JavaScript

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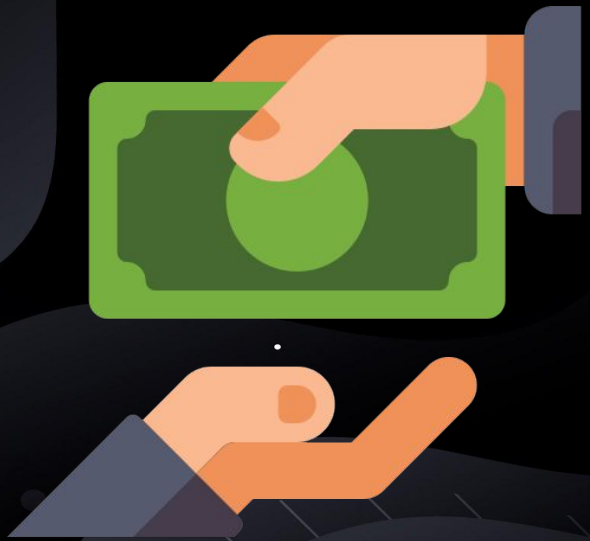
HOMEWORK

Using ESM in Node

- npm init -y
- package.json
- “type”: “module”

PAYMENT APP
ES MODULES



Requirements

- Payment data comes in
- We create payment entity
- Calculate amount based on formula (including currency exchange rate and fee) - in PLN
- Save payment to repository

settled amount formula

amountInPLN = requested_amount * currency_rate

fee = amountInPLN * fee_rate

settled_amount = amountInPLN * fee

fee_rate default to 5%

currency rate API

GET @

https://currency-rate-cache.vercel.app/rate?base={BASE_CURRENCY}&symbol={CURRENCIES}

lab.js

```
// Payment creation DTO

{
  client_id: String;
  request_amount: Number;
  currency: String;
}

const example = {
  client_id: '123',
  request_amount: 100,
  currency: 'USD',
};
```

lab.js

```
// Payment entity

{
  id: String;
  client_id: String;
  request_amount: Number;
  settled_amount: Number;
  currency: String;
  creation_date: Date;
  payment_date?: Date;
  status: String;
}

```

lab.js

```
// Payment entity

const example = {
  id: '321',
  client_id: '123',
  request_amount: 100,
  settled_amount: 425,
  currency: 'USD',
  creation_date: '2024-03-08T12:00:00Z',
  payment_date: '2024-03-08T14:00:00Z',
  status: 'SUCCESS',
};

```

Requirements

- Payment completed request comes in
- We mark our payment as success
- We add reception date to current entity

lab.js

```
// Payment confirmation DTO

{
    transaction_id: String;
}

const example = {
    transaction_id: '321cde'
};

```

Requirements

- Display module
- We need to be able to display the data in human readable format
- Display it based on filters (name, date range, amount range etc.)

HOMEWORK

- Algorithms practice x3
- Pig latin
- This