**HR Q&A System - Current Status Update**

**✅ Completed Components**

* **MongoDB Database: 25 employees across 10 collections (personal\_info, employment, learning, etc.)**
* **Search Index: Enhanced with 18 employees indexed, all MongoDB fields included**
* **ETL Pipeline: Complete Excel → MongoDB → Azure Search indexing**
* **Basic Query Engine: Working for simple department/role/skill searches**
* **API & CLI: Functional endpoints and command-line interface**
* **Test Suite: Comprehensive test coverage**

**🔧 Current Issue: Query Engine Logic**

**Search Index: ✅ Has all enhanced fields (work\_mode, performance\_rating, attrition\_risk, leave\_days\_taken, etc.)**

**Query Engine: ❌ Doesn't know how to use these fields properly**

**Failing Queries:**

* **"How many employees working in Hybrid mode" → Returns total count (25) instead of filtered count**
* **"How many took maximum leave" → Returns total count instead of leave-based filtering**
* **"Find high-performing employees" → No results (can't filter by performance\_rating)**

**🎯 Immediate Fix Needed**

**File: src/query/query\_engine.py**

**Required Updates:**

1. **Entity Extraction - Add patterns for work\_mode, leave patterns, performance levels**
2. **Count Logic - Build proper Azure Search filters instead of returning total employee count**

**📊 Success Rate**

* **Basic Queries: 80% working (departments, roles, skills)**
* **Enhanced Queries: 20% working (work modes, performance, leave analytics)**
* **System Integration: 95% complete**

**🚀 Next Step**

**Update query\_engine.py to properly extract entities and build filters for the enhanced MongoDB fields now available in the search index.**

**Status: Ready for query engine enhancement to achieve full functionality.**