

Integração Empresarial

Project

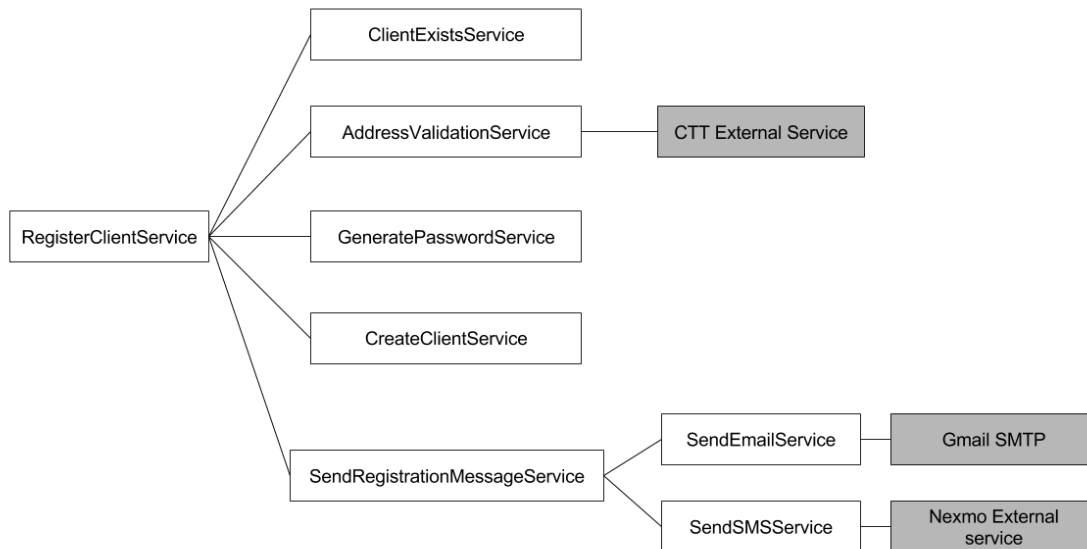
Delivery 1 - Service Trees

Group 8

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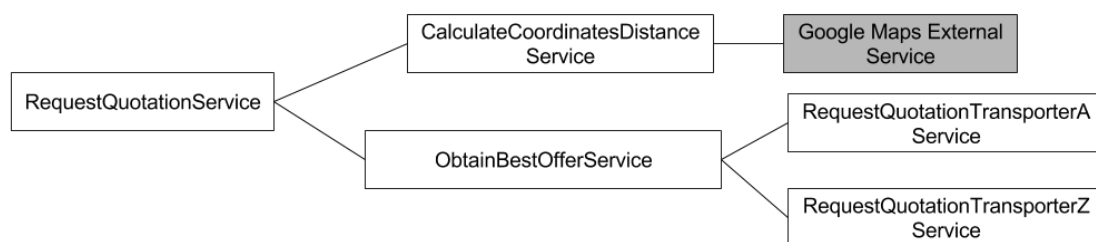
1. Register Client Service Tree



To implement this service, we use the following services:

- **ClientExistsService:** uses an adapter to the database to validate if a client is registered.
- **AddressValidationService:** Uses the CTT external service to validate an address.
- **GeneratePasswordService:** Generates a random password with a specific size.
- **CreateClientService:** Uses an adapter to the database to create a new client, returns the new client number.
- **SendRegistrationMessageService:** Sends an email to the client with it's number and password. Uses a service named **SendEmailService** or **SendSMSService** to send the message as an email or SMS, depending on an argument that is passed.

2. Request Quotation Service Tree



To implement this service, we use the following services:

- **CalculateCoordinatesDistanceService:** Uses the Google Maps external service to calculate the distance (in km) between two sets of coordinates (latitude and longitude).
- **ObtainBestOfferService:** Compares the offers from the two transporters (A and Z) and returns the best offer and respective transporter. It invokes the transporters' services (**RequestQuotationTransporterAService** and **RequestQuotationTransporterZService**) which calculate the offer based on the parcels' weight (in kg) and travel distance.