**🧾 Final Comment – TDA-C2-S6 – Google Type Mapping for DiscoveryBot**

**Epic:** Discovery Optimization  
**Owner:** Metehan Kul / LaMarka Digital  
**Status:** ✅ *Done & Verified (Local)*  
**Date:** 2025-10-18

**🎯 Scope & Objective**

Integrate Google’s place\_types as the primary categorization source for the Turkish Diaspora App.  
Ensure both DiscoveryBot and the AI-layer work on a unified category model defined in YAML, with full support for dev testing via REST endpoints.

**⚙️ Deliverables**

| **Deliverable** | **Path** | **Status** |
| --- | --- | --- |
| ✅ **YAML Mapping Config** | /Infra/config/categories.yml | Generated and validated (yaml.safe\_load OK) |
| ✅ **Documentation** | /Docs/discovery-config.md | Explains structure, usage, and extension rules |
| ✅ **Dev API Routes** | /dev/google/nearby & /dev/google/text | Functional, return HTTP 200 |
| ✅ **Backend Integration** | google\_service.py + google\_dev.py | Patched to use v1 Places API and unified types |
| ✅ **DiscoveryBot Update** | /app/workers/discovery\_bot.py | Fully operational with Google type mapping |
| ✅ **.env Loader** | main.py | Auto-loads GOOGLE\_API\_KEY via load\_dotenv() |

**🧪 Acceptance Criteria**

| **#** | **Criterion** | **Result** |
| --- | --- | --- |
| 1 | Google place\_types correctly map to internal diaspora categories | ✅ |
| 2 | /dev/google/nearby returns valid data (ok:true, count>0) | ✅ |
| 3 | /dev/google/text supports Turkish/NL queries successfully | ✅ |
| 4 | DiscoveryBot reads mappings and runs with HTTP 200 responses | ✅ |
| 5 | API key auto-loads from .env (no manual export needed) | ✅ |
| 6 | Locations endpoint returns populated CANDIDATE records | ✅ |

**📊 Verification Evidence**

# Nearby Test

curl -s "http://127.0.0.1:8000/dev/google/nearby?...included\_types=bakery" | jq '.ok,.count'

→ true, 20

# Text Search

curl -s --get "http://127.0.0.1:8000/dev/google/text" --data-urlencode "q=Turkse bakkerij Rotterdam" | jq '.ok,.count'

→ true, 20

# DiscoveryBot Worker

python -m app.workers.discovery\_bot --categories=bakery

→ HTTP/1.1 200 OK x5, “✓ Klaar. Totaal nieuw (idempotent) ingevoegd: 0”

# Location Listing

curl -s "http://127.0.0.1:8000/api/v1/locations/?state=CANDIDATE&limit=20" | jq length

→ 20

**✅ Definition of Done**

* Mapping YAML & documentation delivered
* Dev API & worker fully functional
* .env auto-load implemented
* Manual and automated tests successful
* Verified with live Google Places data

**🚀 Next Steps**

1. Expand /Infra/config/categories.yml with all Turkish diaspora business types (restaurants, supermarkets, barbers, mosques, travel agencies).
2. Integrate mapping directly into the AI classification pipeline (TDA-10 / AI-Schema Consolidation).
3. Add nightly cron job for DiscoveryBot with category rotation and quota awareness.

✅ **TDA-C2-S6 successfully closed.**  
DiscoveryBot now uses native Google categorization with consistent AI alignment — production-ready foundation for large-scale discovery.