Case Study

Spring Microservices

Topics

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Problem Statement

- As a young individual you want to keep track of your expenses and income.
- You want to monitor/analyze the different ‘transactions’ you do in a given time frame.
- To achieve the above task you have decide to create a “Wealth Management Application”.

Solution

- “Wealth Management Application” to be created as a Web Application.
- The application to provide *minimum* of the following REST API Endpoints :
  - /Register -> Provide UI/Screen for user to register/onboard on to the system.
  - /Login -> Provide UI/Screen for user to log into the system.
  - /Home -> provide UI/Screen for user to Add new transactions and View historical transactions.

Functional Requirements

- “Wealth Management Application” needs to have the following features :
  - User Registration : Enable onboarding of new user to the application/service.
  - User Login : User should be able to access various resources only after logging in into the system.
  - User Expense Tracker : User should be able to maintain daily transactions.
  - User Dashboard : User can see overview of all the transactions and trends.

Technical Requirements

- “Wealth Management Application” You can build such a service using Spring boot and H2 in memory database.
  - Authentication : All the REST API Endpoints need to be authenticated and unauthenticated *request* should not be processed
  - Architecture: Monolithic MVC or REST API Microservice.
  - Configurations: If any default configurations/values are used/initialised then the same needs to be maintained in XML file and no hardcoding of values allowed.

Sample Solution