

Microservice TST 18223080 18223094

Repositori ini berisi dua microservice, pertama adalah microservice Job Listing yang menyediakan informasi lowongan pekerjaan, kedua adalah microservice Rental Price yang memberikan informasi harga rental properti.

Data yang dikeluarkan dari microservice Job Listing berupa title pekerjaan, nama perusahaan yang memberikan pekerjaan, lokasi dari pekerjaan dan skill yang dibutuhkan. Sementara, informasi dari microservice Rental Price berisi harga properti yang dapat disewa beserta dengan lokasi kota dan Statenya.

Panduan Akses

Anda bisa mengakses kedua microservice ini secara live maupun menjalankannya sendiri di komputer anda.

Akses Live Endpoint

Pastikan anda mengakses link-link ini melalui HTTP dan bukan HTTPS

Bisa melalui:

Link API STB-deployed Job Listing (Rafi): <http://rafi.tugastst.my.id>

Link API STB-deployed Rent Listing (Michael Ballard): <http://ballard.tugastst.my.id>

Link API JSON Mentah Job Listing (Rafi): <http://rafi.tugastst.my.id/api/jobs>

Link API JSON Mentah Rent Listing (Michael Ballard):

<http://ballard.tugastst.my.id/api/rents>

Akses Lokal

1. Lakukan "git clone" terhadap repositori ini di terminal anda.
2. Lakukan command cd untuk pindah directory ke folder baru yang telah tercipta
3. Masuk ke folder BallardRent
4. Lakukan command "npm i"
5. Lakukan command "node Server.js"
6. Buat Instance terminal yang baru
7. Masuk ke folder RafiJob
8. Lakukan command "npm i"
9. Lakukan command "node Server.js"
10. Buka localhost:8880 dan localhost:8881 di perangkat anda.

Teknologi yang digunakan

Backend

- Runtime: NodeJS
- Framework: ExpressJS
- Middleware: CORS (supaya bisa ada cross-origin request antara microservice Job Listing dan Rent Listing)

Frontend

- Pure HTML5, CSS3, dan Vanilla Javascript

Data

- Format: JSON

Infrastruktur

- Containerization: Docker, untuk meng-kontainerisasi aplikasi memakai image node:18-alpine
- Orchestration: Docker Compose, mendefinisikan dan menjalankan microservicenya di port 8880 dan 8881

Anggota dan Kontribusi

18223080 - Michael Ballard Isaiah Silaen - Rent Listing Microservice

18223094 - Muhammad Rafi Ramadhan - Job Listing Microservice

Struktur Data JSON

Job Listing

```
[  
 {  
   // ID unik untuk entri pekerjaan (Integer)  
   "Number": 6,  
  
   // Judul atau posisi pekerjaan yang ditawarkan (String)  
   "Position/title": "Member of Technical Staff, AI Platform & Architecture",  
  
   // Nama perusahaan yang membuka lowongan (String)  
   "Company": "Postman",  
  
   // Informasi kapan lowongan tersebut diposting (String)  
   "Post Date": "reposted 8 hours ago",
```

```
// Daftar keahlian teknis yang dibutuhkan, dipisahkan dengan koma (String)
"Skills": "AI Infrastructure, Cloud Computing, Distributed Systems, Go, Python",

// Jenis lokasi kerja: Hybrid, Remote, atau In-Office (String)
"Job Location": "Hybrid",

// Nama lengkap negara tempat pekerjaan berada (String)
"Country": "United States of America (the)",

// Kode negara standar ISO (String)
"Country Code": "USA",

// Nama kota tempat pekerjaan berada (String)
"City": "Austin",

// Tingkat senioritas pekerjaan (Entry level, Mid level, Senior level, dll) (String)
"Level": "Senior level",
}

]
```

Rent Listing

```
[

{
    // ID unik untuk wilayah tersebut (Integer)
    "RegionID": 6181,

    // Peringkat wilayah berdasarkan ukuran populasi/pasar (Integer)
    "SizeRank": 0,

    // Nama wilayah atau kota (String)
    "RegionName": "New York",

    // Tipe wilayah, misalnya "city" (String)
    "RegionType": "city",

    // Kode negara bagian (String)
    "StateName": "NY",

    // Kode negara bagian (duplikasi dari StateName) (String)
    "State": "NY",

    // Nama area metropolitan yang mencakup kota tersebut (String)
    "Metro": "New York-Newark-Jersey City, NY-NJ-PA",
}
```

```

// Nama wilayah administratif setingkat kabupaten (String)
"CountyName": "Queens County",

// Harga sewa properti pada tanggal tertentu.
// Catatan: Key ini dinamis berdasarkan tanggal data diambil (Format: YYYY-MM-DD) (Float)
"2025-11-30": 3707.812323407801
}
]

```

Dokumentasi Endpoint

<http://ballard.tugastst.my.id>

Region	Location	PROPERTY RENT PRICE	Action
New York	New York-Newark-Jersey City, NY-NJ-PA, NY	\$3,708	Find Jobs in New York
Los Angeles	Los Angeles-Long Beach-Anaheim, CA, CA	\$2,791	Find Jobs in Los Angeles
Houston	Houston-The Woodlands-Sugar Land, TX, TX	\$1,542	Find Jobs in Houston
Chicago	Chicago-Naperville-Elgin, IL-IN-WI, IL	\$2,173	Find Jobs in Chicago
San Antonio	San Antonio-New Braunfels, TX, TX	\$1,351	Find Jobs in San Antonio
Philadelphia	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, PA	\$1,704	Find Jobs in Philadelphia

Jobs in New York

- Sr. Systems Engineer - Object Storage (Remote)**
Company: CrowdStrike
Level: Senior level
- Sr. Backend Engineer - Golang (Remote)**
Company: CrowdStrike
Level: Senior level
- Full Stack Software Engineer III, Infrastructure (Remote)**
Company: CrowdStrike
Level: Senior level

<http://rafi.tugastst.my.id>

The screenshot shows a web browser window with the URL <http://rafi.tugastst.my.id>. The title bar indicates "Not Secure". The main content is titled "Job Openings". A search bar at the top left contains the placeholder "Search skills (e.g., Python, AWS)...". To its right is a filter section with radio buttons for "All Levels" (selected), "Entry Level", "Mid Level", "Senior Level", and "Expert/Leader". Below the search bar are three job listing cards:

- Member of Technical Staff, AI Platform & Architecture (Infrastructure)**
Postman
Senior level
Location: Austin, USA
Skills: AI Infrastructure, Cloud Computing, Distributed Systems, Go, Gpu/Xpu Accelerators, Python
Check Rent
- Senior Site Reliability Engineer**
Supernova Technology
Senior level
Location: Austin, USA
Skills: AWS, Bash, Datadog, Eks, Go, Grafana, Kubernetes, Prometheus, Python
Check Rent
- Sr. Systems Engineer - Object Storage (Remote)**
CrowdStrike
Senior level
Location: New York, USA
Skills: Ansible, AWS, Chef, Gitlab, Go, JIRA, Kubernetes, Linux, Python, S3
Check Rent

The screenshot shows the same web browser window and job openings page as the first one. A modal dialog box is overlaid on the page, centered over the second job listing. The modal has a white background and contains the following information:

Austin
\$1,554.27
Rent in Austin, TX
Source: michael.tugastst.my.id

The background of the page is dimmed, and the other two job listings are partially visible behind the modal.

<http://rafi.tugastst.my.id/api/jobs>

(Number "16,"Position/title": "Member of Technical Staff, AI Platform & Architecture [Infrastructure]", "Company": "Postman", "Post Date": "reposted 8 hours ago", "Skills": "AI Infrastructure, Cloud Computing, Distributed Systems, Go, Gpu/Kpu Accelerators, Python", "Job Location": "Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Austin", "Level": "Senior level", "Details": "builtin.com/job/member-technical-staff-ai-platform-architecture/7336787"}, {"Number "10,"Position/title": "Senior Site Reliability Engineer", "Company": "Supernova Technology", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Bash, Datadog, Eks, Go, Grafana, Kubernetes, Prometheus, Python", "Job Location": "Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Austin", "Level": "Senior level", "Details": "builtin.com/job/site-reliability-engineer/6930951"}, {"Number "1,"Position/title": "Software Engineer - Backend", "Company": "Uber", "Post Date": "reposted 8 hours ago", "Skills": "Python", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "New York", "Level": "Senior level", "Details": "builtin.com/job/rs-systems-engineer-object-storage-remote/4072974"}, {"Number "12,"Position/title": "Sr. Backend Engineer - Golang (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, C++, Docker, GCR, Go, Java, Kafka, Ingress, Kubernetes, Python", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "New York", "Level": "Senior level", "Details": "builtin.com/job/rs-engineer-cloud-remote/7164307"}, {"Number "13,"Position/title": "Full Stack Software Engineer III, Infrastructure (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, CI/Cd, CloudFormation, Go, Grpc, JavaScript, Kubernetes, Linux, React, Restful Api, Terraform", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "New York", "Level": "Senior level", "Details": "builtin.com/job/software-engineer-iii-infrastructure-engineering-emote/6692184"}, {"Number "15,"Position/title": "Cloud Software Engineer III - Exposure Management (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, Cassandra, Elasticsearch, Go, Grafana, Kubernetes, Logstash, Prometheus, Python", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Los Angeles", "Level": "Senior level", "Details": "builtin.com/job/cloud-software-engineer-iii-exposure-management/7554631"}, {"Number "16,"Position/title": "Software Engineer - Backend", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, Cassandra, Elasticsearch, GCP, Go, Kafka", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Los Angeles", "Level": "Senior level", "Details": "builtin.com/job/rs-software-engineer-backend-ingestion-emote/7554521"}, {"Number "120,"Position/title": "Sr. IAM DevOps Engineer (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, GCP, Go, Iam, Iga, Java, Javat, Oidc, Pow, Powershell, Python, Rbac, Saml, SAML SQL", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Houston", "Level": "Senior level", "Details": "builtin.com/job/iam-devops-engineer-remote/7162425"}, {"Number "21,"Position/title": "Sr. Full Stack Software Engineer, Infrastructure (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, CI/Cd, Go, Grpc, JavaScript, Kubernetes, Linux, Restful Api, Typescript", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Houston", "Level": "Senior level", "Details": "builtin.com/job/rs-software-engineer-infrastructure-remote/7173065"}, {"Number "25,"Position/title": "Engineer III - Java (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Git, Go, Grafana, Kubernetes, OpenSearch, Redis", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Austin", "Level": "Senior level", "Details": "builtin.com/job/java-engineer-iii/7173066"}, {"Number "3,"Position/title": "Software Engineer - Backend", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, Bash, Ci/Cd Tool, CloudFormation, Go, Grafana, Kubernetes, Linux, Next-Gen PaaS, Python, Rest API, Terraform", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Philadelphia", "Level": "Senior level", "Details": "builtin.com/job/resident-services-principal-consultant-remote/6912926"}, {"Number "28,"Position/title": "Technical Operations Engineer III - Agentic AI (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AI, Go, Llm, Microservices, Python, React, Restful Api", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "San Jose", "Level": "Senior level", "Details": "builtin.com/job/jr-senior-technical-operations-engineer-agentic-ai-emote/7566661"}, {"Number "29,"Position/title": "Cloudforce One REACT Principal Consultant", "Company": "Cloudflare", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, Cifs/Mp, Ftp, Gcp, Go, Https, Linux, MacOs, Nfs, Python, Rdp, Sftp, Ssh, Tcp/Ip, Windows", "Job Location": "Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Columbus", "Level": "Mid level", "Details": "builtin.com/job/cloudforce-one-react-principal-consultant/7701210"}, {"Number "31,"Position/title": "Sr. IAM Operations Engineer", "Company": "Cloudflare", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, Cifs/Mp, Ftp, Gcp, Go, Https, Linux, MacOs, Nfs, Python, Rdp, Sftp, Ssh, Tcp/Ip, Windows", "Job Location": "Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "San Francisco", "Level": "Senior level", "Details": "builtin.com/job/jr-iam-operations-engineer-alioint-remote/7163715"}, {"Number "32,"Position/title": "Cloud Engineer II - Spotlight (Remote)", "Company": "CrowdStrike", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, Cassandra, Elasticsearch, Go, Grafana, Java, Kafka, Redis, Sdn", "Job Location": "Remote or Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Orlando", "Level": "Senior level", "Details": "builtin.com/job/jr-cloud-engineer-ii-spotlight-remote/7272609"}, {"Number "33,"Position/title": "Software Engineer - Foundation Data System for AI", "Company": "Granicus", "Post Date": "reposted 8 hours ago", "Skills": "Apache Iceberg, Delta Lake, Go, Java, Parquet, Scala, Spark", "Job Location": "In-Office", "Country": "United States of America (the)", "Country Code": "USA", "City": "Dallas", "Level": "Senior level", "Details": "builtin.com/job/lakehouse-core-engineer/6694692"}, {"Number "34,"Position/title": "AI Engineering Lead", "Company": "ZS", "Post Date": "reposted 8 hours ago", "Skills": "AWS, Azure, Azure Devops, Docker, Fastapi, Gcp, Github Actions, Go, Grafana, Java, Kubernetes, Llm, Api, Next.js, Opentelemetry, Prometheus, Python, React, Rust, Tailwind Cs, Terraform", "Job Location": "Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Charlotte", "Level": "Senior level", "Details": "builtin.com/job/jr-ai-engineering-lead/7582800"}, {"Number "35,"Position/title": "Software Engineer - Forward Deployed Engineering Leader", "Company": "ZS", "Post Date": "reposted 8 hours ago", "Skills": "C++, Go, Java, Python", "Job Location": "Remote", "Country": "United States of America (the)", "Country Code": "USA", "City": "Memphis", "Level": "Senior level", "Details": "builtin.com/job/jr-forward-deployed-engineering-leader/7582800"}, {"Number "36,"Position/title": "Technical Lead, Software Engineer - AI Assistant", "Company": "Cisco", "Post Date": "reposted 8 hours ago", "Skills": "AI, Autogen, Ci/Cd, Docker, Go, GraphNl, Kubernetes, Langchain, Llmaimagine, Ml, Python, React, Rest, Semantic Kernel, Typescript", "Job Location": "Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Miami", "Level": "Senior level", "Details": "builtin.com/job/technical-lead-software-engineer-ai-assistant/7077551"}, {"Number "41,"Position/title": "Software Engineer - New Grad", "Company": "Domino Data Lab", "Post Date": "reposted 8 hours ago", "Skills": "Docker, Go, GraphQL, Kafka, Uberapis, Postgres, Python, React, Redis, Typescript", "Job Location": "Hybrid", "Country": "United States of America (the)", "Country Code": "USA", "City": "Memphis", "Level": "Entry level", "Details": "builtin.com/job/software-engineer-new-grad-campus-recruiting-2026/792251"}, {"Number "44,"Position/title": "Systems Engineer III - Ground Network (Clearance required)", "Company": "Sierra Space", "Post Date": "reposted 8 hours ago", "Skills": "Bash, C#, Cameo C, Ci/Cd, Doors, Go, Java, Matlab, Python, Rhapsody, Ruby, Sysml", "Job Location": "In-Office", "Country": "United States of America (the)", "Country Code": "USA", "City": "San Francisco", "Level": "Senior level", "Details": "builtin.com/job/systems-engineer-iii-ground-network-clearance-required/792251"}]

<http://ballard.tugastst.my.id/api/rents>