

Java Application to assign employee to office desk.

1. Below entities have parent - child (one-to-many) relationship

i.e. Building contains many floors, floor contains many blocks, block contains many desks

For Example:

Building A contains 3 floors (F1, F2, F3);

floor 1(F1) contains 2 blocks(BLK1, BLK2);

block 1(BLK1) contains 4 desks(Desk1, Desk2, Desk3, Desk4)

Hierarchy:

-> Building

-> Floor

-> Block

-> Desk

2. Desk - Employee Relationship one-to-one

Requirement:

1. Create Mysql DB schema which supports above relationships.

2. Create Spring Boot Java application with above DB access.

3. Create APIs to

-> perform CRUD operations on Building, Floor, Block, Desk and their relationship

-> perform CRUD operation on Employee entity

-> associate/dissociate Employee and Desk

-> fetch non-associated Desks (i.e. Desks without any employee assigned)

-> fetch non-associated Employee (i.e. Employee without any desk assigned)

-> fetch list of non-associated desks at block/floor/building level

What to use:

DB: Mysql

Java: >=8

Java ORM Layer: Any tool like Hibernate or JdbcTemplate etc.

Unit Test cases: Any tool like Junit or mockito.

Framework: Spring based

Final submission should include github link which contains application source code and DB (DDL and DML) script

Assume anything that is missing in this document as per your own understanding.