor bump –2, heavy collision –12, patrol tackle –25.

**Scoring Multiplier:** Fragile ×1.2; Time-Sensitive ×1.3; Secure ×1.4.

### 4.3 Stealth & Detection

- **Patrol Vision Cone:** 55°/8 m; rain/fog reduce to 35°/6 m.
- **Noise:** sprint +10 noise; bike boost +18; walking +2; rain -6 global.
- **Concealment:** stalls/awnings reduce visibility by 40%; shadows by 20%.
- **Kilo Ping:** one-shot sonar revealing patrols within 12 m, 20 s cooldown.

**AI States:** Patrol → Investigate (heard/seen hint) → Pursue → Search → Return.

**Break LOS:** 3 s plus enter cover to reset.

### 4.4 Weather & World Modifiers

- **Rain Intensity:** *Drizzle / Rain / Downpour* influences traction, noise masking, fog density, puddle spawn.
- **Wind Gusts:** rare; push bike sideways; used for variety set-pieces.

### 4.5 Reputation & Progression

Reputation ranks: **Rookie** → **Runner** → **Courier** → **Express** → **Phantom**. - Rank raises payout multiplier (+0%, +5%, +10%, +15%, +20%). - Unlocks **Rumor Jobs** (branching micro-stories) and shop inventory.

### 4.6 Economy & Upgrades

Currency: **Creds**.

**Shops:** Night-market stalls & garage.

Category	Examples	Effect
Bike Mods	Hover Rim MkII, Dampers+, Regen Coil	speed/traction/battery
Courier Gear	Grip gloves, knee pads, reflective coat	handling/damage resist
Drone Rigs	Wide-cone sonar, threat highlighter, path laser	detection/utility

## 5) Controls & Camera

**Keyboard/Mouse (PC)** - Move: WASD • Sprint: Shift • Interact/Deliver: E • Boost: Space • Kilo Ping: Q • Bike/On-foot Toggle: F • Map/Route: M • Pause: Esc.

**Controller (Xbox/PS Layout)** - Left Stick Move • B/Circle Sprint • X/Square Interact • A/Cross Boost • Y/Triangle Bike Toggle • LB/L1 Kilo Ping • View/Touchpad Map • Menu/Pause.

**Camera:** 2.5D side camera with slight parallax; dynamic zoom (1.0–1.2×) on speed/encounter; vignette in downpour.

## 6) Levels & Encounters

**Districts (act as hubs)** 1) **Harbor Night Market** — tutorial routes, puddles, lanterns.

2) **Crane Yards** — moving hazards, wind gusts, tighter patrol corridors.

3) **Old Canals** — bridges, slick stone, shortcuts via locks.

4) **Corporate Promenade** — high surveillance, faster rewards.

**Encounter Palette** - Patrol duo on fixed loop; stall collision hazard; puddle cluster; rumor NPC; drone jammers (disable ping briefly).

**Example Route Beat (Harbor Alley)** - Start kiosk → lantern gauntlet (visibility shifts) → patrol loop (hide under awning) → puddle s-curve (traction test) → delivery balcony.

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## 7) Missions & Templates

- **Standard Delivery:** get parcel A to B intact.
- **Timed Express:** reach before deadline; bonus if >20 s left.
- **Fragile Run:** integrity ≥90%.
- **Covert Drop:** secret stash; patrol density +1 tier.
- **Chain Run:** 3 sequential drops within one shift.

### Scoring

```
Score = rewardBase * multipliers + timeBonus + integrityBonus + reputationTierBonus
```

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## 8) UI/UX

- **HUD:** health/stamina, parcel integrity, minimap ping, stealth indicator (eye icon with fill), timer when active.
  - **Wayfinding:** diegetic holographic sign pulses subtly along target route; optional breadcrumb dots.
  - **Menus:** job board → route planner; garage → upgrades; codex → rumors, people, places.
  - **Accessibility:** UI scale 80–140%; colorblind-safe HUD set; aim/steer assist; hold-to-deliver toggle; subtitle size/black bars.
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## 9) Audio Direction

- **Music:** lo-fi synth with rain foley layers; stingers for patrol aggro/escape.
  - **SFX:** bike hover hum, puddle splash, fabric rustle, Kilo chirps.
  - **Mix Rules:** duck music –6 dB on aggro; boost rain mask in downpour; raise Kilo VO clarity.
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## 10) Art Direction (Quick Ref)

- Cel-shaded, painterly edge; teal/magenta/amber; soft volumetric glow; crisp silhouettes.
  - Environments exported in **Foreground/Mid/Background** layers for parallax.
  - Keep top corners clean for HUD; left-to-right leading lines.
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## 11) Technical & Pipeline

**Engine:** Unity 2022+ (Unreal 5.x compatible).

**Performance Targets:** 60 FPS @ 1080p, mid-range laptop; texture memory budget  $\leq$  800 MB; draw calls  $\leq$  1.2k per scene.

**Asset Pipeline 1) Ideation:** ChatGPT/Claude brainstorming  $\rightarrow$  prompt drafts.

2) **Generation:** Midjourney v6 / SDXL / DALL-E per asset spec.

3) **Cleanup:** inpaint artifacts; upscale (ESRGAN/Topaz).

4) **Engine Prep:** slice sprites; set PPU; import rules (BC7/ASTC); parallax layers.

5) **Grade:** LUT application; post-process volume.

**Data Schemas (examples)**

```
// Mission
{
  "missionId": "HM-1A",
  "district": "HarborNightMarket",
  "parcelId": "PX-2048",
  "deadlineSec": 420,
  "patrolDensity": 1,
  "weather": "Drizzle",
  "rewards": { "base": 85, "bonus": {"time": 0, "integrity": 0} }
}
```

```
// Upgrade
{
  "upgradeId": "rim_mk2",
  "slot": "Bike",
  "name": "Hover Rim MkII",
  "effects": [{"stat": "speed", "add": 0.6}, {"stat": "traction", "mul": 1.1}],
  "cost": 240
}
```

**Save/Load:** autosave on delivery & purchase; JSON save with checksum; 3 slots.

**Telemetry (optional):** route choice, delivery outcomes, encounter fails, upgrade picks.

## 12) Difficulty & Tuning

- **Modes:** Story / Standard / Courier+ (hard).
  - Patrol cone +10%/+0%/-10%; integrity loss -30%/0%/+30%; deadlines +30%/0%/-20%.
  - Assist toggles: aim/steer assist, extended aggro break, slow-mo on near miss (10%).

<b>Tuning Table (initial)</b>	Variable	Default	Min	Max	---	---	---	---	---	sprintStamina	100	60	140	---	
	sprintDrain/s	18	12	24		boostBattery	100	80	140		boostCost/burst	35	25	45	
	patrolSpeed m/s	3.0	2.5	3.8		puddleSlip%	12	6	18						

## 13) Production Plan (Vertical Slice → Alpha)

**Team Roles:** design/program (1), art (1), tech art (shared), audio (contract), QA (part-time).

## **Milestones (6 weeks) - Wk 1: core movement, camera, HUD shell, Harbor Alley blockout.**

- **Wk 2:** parcel system + timer, basic patrol AI, rain v1, delivery loop.
  - **Wk 3:** mag-bike handling, Kilo ping, shop stub, two upgrades.
  - **Wk 4:** polish art pass (parallax), mech poster + T-pose, SFX/Music temp.
  - **Wk 5:** tuning pass, accessibility, save/load, telemetry hooks.
  - **Wk 6:** UX polish, performance, playtest, bug triage → **Vertical Slice**.

**Definition of Done (VS):** 3 deliveries playable end-to-end; 1 district; 2 patrol types; shop with 3 upgrades; controller support; 60 FPS on mid-range.

## **14) QA & Playtesting**

- **Heuristics:** clarity of route, fairness of patrol telegraphing, rain readability.
  - **Playtests:** 5-minute loops; track fail reasons; A/B route readability (sign glow off/on).
  - **KPIs:** avg deliveries/shift  $\geq 3.5$ ; fail  $\rightarrow$  retry under 20 s; players choose high-risk path  $\geq 30\%$  of time.

## 15) Risks & Mitigations

- **Art Consistency Drift** → lock seeds/palettes; brief paint-over pass.
  - **Stealth Frustration** → fast resets; generous concealment in rain; audio telegraph.
  - **Performance in Downpour** → particle LOD & GPU instancing; cap puddle decals.

## 16) Roadmap (Post-VS)

- District 2 (Crane Yards), patrol archetype B, 5–8 new deliveries, new upgrade tier, rumor chain #1.
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## 17) Glossary

- **Integrity** — health of parcel; reduces with impacts.
  - **Rumor Job** — optional delivery chain that reveals character story.
  - **Cone** — patrol vision cone; reduced by rain/fog.
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## Appendix A — Mission State Machine

```
stateDiagram-v2
[*] --> Idle
Idle --> Accepted: pick job
Accepted --> EnRoute: start traversal
EnRoute --> Encounter: patrol/hazard trigger
Encounter --> EnRoute: evade success
Encounter --> Failed: caught or integrity 0
EnRoute --> Delivered: reach destination
Delivered --> [*]
Failed --> [*]
```

## Appendix B — UI Wireframe Notes

- Top-left: parcel integrity + timer.
  - Top-right: mini-map ping + Kilo cooldown.
  - Bottom-center: stamina/battery bars; Boost prompt when full.
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**Design Status:** VS-ready spec. Update as playtest data arrives.