HashAgile

Task 2 :Elasticsearch using SpringBoot .

Created a index for the Employee dataset.

Coding:

ElasticSearch running in console:

[2024-10-03T00:46:06,580][INFO][o.e.t.n.NettyAllocator   ] [HPVICTUSMK] creating NettyAllocator with the following configs: [name=elasticsearch_configured, chunk_size=1mb, suggested_max_allocation_size=1mb, factors={es.unsafe.use_netty_default_chunk_and_page_size=false, g1gc_enabled=true, g1gc_region_size=4mb}]
[2024-10-03T00:46:06,643][INFO][o.e.d.DiscoveryModule   ] [HPVICTUSMK] using discovery type [multi-node] and seed hosts providers [settings]
[2024-10-03T00:46:07,922][INFO][o.e.n.Node   ] [HPVICTUSMK] initialized
[2024-10-03T00:46:07,922][INFO][o.e.n.Node   ] [HPVICTUSMK] starting ...
[2024-10-03T00:46:07,963][INFO][o.e.x.s.c.f.PersistentCache] [HPVICTUSMK] persistent cache index loaded
[2024-10-03T00:46:07,964][INFO][o.e.x.d.l.DeprecationIndexingComponent] [HPVICTUSMK] deprecation component started
[2024-10-03T00:46:08,078][INFO][o.e.t.TransportService   ] [HPVICTUSMK] publish_address {127.0.0.1:9300}, bound_addresses {[::1]:9300}, {127.0.0.1:9300}
[2024-10-03T00:46:08,424][WARN][o.e.c.c.ClusterBootstrapService] [HPVICTUSMK] this node is locked into cluster UUID [s1rpNWywQSmjh1bwSHnn7w] but [cluster.initial_master_nodes] is set to [HPVICTUSMK]; remove this setting to avoid possible data loss caused by subsequent cluster bootstrap attempts; for further information see https://www.elastic.co/guide/en/elasticsearch/reference/8.15/important-settings.html#initial_master_nodes
[2024-10-03T00:46:08,533][INFO][o.e.c.s.MasterService   ] [HPVICTUSMK] elected-as-master ([1] nodes joined in term 5)[_FINISH_ELECTION_, {HPVICTUSMK}{jETDbkzzTIuNtX6k8QbFyA}{I2k7-Xf-TuOtd7905M--Qg}{HPVICTUSMK}{127.0.0.1}{127.0.0.1:9300}{cdfhilmrstw}{8.15.2}{7000099-8512000} completing election], term: 5, version: 77, delta: master node changed {previous [], current [{HPVICTUSMK}{jETDbkzzTIuNtX6k8QbFyA}{I2k7-Xf-TuOtd7905M--Qg}{HPVICTUSMK}{127.0.0.1}{127.0.0.1:9300}{cdfhilmrstw}{8.15.2}{7000099-8512000}]}
[2024-10-03T00:46:08,624][INFO][o.e.c.s.ClusterApplierService] [HPVICTUSMK] master node changed {previous [], current [{HPVICTUSMK}{jETDbkzzTIuNtX6k8QbFyA}{I2k7-Xf-TuOtd7905M--Qg}{HPVICTUSMK}{127.0.0.1}{127.0.0.1:9300}{cdfhilmrstw}{8.15.2}{7000099-8512000}]}, term: 5, version: 77, reason: Publication{term=5, version=77}
[2024-10-03T00:46:08,662][INFO][o.e.c.c.NodeJoinExecutor] [HPVICTUSMK] node-join: [{HPVICTUSMK}{jETDbkzzTIuNtX6k8QbFyA}{I2k7-Xf-TuOtd7905M--Qg}{HPVICTUSMK}{127.0.0.1}{127.0.0.1:9300}{cdfhilmrstw}{8.15.2}{7000099-8512000}] with reason [completing election]
[2024-10-03T00:46:08,662][INFO][o.e.h.AbstractHttpServerTransport] [HPVICTUSMK] publish_address {192.168.127.151:9200}, bound_addresses {[::]:9200}
[2024-10-03T00:46:08,682][INFO][o.e.n.Node   ] [HPVICTUSMK] started {HPVICTUSMK}{jETDbkzzTIuNtX6k8QbFyA}{I2k7-Xf-TuOtd7905M--Qg}{HPVICTUSMK}{127.0.0.1}{127.0.0.1:9300}{cdfhilmrstw}{8.15.2}{7000099-8512000}{ml.config_version=12.0.0, ml.max_jvm_size=3942645760, ml.allocated_processors_double=12.0, ml.allocated_processors=12, ml.machine_memory=7884570624, transform.config_version=10.0.0, xpack.installed=true}
[2024-10-03T00:46:09,194][INFO][o.e.l.ClusterStateLicenseService] [HPVICTUSMK] license [acf4677f-ab9a-48fc-b041-32fc01ff1f3d] mode [basic] - valid
[2024-10-03T00:46:09,194][INFO][o.e.c.f.AbstractFileWatchingService] [HPVICTUSMK] starting file watcher ...
[2024-10-03T00:46:09,208][INFO][o.e.c.f.AbstractFileWatchingService] [HPVICTUSMK] file settings service up and running [tid=91]
[2024-10-03T00:46:09,208][INFO][o.e.g.GatewayService   ] [HPVICTUSMK] recovered [2] indices into cluster_state
[2024-10-03T00:46:09,210][INFO][o.e.r.s.FileSettingsService] [HPVICTUSMK] setting file [C:\elasticsearch-8.15.2\config\operator\settings.json] not found, initializing [file_settings] as empty
[2024-10-03T00:46:09,588][INFO][o.e.h.n.s.HealthNodeTaskExecutor] [HPVICTUSMK] Node [{HPVICTUSMK}{jETDbkzzTIuNtX6k8QbFyA}] is selected as the current health node.
[2024-10-03T00:46:09,620][INFO][o.e.c.r.a.AllocationService] [HPVICTUSMK] current.health="YELLOW" message="Cluster health status changed from [RED] to [YELLOW] (reason: [shards started [[employees][0], [.security-7][0]]])." previous.health="RED" reason="shards started [[employees][0], [.security-7][0]]"

Console:

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  \\/ ___)| |_)| | | | | || (_| |))))
   ' |____| .__|_| |_|_| |___, | / / / /
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  :: Spring Boot ::   (v3.3.4)

2024-10-03T01:12:59.758+05:30 INFO 24380 --- [Task2] [main] com.Hashagile.Task2.Task2Application   : Starting Task2Application using Java 22.0.2 with PID 24380 (C:\Users\sivam\OneDrive\Desktop
2024-10-03T01:12:59.762+05:30 INFO 24380 --- [Task2] [main] com.Hashagile.Task2.Task2Application   : No active profile set, falling back to 1 default profile: "default"
2024-10-03T01:13:00.328+05:30 INFO 24380 --- [Task2] [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data Elasticsearch repositories in DEFAULT mode.
2024-10-03T01:13:00.387+05:30 INFO 24380 --- [Task2] [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 53 ms. Found 1 Elasticsearch repository interf
2024-10-03T01:13:00.935+05:30 INFO 24380 --- [Task2] [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port 8080 (http)
2024-10-03T01:13:00.959+05:30 INFO 24380 --- [Task2] [main] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2024-10-03T01:13:00.959+05:30 INFO 24380 --- [Task2] [main] o.apache.catalina.core.StandardEngine   : Starting Servlet engine: [Apache Tomcat/10.1.30]
2024-10-03T01:13:01.018+05:30 INFO 24380 --- [Task2] [main] o.a.c.c.C.[Tomcat].[localhost].[/]   : Initializing Spring embedded WebApplicationContext
2024-10-03T01:13:01.019+05:30 INFO 24380 --- [Task2] [main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 1215 ms
2024-10-03T01:13:01.901+05:30 INFO 24380 --- [Task2] [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port 8080 (http) with context path '/'
2024-10-03T01:13:01.909+05:30 INFO 24380 --- [Task2] [main] com.Hashagile.Task2.Task2Application   : Started Task2Application in 2.593 seconds (process running for 3.017)

Get Method:


```
http://localhost:8080/Hashagile/findAll                    Save    Share

GET  ∨    http://localhost:8080/Hashagile/findAll              Send  ∨

Params  Authorization  Headers (9)  Body ●  Scripts  Settings          Cookies

Body  Cookies  Headers (5)  Test Results     200 OK • 1395 ms • 1.63 KB ⊕ •

Pretty  Raw  Preview  Visualize  JSON ∨                          ⎘  🔍

  1  {
  2      "content": [
  3          {
  4              "id": "RnalTpIBh01rQc5GKYC8",
  5              "fullName": "John Doe",
  6              "jobTitle": "Software Engineer",
  7              "department": "IT",
  8              "businessUnit": "Corporate",
  9              "gender": "Male",
 10              "ethnicity": "Caucasian",
 11              "age": 30,
 12              "hireDate": "2024-01-15",
 13              "annualSalary": 75000.0,
 14              "bonusPercentage": 10,
 15              "country": "United States",
 16              "city": "New York",
 17              "exitDate": ""
 18          },
 19          {
 20              "id": "SnanTpIBh01rQc5GSYA_",
 21              "fullName": "John Doe",
```

Post Method:


```
POST  ∨    http://localhost:8080/Hashagile/insert              Send  ∨

Params  Authorization  Headers (9)  Body ●  Scripts  Settings          Cookies

○ none  ○ form-data  ○ x-www-form-urlencoded  ● raw  ○ binary  ○ GraphQL  JSON ∨   Beautify

  1  {
  2    "id": "er2305",
  3    "fullName": "Kai Le",
  4    "jobTitle": "Controls Engineer",
  5    "department": "Engineering",
  6    "businessUnit": "Manufacturing",
  7    "gender": "Male",
  8    "ethnicity": "Asian",
  9    "age": 47,
 10    "hireDate": "02-05-2022",
 11    "annualSalary": 92368,
 12    "bonusPercentage": 0,
 13    "country": "United States",
 14    "city": "Columbus",
 15    "exitDate":null
 16  }
 17
```

Search using Match query:


```
1  {
2       "query":{
3          "match":{
4             "gender":"Male"
5          }
6       }
7  }
```

Body Cookies Headers (4) Test Results   200 OK · 78 ms · 613 B · ⊕ 📝 Save Response ∘∘∘

Pretty Raw Preview Visualize JSON ∨ ⇶

```
1  {
2      "took": 49,
3      "timed_out": false,
4      "_shards": {
5          "total": 1,
6          "successful": 1,
7          "skipped": 0,
8          "failed": 0
9      }
```

GET   ∨   http://localhost:9200/employees/_search

Params   Authorization   Headers (9)   Body ●   Scripts   Settings

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   ○ GraphQL   JSON ∨

```
1  {
2       "query":{
3          "match":{
4             "fullName":"John"
5          }
6       }
7  }
```

```
  },
  "hits": {
      "total": {
          "value": 4,
          "relation": "eq"
      },
      "max_score": 0.10536051,
      "hits": [
          {
              "_index": "employees",
              "_id": "RnalTpIBh01rQc5GKYC8",
              "_score": 0.10536051,
              "_source": {
                  "_class": "com.Hashagile.Task2.model.Employee",
                  "fullName": "John Doe",
                  "jobTitle": "Software Engineer",
                  "department": "IT",
                  "businessUnit": "Corporate",
                  "gender": "Male",
                  "ethnicity": "Caucasian",
                  "age": 30,
                  "hireDate": "2024-01-15".
```

GET ▾   http://localhost:9200/employees/_search   **Send** ▾

Params   Authorization   Headers (7)   Body   Scripts   Settings   **Cookies**

ody   Cookies   Headers (4)   Test Results   200 OK • 10 ms • 603 B • 🌐   📄 Save Response ⚙

Pretty   Raw   Preview   Visualize   JSON ▾

```
1 ▾ {
2       "took": 3,
3       "timed_out": false,
4 ▾     "_shards": {
5           "total": 1,
6           "successful": 1,
7           "skipped": 0,
8           "failed": 0
9       },
10 ▾    "hits": {
11 ▾        "total": {
12             "value": 4,
13             "relation": "eq"
14         },
15         "max_score": 1.0,
16 ▾        "hits": [
17 ▾            {
18                 "_index": "employees",
19                 "_id": "RnalTpIBh01rQc5GKYC8",
20                 "_score": 1.0,
21 ▾              "_source": {
```

🔗 http://localhost:9200/employees   💾 Save ▾   Share

GET ▾   http://localhost:9200/employees/_search   **Send** ▾

Params   Authorization   Headers (7)   Body   Scripts   Settings   **Cookies**

Body   Cookies   Headers (4)   Test Results   200 OK • 10 ms • 603 B • 🌐   📄 Save Response ⚙

Pretty   Raw   Preview   Visualize   JSON ▾

```
1   {
2       "took": 3,
3       "timed_out": false,
4       "_shards": {
5           "total": 1,
6           "successful": 1,
7           "skipped": 0,
8           "failed": 0
9       },
10      "hits": {
11          "total": {
12              "value": 4,
13              "relation": "eq"
14          },
15          "max_score": 1.0,
16          "hits": [
17              {
18                  "_index": "employees",
19                  "_id": "RnalTpIBh01rQc5GKYC8",
20                  "_score": 1.0,
21                  "_source": {
```