Testing with Jest & Supertest

Material (09:00 - 09:10)

Test Runner & Assertion Library

- Jest = https://jestjs.io/ ← test runner & assertion
- Cucumber = https://cucumber.io/docs/installation/javascript/ ← test runner only
- Mocha = https://mochajs.org/ ← test runner only
- Chai = https://www.chaijs.com/ ← assertion only

TDD (Test Driven Development)

Demo (09:10 - 10:40)

Jest

- Globals Methods
  - `describe`
  - `test` (alias `it`)
  - Lifecycle / Hooks
    - `beforeAll`
    - `beforeEach`
    - `afterAll`
    - `afterEach`
  - `skip`
  - `only`
  - etc
- Expect Methods
  - `toBe(value)` untuk type data primitive
  - `toEqual(value)` untuk type data non-primitive
  - `toBeInstanceOf(Array || Object)`

- - `toHaveProperty("key", values)`
  - `toHaveProperty("key", expect.any(Number || String || Boolean))`
  - `arrayContaining([1, 2, 3])`
  - etc
- Jest CLI Options
  - `--runInBand` = sequence
  - `--forceExit`
  - `--testTimeout`
  - etc

- Running test
  - `sequelize db:drop --env test`
  - buat `.sequelizerc` berisikan :

```
module.exports = {
  'env': 'test'
}
```

- Run Server Script
  - lakukan export pada `app.js`

```
modules.export = app;
```

  - buatkan folder `bin/www`

```
const app = require('../app');
const port = process.env.PORT || 3000;

app.listen(port, () => {
  console.log(`Server listening on port ${port}`);
}
```

Jest with Supertest

- promises
- async/await

Announcement (10:40 - 10:50)