# Solita Pre-Assignment for Dev Academy

## Description

This is Yinan Li's solution to the Solita pre-assignment for applying to Dev Academy Finland 2022.

[Here you can find the pre-assignment for upcoming Dev Academy](#)

This is a web application that uses a backend service to fetch the data from MySQL, besides frontend uses React and Ant UI.

## Tech & Libraries

### Backend

- [JavaScript](#)
- [Node.js](#)
- [Express](#)
- [cors](#)
- [mysql2](#)
- [joi](#)
- [express-joi](#)
- [jsonwebtoken](#)
- [expres-jwt](#)
- [sequelize](#)
- [csv-parser](#)
- [sqlite3](#)
- [docker](#)

### Frontend

- [JavaScript](#)
- [React](#)
- [Axios](#)
- [Ant design](#)
- [Redux](#)
- [React Router V6](#)
- [Sass](#)
- [CSS Modules](#)

## Prerequisites

NPM and Node.js installed

## Installation & Run

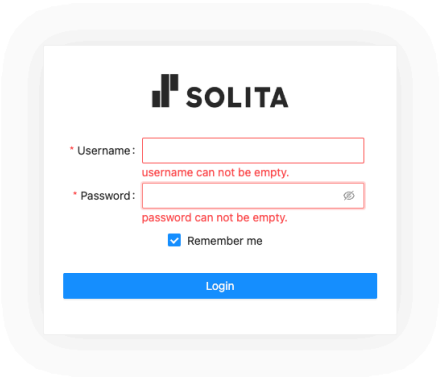### Step 1: Import Data

```
npm install
node app.js
```

### Step 2: Backend

```
npm install
cd src
node app.js
```

### Step 3: Frontend

```
npm install
npm start
```

# App Overview

### Login View

## Add Journey View

**SOLITA**

User   G Logout

- ⌂ Home
- ⌕ Journey
- ⛳ Station

⌂ Home

| | |
|---|---|
| * Date : | Start date → End date 🗓 |
| * Time : | |
| * Departure Station : | |
| * Return Station : | |
| * Covered Distance (m) : | |
| Duration : | |

**Calendar popup:**

« ‹    Aug 2022        Sep 2022    › »

| Su | Mo | Tu | We | Th | Fr | Sa | | Su | Mo | Tu | We | Th | Fr | Sa |
|----|----|----|----|----|----|----|---|----|----|----|----|----|----|----|
| 31 | 1 | 2 | 3 | 4 | 5 | 6 | | 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 28 | 29 | 30 | 31 | 1 | 2 | 3 | | 25 | 26 | 27 | 28 | 29 | 30 | 1 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 | | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

**Add Journey**

## Journey List View

**SOLITA**

User   G Logout

- ⌂ Home
- ⛳ Journey
- ⛳ Station

⌂ Home / ⛳ Journey

| | |
|---|---|
| * Departure Station : | Select a station name ⌄ |
| * Date : | Start date → End date 🗓 |

**Filter**

Total 1563238 records:

| Departure Station | Return Station | Cover Distance (km) | Duration (min) |
|---|---|---|---|
| Viikin normaalikoulu | Puotila (M) | 5.37 | 21.73 |
| Viiskulma | Hernesaarenranta | 1.40 | 5.83 |
| Näkinsilta | Vilhonvuorenkatu | 1.02 | 6.65 |
| Laajalahden aukio | Teljäntie | 2.04 | 8.33 |
| Töölöntulli | Pasilan asema | 1.87 | 10.18 |
| Linnanmäki | Pohjolankatu | 3.25 | 15.58 |
| Kansallismuseo | Stenbäckinkatu | 2.55 | 22.95 |
| Viiskulma | Hernesaarenranta | 4.32 | 33.48 |
| Koskelan varikko | Paavalinpuisto | 1.71 | 6.10 |
| Linnanmäki | Brahen puistikko | 3.34 | 23.22 |

‹ 1 2 3 4 5 ··· 156324 ›   10 / page ⌄

# Station List View



SOLITA                                                                                    User    Logout

Home
Journey
**Station**

Home / Journey

* Station Name : [Select a station name ⌄]

| | |
|---|---|
| A.I. Virtasen aukio | 204 |
| Aalto-yliopisto (M), Korkea | 541 |
| Aalto-yliopisto (M), Tietot | 539 |
| Abraham Wetterin tie | 258 |
| Agnetankuja | 254 |
| Agronominkatu | 241 |
| Ahertajantie | 523 |
| Ajomiehentie | 398 |

Total 457 records :

| Number | Name | Address | City | Action |
|---|---|---|---|---|
| 1 | Kaivopuisto | Meritori 1 | | 🔍 |
| 2 | Laivasillankatu | Laivasillankatu 14 | | 🔍 |
| 3 | Kapteeninpuistikko | Tehtaankatu 13 | | 🔍 |
| 4 | Viiskulma | Fredrikinkatu 19 | | 🔍 |
| 5 | Sepänkatu | Tehtaankatu 25 | | 🔍 |
| 6 | Hietalahdentori | Hietalahdenkatu 2 | | 🔍 |
| 7 | Designmuseo | Korkeavuorenkatu 23 | | 🔍 |
| 8 | Vanha kirkkopuisto | Annankatu 16 | | 🔍 |
| 9 | Erottajan aukio | Eteläesplanadi 22 | | 🔍 |
| 10 | Kasarmitori | Fabianinkatu 13 | | 🔍 |
| 11 | Unioninkatu | Eteläesplanadi 1 | | 🔍 |

# Single Station View



SOLITA                                                                                    User    Logout

Home
Journey
**Station**

Home / Journey

* Station Name : [Select]

[Search]

Total 457 records :

| Number | Nam | | City | Action |
|---|---|---|---|---|
| 1 | Kaiv | | | 🔍 |
| 2 | Laiv | | | 🔍 |
| 3 | Kap | | | 🔍 |
| 4 | Viis | | | 🔍 |
| 5 | Sep | | | 🔍 |
| 6 | Hiet | | | 🔍 |
| 7 | Des | | | 🔍 |
| 8 | Vanl | | | 🔍 |
| 9 | Erot | | | 🔍 |
| 10 | Kas | | | 🔍 |
| 11 | Unic | | | 🔍 |

**Station Detail**

## Kaivopuisto

Meritori 1

| | |
|---|---|
| Total number of journeys starting from the station: | **11892** |
| Total number of journeys ending at the station: | **12136** |
| The average distance of a journey starting from the station: | **≈ 3.36 km** |
| The average distance of a journey ending at the station: | **≈ 2.99 km** |

Top 5 most popular return stations for journeys starting from the station

| Return Station | Amount |
|---|---|
| Unioninkatu | 667 |
| Kanavaranta | 610 |
| Hernesaarenranta | 578 |
| Hietalahdentori | 443 |
| Itämerentori | 437 |

Top 5 most popular departure stations for journeys ending at the station

| Departure Station | Amount |
|---|---|
| Unioninkatu | 529 |
| Hernesaarenranta | 504 |
| Hietalahdentori | 489 |
| Itämerentori | 485 |

## Import Data View

```
yinanli@Yinans-MBP NewImportData % nodemon app.js
[nodemon] 2.0.16
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,json
[nodemon] starting `node app.js`
Do you want to import all journeys and stations to database? (yes/no) yes
yes
Starting...
Reading Station file completed, start to insert...
Inserting...
All stations import completed, imported 457 rows.
Reading 2021-05.csv completed, start to insert...
Inserting...
All journeys in 2021-05.csv import completed, imported 392397 rows.
Reading 2021-06.csv completed, start to insert...
Inserting...
All journeys in 2021-06.csv import completed, imported 588990 rows.
Reading 2021-07.csv completed, start to insert...
Inserting...
All journeys in 2021-07.csv import completed, imported 581846 rows.
> ▯
```