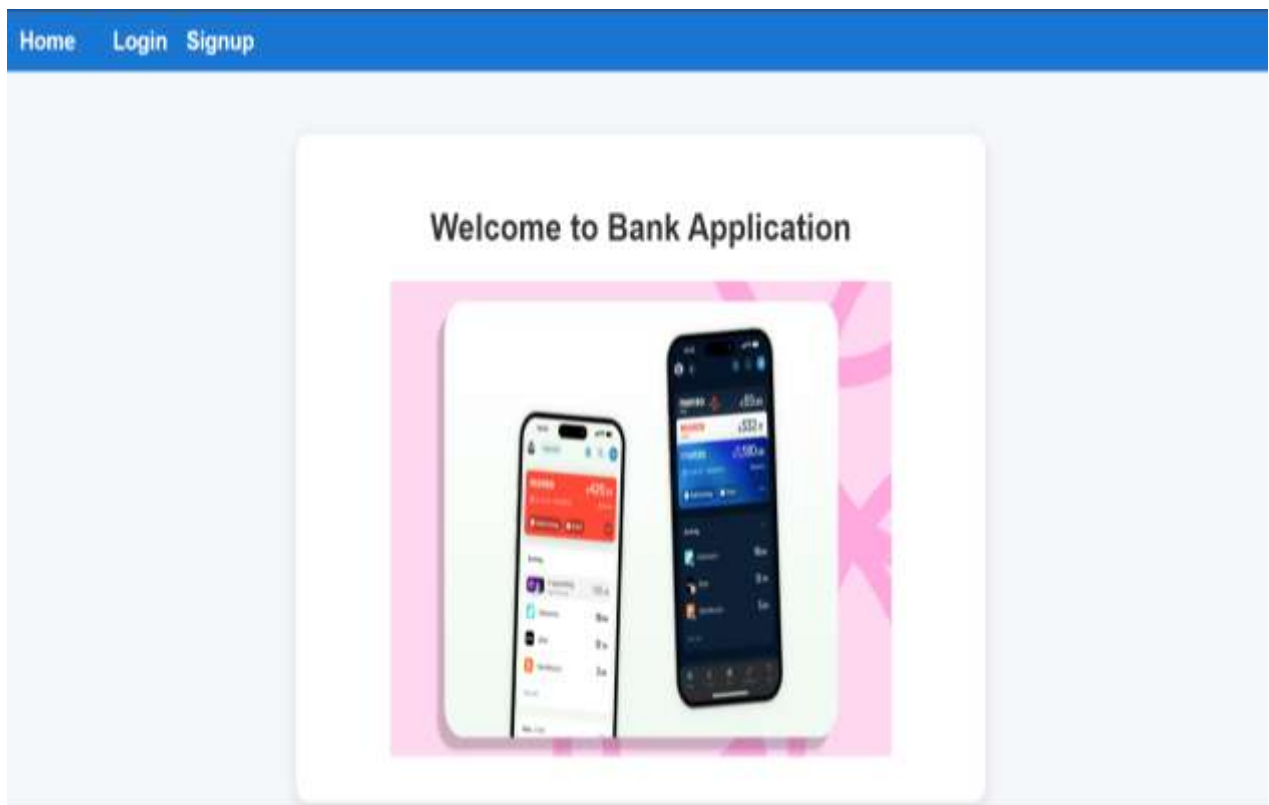


BANK APPLICATION

FRONT END

Front end Technologies used : Angular 19(Angular Material 19), HTML, CSS



Login

Login

Don't have an account? [Signup](#)

Signup

Signup

Already have an account? [Login](#)

User Dashboard

Welcome User! Choose an option:

View Accounts

View Payments

Accounts

ID	User Name	Aadhar	Bank Number	IFSC	Balance
1	Karthik	1234-5678-9123	9876543210	SBIN000123	₹50,000
2	Ram	9876-5432-1098	1234567890	HDFC000456	₹75,000

Payments

ID	From Bank	To Bank	Amount	Status	Date
1	9876543210	1234567890	₹5,000	Success	2025-09-03
2	1234567890	9876543210	₹2,500	Pending	2025-09-04

Admin Dashboard

Welcome Admin! Choose an option:

[View Audit](#)

[Sync Audit](#)

Audit Records

ID	Payment ID	Amount	Details	Date
1	101	₹30890	Payment Successful	2025-09-04

Sync Audit

Sync Now

Last Sync: Just now

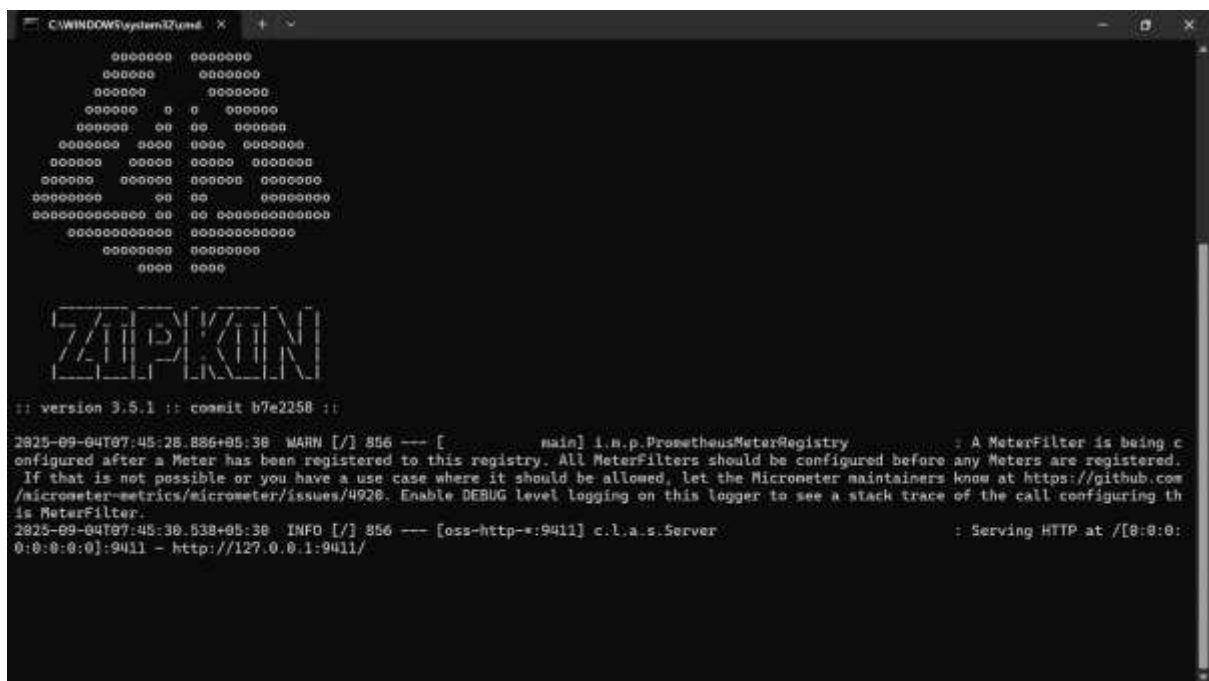
ID	Payment ID	Amount	Details	Date
2	202	₹3000	Synced Successfully	2025-09-04

BACK END

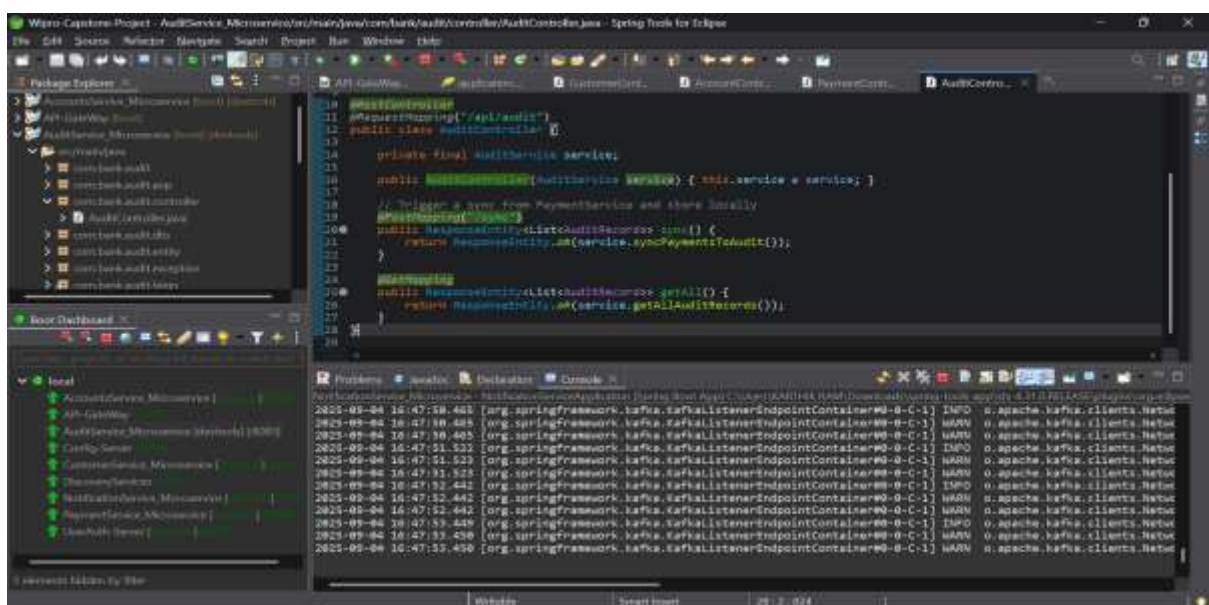
TECHNOLOGIES USED: Spring Security, Spring Boot, Kafka

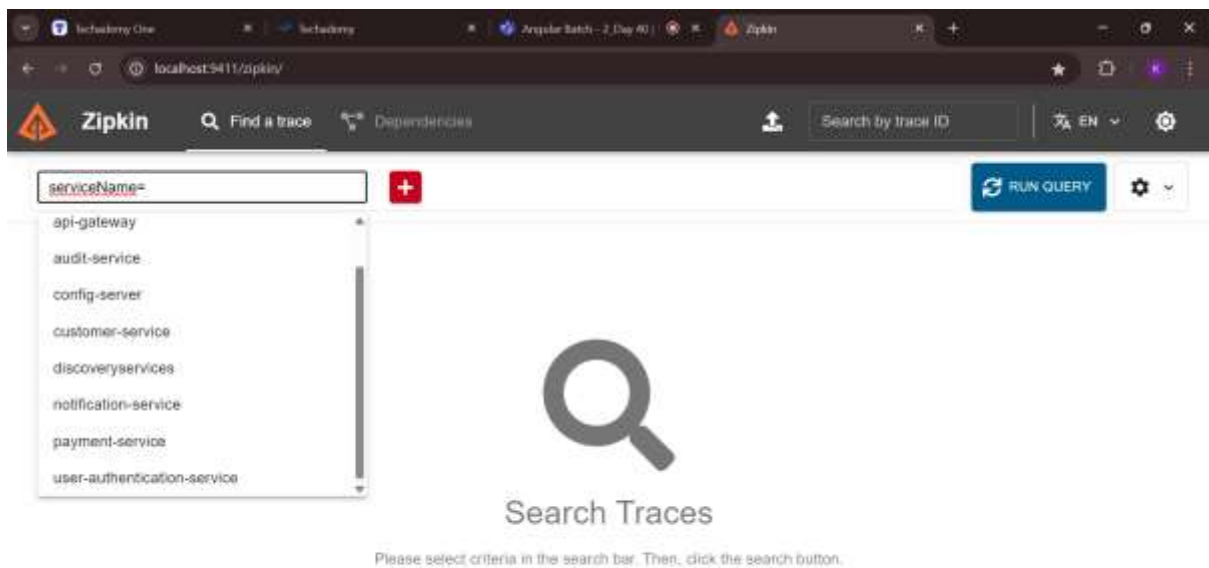
- **JavaMailSender** - for sending mails
- **MySQL** – for database storage
- **FeignClient** – to communicate between services

ZIPKIN

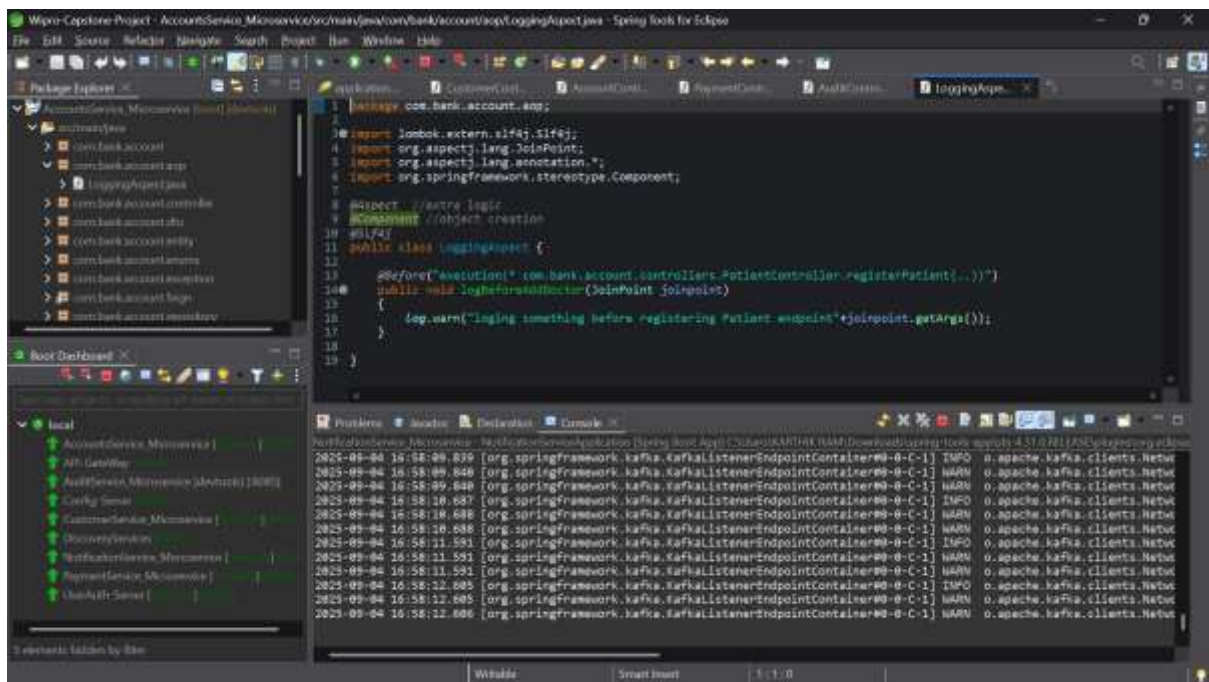


MICROSERVICES ARCHITECTURE

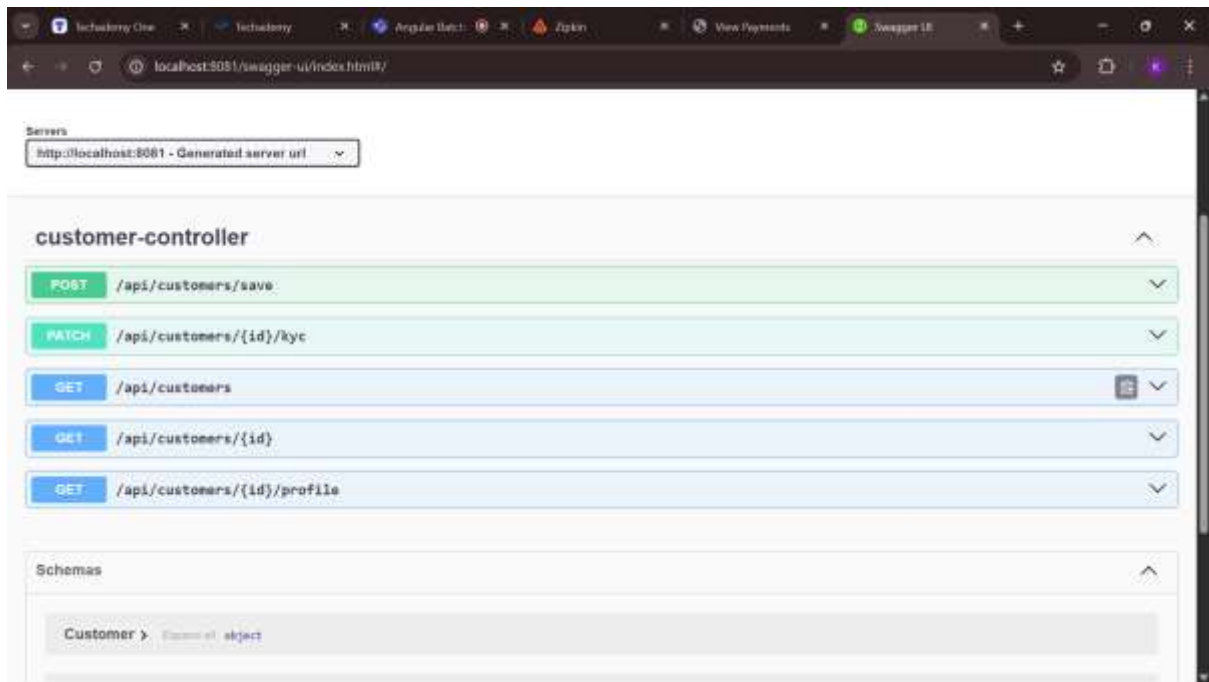




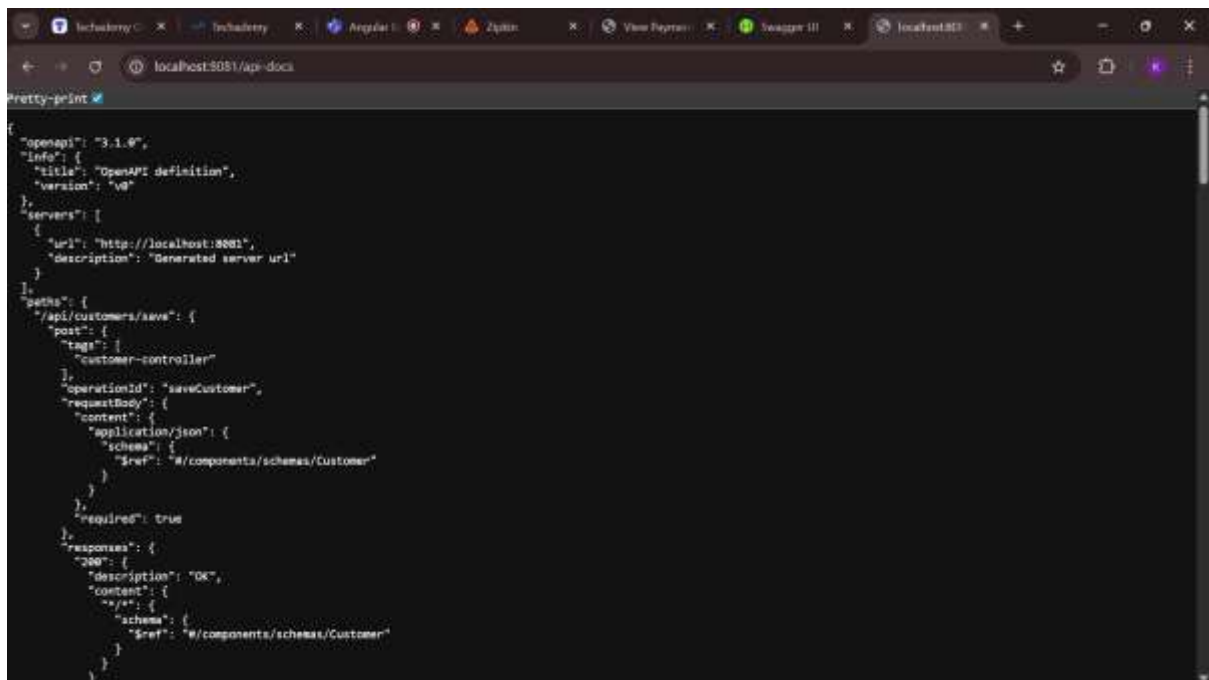
AOP



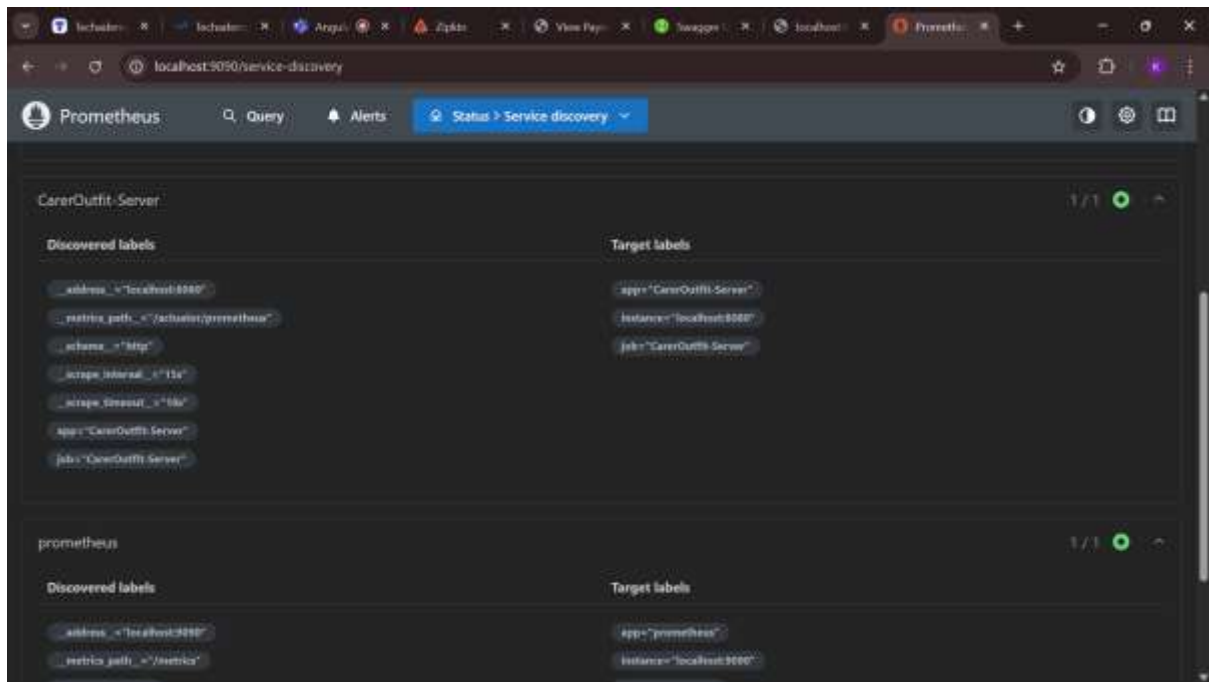
SWAGGER



API DOCS



Prometheus

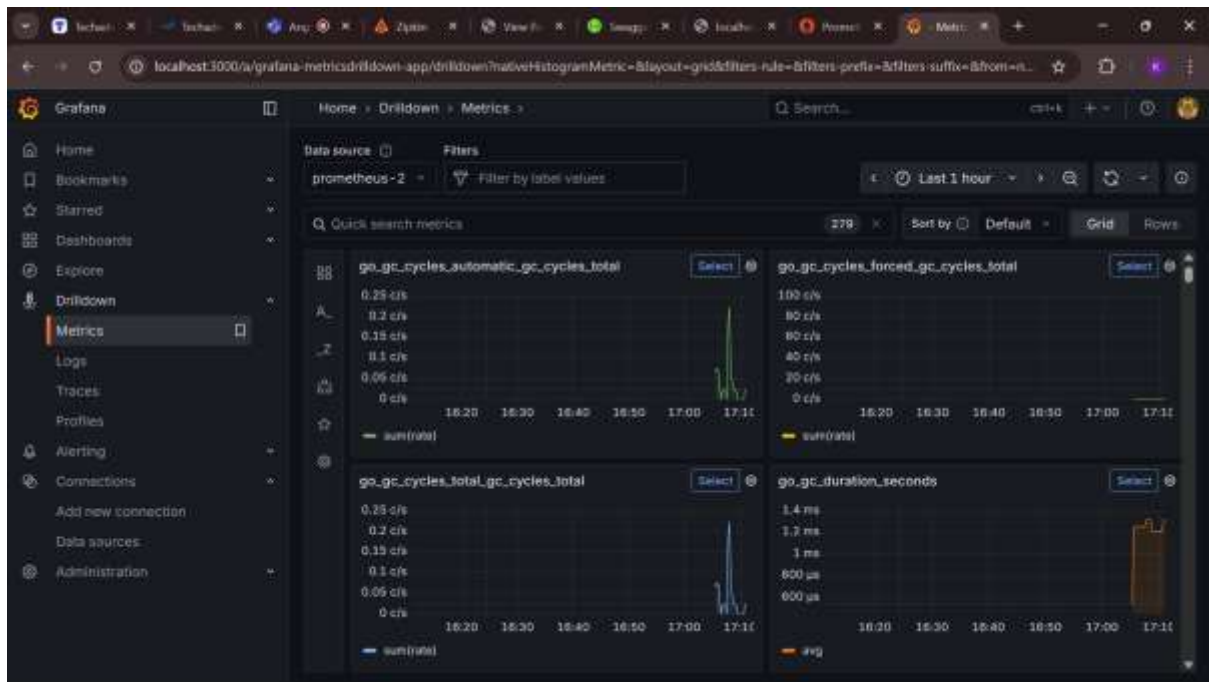


Grafana

```

C:\Windows\System32\cmd.exe
prise-12.1.0.windows-amd64\grafana-v12.1.0\conf\defaults.ini
INFO [09-04|17:10:22] Target
INFO [09-04|17:10:22] Path Home
prise-12.1.0.windows-amd64\grafana-v12.1.0
INFO [09-04|17:10:22] Path Data
prise-12.1.0.windows-amd64\grafana-v12.1.0\data
INFO [09-04|17:10:22] Path Logs
prise-12.1.0.windows-amd64\grafana-v12.1.0\data\log
INFO [09-04|17:10:22] Path Plugins
prise-12.1.0.windows-amd64\grafana-v12.1.0\data\plugins
INFO [09-04|17:10:22] Path Provisioning
prise-12.1.0.windows-amd64\grafana-v12.1.0\conf\provisioning
INFO [09-04|17:10:22] App mode production
INFO [09-04|17:10:22] FeatureToggles
SettingsSAML=true alertingNotificationsStepMode=true pinNavItems=true logRowsPopoverMenu=true pluginsDetailsRightPanel=true annotationPermissionUpdate=true panelMonitoring=true newPDFRendering=true localLabelNamesQueryApi=true preinstallAutoUpdate=true azureMonitorEnableUserAuth=true logsExploreTableVisualisation=true logsInfiniteScrolling=true improvedExternalSessionHandling=true alertingQueryAndExpressionsStepMode=true tabularNumbers=true dashboardSceneSetup=true teamHttpHeadersMinix=true cloudWatchRoundUpEndTime=true nestedFolders=true groupToNestedTableTransformation=true newFiltersBit=true cloudWatchCrossAccountQuerying=true alertingBulkActionsInUI=true recordedQueriesMulti=true unifiedStorageSearchPermissionFiltering=true skipTokenRotationIfRecent=true unifiedRequestLog=true tlsNewcacbed=true influxdbBackendMigration=true alertingRuleVersionHistoryRestore=true azureMonitorPrometheusExplains=true useSessionStorageForRedirection=true alertRuleRestore=true externalCorePlugins=true addFieldFromCalculationStatFunctions=true dataplaneFrontendFallback=true LokiQuerySplitting=true kubernetesClientDashboardsFolders=true sslSettingsLDAP=true dashboardSceneForViewers=true logsPanelControls=true dashboardScene=true promQLScopes=true alertingUIOptimizationsReducer=true alertingMigrationUI=true transformationsRedesign=true onPreToCloudMigration=true cloudWatchNewLabelParsing=true formatString=true jaegerBackendMigration=true correlations=true awsAsyncQueryCaching=true publicDashboardsScene=true unifiedStorageHistoryPruner=true alertingRuleRecoverDeleted=true prometheusAzureOverrideAuthn=true grafanaconthemes=true alertingImportYAMLUI=true improvedExternalSessionHandlingSAML=true logsContextDataaSourceUI=true newDashboardSharingComponent=true
INFO [09-04|17:10:22] Connecting to DB
WARN [09-04|17:10:22] SQLite database file has broader permissions than it should
INFO [09-04|17:10:22] Locking database
INFO [09-04|17:10:22] Starting DB migrations
INFO [09-04|17:10:22] migrations completed
INFO [09-04|17:10:22] Unlocking database
logger=settings target=[all]
logger=settings path="C:\\Users\\WARTHAK RAM\\Downloads\\grafana-enter
logger=settings path="C:\\Users\\WARTHAK RAM\\Downloads\\grafana-enter
logger=settings path="C:\\Users\\WARTHAK RAM\\Downloads\\grafana-enter
logger=settings path="C:\\Users\\WARTHAK RAM\\Downloads\\grafana-enter
logger=settings path="C:\\Users\\WARTHAK RAM\\Downloads\\grafana-enter
logger=settings path="C:\\Users\\WARTHAK RAM\\Downloads\\grafana-enter
logger=settings
logger=featuremgmt alertingRulePermanentlyDelete=true dashpnt=true ssa
logger=sqlstore obtype=sqlite3
WARN [09-04|17:10:22] SQLite database file has broader permissions than it should
logger=sqlstore path="C:\\Users\\WARTHAK RAM\\Downl
loads\\grafana-enterprise-12.1.0.windows-amd64\\grafana-v12.1.0\\data\\grafana.db" mode=rw-rw-rw- expected=rw-r-----
logger=migrator
logger=migrator
logger=migrator performed=0 skipped=788 duration=4.8204ms
logger=migrator

```

```
Microsoft Windows [Version 10.0.26100.4946]
(c) Microsoft Corporation. All rights reserved.

C:\Users\KARTHIK RAM>cd C:/kafka_2.12-3.9.0

C:\kafka_2.12-3.9.0>.bin\windows\kafka-console-consumer.bat --topic notify-payment --from-beginning --bootstrap-server
localhost:9092
hello
hi
{"senderEmail":"karthikran.in89@gmail.com","receiverEmail":"karthikrangudinetla2@gmail.com","senderName":"Karthik Ran",
"receiverName":"Sujatha","amount":12000.1,"senderAccountNumber":"6784712417427","receiverAccountNumber":"6784121091742"}
Processed a total of 3 messages
Terminate batch job (Y/N)? Y

C:\kafka_2.12-3.9.0>.bin\windows\kafka-console-consumer.bat --topic notify-payment --from-beginning --bootstrap-server
localhost:9092
hello
hi
{"senderEmail":"karthikran.in89@gmail.com","receiverEmail":"karthikrangudinetla2@gmail.com","senderName":"Karthik Ran",
"receiverName":"Sujatha","amount":12000.1,"senderAccountNumber":"6784712417427","receiverAccountNumber":"6784121091742"}
{"senderEmail":"karthikrangudinetla2@gmail.com","receiverEmail":"karthikran.in89@gmail.com","senderName":"Sujatha","recei
verName":"Karthik Ran","amount":12000.0,"senderAccountNumber":"6784121091742","receiverAccountNumber":"6784712417427"}
{"senderEmail":"karthikrangudinetla2@gmail.com","receiverEmail":"karthikran.in89@gmail.com","senderName":"Sujatha","recei
verName":"Karthik Ran","amount":9000.0,"senderAccountNumber":"6784121091742","receiverAccountNumber":"6784712417427"}
```

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL statement:

```
SELECT * FROM pet_db.user
```

The result set displays the following data:

#	email	name	password	user_role
1	admin@pet.com	admin	\$2a\$10\$040H4ntz1pA8BvYV4Q1Y8dCvY4qD1X03D7AopPL1k4S	0
2	karthi@pet@gmail.com	karthi	\$2a\$10\$040H4ntz1pA8BvYV4Q1Y8dCvY4qD1X03D7AopPL1k4S	1
3	ganesh@gmail.com	ganesh	\$2a\$10\$040H4ntz1pA8BvYV4Q1Y8dCvY4qD1X03D7AopPL1k4S	1
4	raheh12@gmail.com	raheh	\$2a\$10\$040H4ntz1pA8BvYV4Q1Y8dCvY4qD1X03D7AopPL1k4S	1
5	krishna2@gmail.com	krishna	\$2a\$10\$040H4ntz1pA8BvYV4Q1Y8dCvY4qD1X03D7AopPL1k4S	1
6	shiv@gmail.com	shiv	\$2a\$10\$040H4ntz1pA8BvYV4Q1Y8dCvY4qD1X03D7AopPL1k4S	1
7	seetha12@gmail.com	seetha	\$2a\$10\$040H4ntz1pA8BvYV4Q1Y8dCvY4qD1X03D7AopPL1k4S	1

The output pane shows the execution time for each row:

#	Time	Action	Message	Duration / Fetch
4	29.36.57	SELECT * FROM pet_db.user LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
5	10.16.15	SELECT * FROM pet_db.user LIMIT 0, 1000	6 row(s) returned	0.063 sec / 0.000 sec
6	10.16.15	SELECT * FROM pet_db.user LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
7	11.20.25	SELECT * FROM pet_db.user LIMIT 0, 1000	7 row(s) returned	0.031 sec / 0.016 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigation

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- employee_db
- hr_22
- hrmate
- property_db
- property_1
- property_2
- property_3
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- property_5
- property_6
- property_7
- property_8
- property_9
- property_10
- property_11
- property_12
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- property_97
- property_98
- property_99
- property_100

Schema: customer_db

Information

Schema: customer_db

Query

1. SELECT * FROM customer_db.customers;

Result Grid

customer_id	address	age	email	gender	lvc	mobile_number	name
1	S-36/2, Guntur	22	karthikan.rnm@gmail.com	MALE	true	9639184996	Karthika Rani
2	S-36/2, Guntur	46	karthikan.rnm@gmail.com	FEMALE	true	7794272943	Sujatha

customers 1

Output

Action Output

#	Time	Action	Message	Duration / Feeds
6	17:16:15	SELECT * FROM customer_db.customers LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
7	17:16:25	SELECT * FROM customer_db.customers LIMIT 0, 1000	7 row(s) returned	0.031 sec / 0.016 sec
8	17:16:29	SELECT * FROM customer_db.customers LIMIT 0, 1000	2 row(s) returned	0.110 sec / 0.000 sec
9	17:16:21	SELECT * FROM customer_db.customers LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigation

SCHEMAS

Filter objects

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 - Views
 - Stored Procedures
 - Functions
- appointment_service_db
- audit_db
- bank_management_system
 - Tables
 - bank_user_details
 - Views
 - Stored Procedures
 - Functions

Schema: account_db

Information

Schema: account_db

Query

1. SELECT * FROM account_db.accounts;

Result Grid

account_id	ancho_card_number	account_type	balance	bank_account_number	customer_id	pan_card_number	password	user_name
1	77952668127	SAVINGS	969394	678412141740	1	999912345	4567	Karthika Rani
2	77952668127	SAVINGS	969395.2	678412141740	1	999912345	4567	Karthika Rani
3	7955668127	SAVINGS	969441.1	678412141740	3	999912345	9364	Sujatha

accounts 1

Output

Action Output

#	Time	Action	Message	Duration / Feeds
11	17:16:58	SELECT * FROM account_db.accounts LIMIT 0, 1000	1 row(s) returned	0.062 sec / 0.000 sec
12	17:17:42	SELECT * FROM account_db.accounts LIMIT 0, 1000	3 row(s) returned	0.031 sec / 0.000 sec
13	17:17:43	SELECT * FROM account_db.accounts LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
14	17:17:45	SELECT * FROM account_db.accounts LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec