

GPRC USING JAVA

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Day 1

Introduction

Microservices with gRPC

What you should know

1. Introduction to gRPC
Inter-service communication

gRPC framework overview

gRPC framework features

gRPC foundations

HTTP/1 problems

How is HTTP/2 better?

Understand protocol buffers

Steps to develop a gRPC service

2. Building Blocks of gRPC
Using protocol buffers

Using the gRPC API: Download utilities

Service definition using protobufs

Generate stubs using protoc

Generated classes walk-through

Metadata and channels

Types of gRPC calls

Day 2

3. Build User Service Using RPC

Overview of order management services

Create a maven-gRPC project

Define user.proto and generate service stubs

Database code setup

Add database method to get user details

Implement service stub

Write code to host the user service

Day 3

Test the user service

4. Build Order Management Service Using gRPC

Define order.proto and generate stubs

Add database method to get orders

Add service method to get order details

Write code to host order service

Test the order service using the client

Recap to connect user and order services

Write a client to call order service

Call order client from user service

Test the full flow of order management

Challenge: Implement add-to-cart use case

Handling Events

Notifications

Day 4

Message packing

Using over network

Networking concepts

Ssl

Troubleshooting

Debugging

Building gRPC microservices in Java: Advanced concepts