

Design Document

Self learning

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Overview

This page contains the design details of contact management system for self learning purpose.

Prerequisites

- .net 5
- Visual Studio 2019

Technology Stack

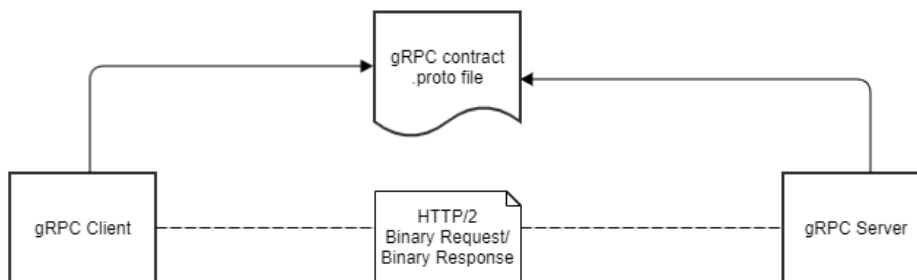
- gRPC Service
- Blazor

Why gRPC

As a variant of the RPC architecture, gRPC was created by Google to speed up data transmission between microservices and other systems that need to interact with each other. Compared to REST APIs, gRPC APIs are unique in the following ways:

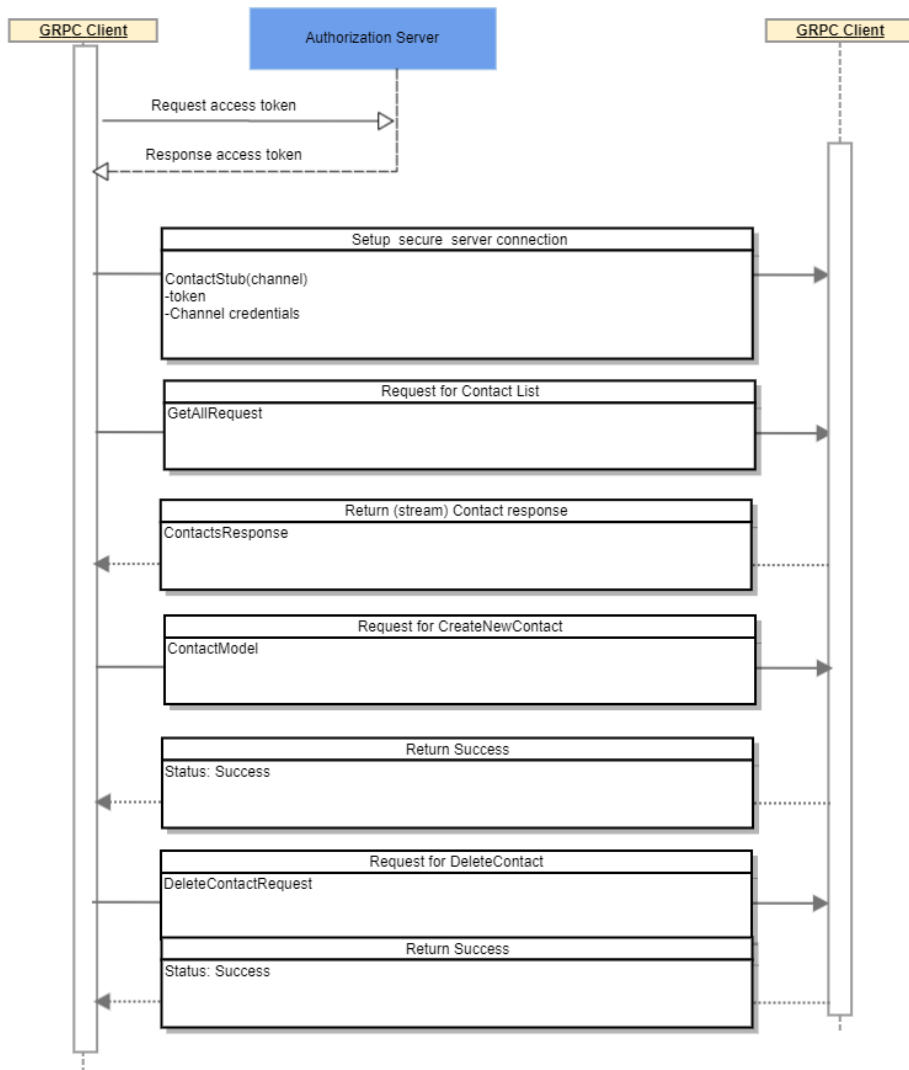
- Protobuf Instead of JSON
- Multi Language Support
- Built on HTTP 2 Instead of HTTP 1.1
- In-Born Code Generation Instead of Using Third-Party Tools Like Swagger
- 7 to 10 times Faster Message Transmission
- Slower Implementation than REST

High level design



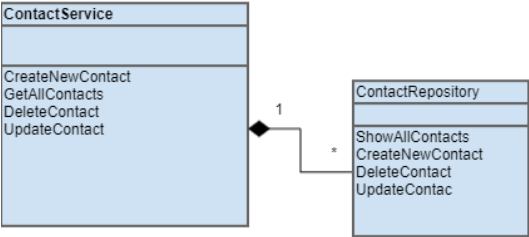
Sequence Flow

Sequence Diagram



Class Diagram

GRPC Server



GRPC Client

