

Full Stack Web Development

# Exercise



## Create REST API for expense tracker app.

## Requirement:

- Use ExpressJS to create REST API
- Use SQL as a data store (MySQL, PostgreSQL, etc)
- Implement sequelize as an ORM

## Hint:

https://sequelize.org/



#### Features:

- User can register
  - Register must contain email, username, phone number, password, and password confirmation
  - Check if email or username is available (not duplicate)
  - o Check if password and password confirmation have a same value
  - Password only valid if length is more than 8
- User can login to the apps
  - o Email, username, or phone number could be used as a login process
  - Login success if email, username, or phone number and password is match
  - If email, username, or phone number used in login process input the wrong password three times, the account would be suspended
- User can update his/her profile
  - Update gender, birthdate, occupation
  - Set currency (IDR, USD, MYR, and etc) by default is using IDR



#### **Features:**

- User can create new expense data
  - Input day to day expenses
  - Each expense should contain expense type (fnb, rental, shopping, and etc)
- User can edit expense data
- User can delete expense data
- User can get total expense
  - Total by category
  - Total by year
  - Total by month
  - Total by day
  - Total by date range
  - Possibly to convert total expense into another currency



#### **Features:**

- User can view every expense transaction log
  - Daily transaction log
  - o Implement pagination, maximum total rows to show is three each page
  - Implement filter search by expense type name
  - Implement filter date range
- User can set reminder for their expense limitation
  - Reminder could be set for daily, and monthly expense
  - If reminder have been set, check daily or monthly reminder every time user input new expense data

# Thank You!



