# ThirdEye — Select.dev-Inspired UI (Greenfield) + Cursor Tasks

**Branding:** Company = **ThirdEye**. All UI copy, code, env vars, and docs use *ThirdEye* (no OpenMetadata terms).

**Copyright:** © ThirdEye. Footer snippet provided below.

#### **Tech & Conventions**

• Framework: Next.js (App Router) + TypeScript

• UI: Tailwind CSS + shadcn/ui + lucide-react (select.dev-like neutral/compact theme)

• State/Data: React Query

• Charts: Recharts

• Tables: TanStack Table

• Forms: React Hook Form + Zod

· Graph: React Flow

• **Testing:** Vitest + Testing Library + Playwright (smoke e2e)

• Auth: ThirdEye API token (httpOnly cookie via action route)

• Env: THIRDEYE\_BASE\_URL , token saved via UI (cookie)

#### **Folders**

```
app/
  layout.tsx
                           # Home
  page.tsx
  (app)/explore/page.tsx
  (app)/insights/page.tsx
  (app)/rule-agent/page.tsx
  (app)/settings/page.tsx
  (app)/settings/connectors/page.tsx
  (app)/settings/users/page.tsx
  api/connection/route.ts # save baseURL+token to cookie
components/
  chrome/Sidebar.tsx
  chrome/Topbar.tsx
  chrome/AppShell.tsx
  chrome/Footer.tsx
                          # © ThirdEye
  ui/KpiCard.tsx
  data/StackedBar.tsx
  data/BasicTable.tsx
lib/
  theme.ts
  cookies.ts
```

```
teClient.ts # ThirdEye API client
styles/globals.css
```

## **Key Snippets**

#### 1) Cookie + Client

```
// lib/cookies.ts
'use server';
import { cookies } from 'next/headers';
const KEY = 'te_conn';
export function getConn(){
  const raw = cookies().get(KEY)?.value;
  return raw ? JSON.parse(raw) as { baseUrl:string; token:string } : null;
}
export function setConn(v:{baseUrl:string; token:string}){
  cookies().set(KEY, JSON.stringify(v), { httpOnly:true, secure:true, sameSite:'lax', path:'/' });
}
```

```
// lib/teClient.ts
export async function teFetch<T>(path:string, init:RequestInit = {}){
 const { getConn } = await import('./cookies');
 const conn = getConn();
 if(!conn) throw new Error('Not connected');
 const res = await fetch(`${conn.baseUrl}${path}`, {
    ...init,
   headers: { 'Authorization': `Bearer ${conn.token}`, 'Content-
Type':'application/json', ...(init.headers||{}) },
   cache: 'no-store',
 });
 if(!res.ok) throw new Error(`${res.status}`);
 return res.json() as Promise<T>;
}
// examples
export const listUsers = () => teFetch<any>('/api/v1/users');
export const listTeams = () => teFetch<any>('/api/v1/teams');
```

```
// app/api/connection/route.ts
import { NextRequest, NextResponse } from 'next/server';
import { setConn } from '@/lib/cookies';
export async function POST(req:NextRequest){
```

```
const body = await req.json(); // { baseUrl, token }
setConn(body);
return NextResponse.json({ ok:true });
}
```

#### 2) Chrome + Footer

```
// components/chrome/Topbar.tsx (excerpt label)
<header className="h-14 border-b bg-white/70 backdrop-blur flex items-center
px-4 gap-4">
   {/* search etc. */}
   </header>
```

```
// components/chrome/Sidebar.tsx (brand title excerpt)
<div className="p-4 text-lg font-semibold tracking-tight">ThirdEye</div>
```

#### 3) Env

```
THIRDEYE_BASE_URL=https://api.thirdeye.example.com
NEXT_PUBLIC_APP_NAME=ThirdEye Observability UI
```

## Cursor Task List — ThirdEye (Select.dev-Inspired)

One PR per task unless noted. Copy/paste into Cursor.

#### **CP-S1** — Bootstrap + Theme

Branch: feat/select-theme

Goal: Tailwind + shadcn + neutral token set (select.dev vibe).

**Do:** Install deps; init shadcn; add Button/Input/Select/Dialog/Sheet/Tabs/Tooltip/Toast; add theme tokens

(radius, shadows, borders).

AC: /ui gallery renders with compact density and soft shadows.

#### **CP-S2** — App Chrome (Sidebar/Topbar)

Branch: feat/chrome-shell

**Goal:** Sidebar **Home/Explore/Insights/RuleAgent/Settings**; user block pinned at bottom; Topbar search +

period chip.

AC: Nav works; active highlight; keyboard focus rings.

### **CP-S3** — Connection Setup

Branch: feat/connection

**Goal:** Save ThirdEye baseURL+token to httpOnly cookie via /api/connection.

AC: Test Connection calls /api/v1/health (or /versions) and shows Connected/Failed.

## **CP-S4** — ThirdEye Client

**Branch:** feat/te-client

Goal: teClient.ts fetch helper + typed fns (listUsers, listTeams, listServices, search etc.).

AC: Vitest mocks pass; errors normalized.

#### **CP-S5** — Home Overview

Branch: feat/home-overview

**Goal:** KPI cards + stacked bar + workload table (mock first).

AC: Responsive; loading/empty/error handled.

## **CP-S6** — Explore (Search)

Branch: feat/explore

**Goal:** Federated search via POST /api/v1/search/query with filters (entityType/owner/tag).

AC: Debounced search; URL state; keyboard nav.

#### **CP-S7** — Insights (Trends)

Branch: feat/insights

**Goal:** Runs by status, avg duration, cost (if available) with time-range chips.

AC: Range change updates charts smoothly.

### **CP-S8** — Workloads Page

Branch: feat/workloads

Goal: Stacked daily cost bars + sortable workload table with % change badges and cost bars (select.dev

style).

AC: 60 FPS scroll; sort/persist via URL.

## **CP-S9** — Settings → User Management (Read-only)

Branch: feat/settings-users

Goal: Users/Teams lists with quick filters and role badges.

AC: Paginated; standardized empty/error.

## **CP-S10** — Settings → Connectors: Snowflake

Branch: feat/connector-snowflake

Goal: Create/update Snowflake Database Service + Ingestion Pipeline via ThirdEye APIs.

Fields: Account, Auth (user/pass or key), Warehouse, Role, DB/Schema include-exclude, Schedule (cron),

Secrets (masked).

**AC:** Save  $\rightarrow$  success toast; appears in Services list; Zod validation.

## **CP-S11** — Settings → Connectors: dbt

Branch: feat/connector-dbt

Goal: Link dbt artifacts/jobs via ThirdEye APIs (pipeline service + metadata ingestion).

Fields: Artifacts path, Project, Target, Schedule.

**AC:** New pipeline visible in list with basic status panel.

## **CP-S12** — RuleAgent (Rules & Actions)

**Branch:** feat/rule-agent

Goal: Rules (name, trigger, condition, action, status) + test-send to webhook/Slack URL.

AC: Create/edit/delete locally; validations enforced.

#### CP-S13 — RBAC (Read-only respect)

Branch: feat/rbac

**Goal:** Hide/disable actions based on ThirdEye roles/permissions.

AC: Snapshot tests show disabled actions for viewer.

### **CP-S14** — Theming & Dark Mode

Branch: feat/dark-mode

**Goal:** System-aware dark theme; toggle persists.

AC: WCAG AA; charts/tables readable.

### **CP-S15** — Error/Loading/Empty UX

Branch: chore/ux-states

Goal: Shared <= mptyState/> , <= rrorState onRetry/> , <= skeleton/>

AC: All lists use shared states.

#### CP-S16 — E2E Smoke Tests

Branch: test/e2e

**Goal:** Playwright tests for connection, Home, Explore, Settings→Connectors.

AC: CI green.

## **CP-S17** — Packaging

Branch: chore/docker-ci

**Goal:** Dockerfile + compose + GitHub Actions (build/test).

**AC:** docker compose up serves app with THIRDEYE\_BASE\_URL env.

#### **CP-S18** — Perf Pass

**Branch:** chore/perf

Goal: Virtualize big tables; memoize heavy cells; code-split.

**AC:** Lighthouse  $\geq$  85.

#### **Notes**

- All copy and code use **ThirdEye** naming; no references to any other OSS names.
- If your backend is wire-compatible with OM, keep that detail internal; this UI stays vendor-neutral under the **ThirdEye** brand.