# **Open Source Frameworks**

Adding an open-source framework to your project for implementing a CRM for result tracking of candidates with internal marks can enhance the system's capabilities and flexibility. Here's a suggestion for an open-source framework that you can integrate into your project:

## **Elasticsearch and Kibana:**

## **Elasticsearch:**

Elasticsearch is an open-source search and analytics engine that can be used to efficiently store, search, and analyze large volumes of data, including academic records and internal marks. It offers powerful full-text search capabilities, making it easier to find specific data points and patterns within the academic records. Elasticsearch can help in real-time data indexing, searching, and retrieval, ensuring that the result tracking process is quick and accurate.

#### Kibana:

Kibana is an open-source data visualization and exploration tool that works seamlessly with Elasticsearch.It enables you to create interactive dashboards and reports to visualize candidate performance data, providing insights at a glance.Kibana's visualization features can help in tracking trends, identifying areas for improvement, and making data-driven decisions.Integrating Elasticsearch and Kibana into your CRM for result tracking can offer the following

### **Benefits:**

**Improved Search and Retrieval:** Elasticsearch's full-text search capabilities make it easy to find and retrieve specific candidate records and internal marks, even from a large dataset.

**Real-Time Analytics:** Elasticsearch can process and index data in real-time, allowing you to get up-to-the-minute insights into candidate performance.

**Custom Dashboards**: Kibana's customizable dashboards enable you to create visual representations of the data that are most relevant to your institution, making it easier to track results and performance trends.

**Scalability:** Elasticsearch is designed to handle large datasets and can scale as your institution's data grows.

**Data Security**: Elasticsearch can be configured to implement security features to protect sensitive academic data.