

Services documentation for Team utilisation Monitor v1

Mamphasa Agape

May 28, 2022

1 Introduction

This document will detail all of the Backend business logic required for the Team utilisation Monitor. Please take note that the documentation is subject to change as more requirements are added and more improvements are made. The core services has been implemented using the CQRS design pattern. This separates services into Queries and Commands. A short description will be given on each functionality and the name of the Command or Query and it's respective handler.

2 Services

I've decided to classify the functions into 4 classes:

- Queries: Used to get data from the database
- Commands: Used to mutataate the database
- Authentication: Used to verify the user's credentials
- Functions: Provide some general functionality e.g calculateUtilisation()

3 Queries

Queries are generally used to get data from the database

3.1 GetAllPersonsQuery

This function returns all the people in the database

3.2 GetAllPersonsQuery: UserPerson[]

This function returns all Objects of all people in the database

3.3 GetOnePersonQuery(email:string): UserPerson

This function returns one person Object based on their email
returns null if person doesn't exist.

3.4 GetCompany(name:string):UserCompany

This function returns the company's Object based on name of company.
Returns null if company was not found.

3.5 GetUserId(email:string):Int

This function returns the user's id based on their email.
Returns -1 if user doesn't exist.

3.6 GetCompanyId(name:string):Int

This function returns the company's id based on it's name
Returns -1 if company doesn't exist.

4 Commands

Commands are used to mutataate values in the database. Or change the state of the database.

4.1 CreateUserCommand(name:string,surname:string,email:string,inviteLink:string)

This function is used to create a User on the database system.

4.2 CreateAdminCommand(name:string,surname:string, email:string,companyName:string)

This function is used to create an Admin on the database.

5 Authentication

Authentication functions are used to authenticate some field against the database

5.1 login(email:string,name:password):UserPerson

This function is used to login by taking the email and password of the admin/user.

5.2 VerifyCode(inviteCode:string):boolean

This function is used to verify an invitation code that was sent.

6 Functions

Functions are used to provide standard business logic that might be needed in the front-end or Backend.

6.1 CalculateUtilisation(ID:Int):Int

This function calculates the utilisation of an employee and takes in the employee's ID