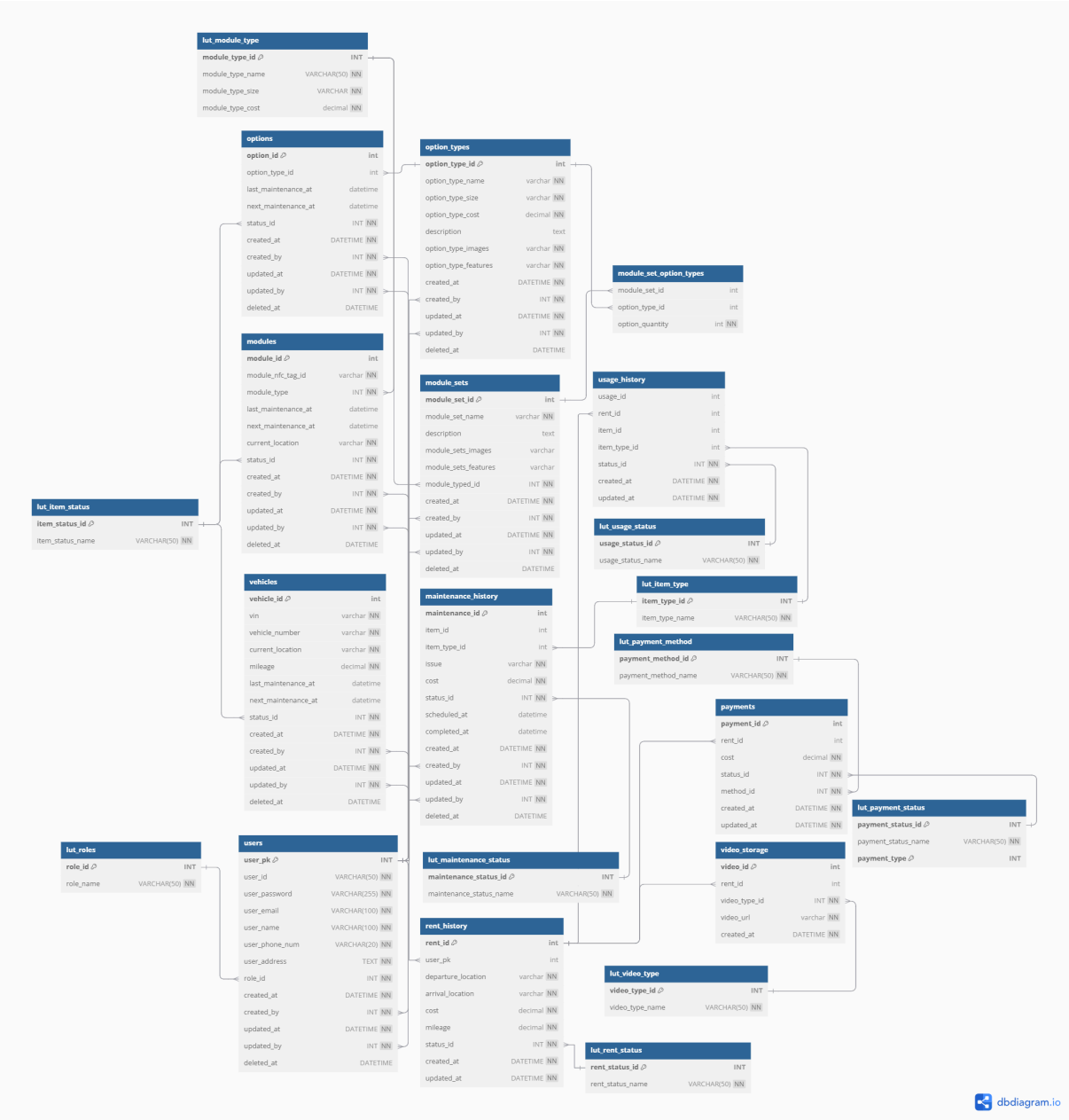
ERD/DB 설계과정

선택

업데이트 v6 updated 2025.01.26



변경사항

1. Look Up Table 적용
2. snake_case 적용
3. create_at, create_by, updated_at, updated_by, deleted_at 적용

```
Table lut_roles {
  role_id INT [pk, increment]
  role_name VARCHAR(50) [unique, not null, note :"master, semi, user"]
}

Table lut_item_status {
  item_status_id INT [pk, increment]
  item_status_name VARCHAR(50) [unique, not null, note :"active, inactive, ma
}

Table lut_item_type {
  item_type_id INT [pk, increment]
  item_type_name VARCHAR(50) [unique, not null, note :"vehicle, module, opti
}

Table lut_module_type {
  module_type_id INT [pk, increment]
  module_type_name VARCHAR(50) [unique, not null, note :"small, medium, lar
  module_type_size VARCHAR [not null]
  module_type_cost decimal [not null, note: "cost >= 0"]
}

Table lut_maintenance_status {
  maintenance_status_id INT [pk, increment]
  maintenance_status_name VARCHAR(50) [unique, not null, note :"pending, ir
}

Table lut_usage_status {
  usage_status_id INT [pk, increment]
  usage_status_name VARCHAR(50) [unique, not null, note :"in_use, completed
```

```
}

Table lut_rent_status {
  rent_status_id INT [pk, increment]
  rent_status_name VARCHAR(50) [unique, not null, note :"in_progress, comple
}

Table lut_video_type {
  video_type_id INT [pk, increment]
  video_type_name VARCHAR(50) [unique, not null, note :"module, autonomou
}

Table lut_payment_status {
  payment_status_id INT [pk, increment]
  payment_status_name VARCHAR(50) [unique, not null]
  payment_type INT [pk, increment]
}

Table lut_payment_method {
  payment_method_id INT [pk, increment]
  payment_method_name VARCHAR(50) [unique, not null]
}




Table users {
  user_pk INT [pk, increment]
  user_id VARCHAR(50) [unique, not null]
  user_password VARCHAR(255) [not null, note: 'encrypted']
  user_email VARCHAR(100) [unique, not null]
  user_name VARCHAR(100) [not null]
  user_phone_num VARCHAR(20) [not null]
  user_address TEXT [not null]
  role_id INT [not null, ref: > lut_roles.role_id]
  created_at DATETIME [not null, default: `now()`]
  created_by INT [not null, ref: > users.user_pk, note: '생성한 사용자']
  updated_at DATETIME [not null, default: `now()`]
```

```
  updated_by INT [not null, ref: > users.user_pk, note: '수정한 사용자']
  deleted_at DATETIME [null, note: '소프트 삭제를 위한 필드']

  indexes {
    user_id
    user_email
    user_phone_num
  }
}

Table vehicles {
  vehicle_id int [pk, increment]
  vin varchar [unique, not null]
  vehicle_number varchar [unique, not null]
  current_location varchar [not null]
  mileage decimal [not null, default: 0]
  last_maintenance_at datetime
  next_maintenance_at datetime
  status_id INT [not null, ref: > lut_item_status.item_status_id]
  created_at DATETIME [not null, default: `now()`]
  created_by INT [not null, ref: > users.user_pk, note: '생성한 사용자']
  updated_at DATETIME [not null, default: `now()`]
  updated_by INT [not null, ref: > users.user_pk, note: '수정한 사용자']
  deleted_at DATETIME [null, note: '소프트 삭제를 위한 필드']

  indexes {
    vin
    vehicle_number
    status_id
  }
}

Table modules {
  module_id int [pk, increment]
  module_nfc_tag_id varchar [unique, not null]
  module_type INT [not null, ref: > lut_module_type.module_type_id]
  last_maintenance_at datetime
  next_maintenance_at datetime
```

```
  current_location varchar [not null]
  status_id INT [not null, ref: > lut_item_status.item_status_id]
  created_at DATETIME [not null, default: `now()`]
  created_by INT [not null, ref: > users.user_pk, note: '생성한 사용자']
  updated_at DATETIME [not null, default: `now()`]
  updated_by INT [not null, ref: > users.user_pk, note: '수정한 사용자']
  deleted_at DATETIME [null, note: '소프트 삭제를 위한 필드']

  indexes {
    module_nfc_tag_id
    status_id
  }
}

Table options {
  option_id int [pk, increment]
  option_type_id int [ref: > option_types.option_type_id]
  last_maintenance_at datetime
  next_maintenance_at datetime
  status_id INT [not null, ref: > lut_item_status.item_status_id]
  created_at DATETIME [not null, default: `now()`]
  created_by INT [not null, ref: > users.user_pk, note: '생성한 사용자']
  updated_at DATETIME [not null, default: `now()`]
  updated_by INT [not null, ref: > users.user_pk, note: '수정한 사용자']
  deleted_at DATETIME [null, note: '소프트 삭제를 위한 필드']

  indexes {
    option_type_id
    status_id
  }
}

Table option_types {
  option_type_id int [pk, increment]
  option_type_name varchar [not null]
  option_type_size varchar [not null]
  option_type_cost decimal [not null, note: "optionCost >= 0"]
  description text
```

```
  option_type_images varchar [not null]
  option_type_features varchar [not null]
  created_at DATETIME [not null, default: `now()`]
  created_by INT [not null, ref: > users.user_pk, note: '생성한 사용자']
  updated_at DATETIME [not null, default: `now()`]
  updated_by INT [not null, ref: > users.user_pk, note: '수정한 사용자']
  deleted_at DATETIME [null, note: '소프트 삭제를 위한 필드']

  indexes {
    option_type_name
  }
}

Table module_sets {
  module_set_id int [pk, increment]
  module_set_name varchar [not null]
  description text
  module_sets_images varchar
  module_sets_features varchar
  module_typed_id INT [not null, ref: > lut_module_type.module_type_id]
  created_at DATETIME [not null, default: `now()`]
  created_by INT [not null, ref: > users.user_pk, note: '생성한 사용자']
  updated_at DATETIME [not null, default: `now()`]
  updated_by INT [not null, ref: > users.user_pk, note: '수정한 사용자']
  deleted_at DATETIME [null, note: '소프트 삭제를 위한 필드']

  indexes {
    module_set_name
  }
}

Table module_set_option_types {
  module_set_id int [ref: > module_sets.module_set_id]
  option_type_id int [ref: > option_types.option_type_id]
  option_quantity int [not null, note: "option_quantity > 0"]

  indexes {
    (module_set_id, option_type_id)
```

```
  }
}

Table maintenance_history {
  maintenance_id int [pk, increment]
  user_pk int [ref: > users.user_pk]
  item_id int
  item_type_id int [ref: > lut_item_type.item_type_id]
  issue varchar [not null]
  cost decimal [not null, note: "cost >= 0"]
  status_id INT [not null, ref: > lut_maintenance_status.maintenance_status_id]
  scheduled_at datetime
  completed_at datetime
  created_at DATETIME [not null, default: `now()`]
  created_by INT [not null, ref: > users.user_pk, note: '생성한 사용자']
  updated_at DATETIME [not null, default: `now()`]
  updated_by INT [not null, ref: > users.user_pk, note: '수정한 사용자']
  deleted_at DATETIME [null, note: '소프트 삭제를 위한 필드']

  indexes {
    item_id
    item_type_id
    status_id
  }
}

Table usage_history {
  rent_id int [ref: > rent_history.rent_id]
  item_id int
  item_type_id int [ref: > lut_item_type.item_type_id]
  status_id INT [not null, ref: > lut_usage_status.usage_status_id]
  created_at DATETIME [not null, default: `now()`]
  updated_at DATETIME [not null, default: `now()`]

  indexes {
    item_id
    item_type_id
    status_id
```

```
  }
}

Table rent_history {
  rent_id int [pk, increment]
  user_pk int [ref: > users.user_pk]
  departure_location varchar [not null]
  arrival_location varchar [not null]
  cost decimal [not null, note: "baseCost >= 0"]
  mileage decimal [not null, default: 0, note: "mileage >= 0"]
  status_id INT [not null, ref: > lut_rent_status.rent_status_id]
  created_at DATETIME [not null, default: `now()`]
  updated_at DATETIME [not null, default: `now()`]

  indexes {
    user_pk
  }
}

Table payments {
  payment_id int [pk, increment]
  rent_id int [ref: > rent_history.rent_id]
  cost decimal [not null, note: "cost > 0"]
  status_id INT [not null, ref: > lut_payment_status.payment_status_id]
  method_id INT [not null, ref: > lut_payment_method.payment_method_id]
  created_at DATETIME [not null, default: `now()`]
  updated_at DATETIME [not null, default: `now()`]

  indexes {
    rent_id
  }
}

Table video_storage {
  video_id int [pk, increment]
  rent_id int [ref: > rent_history.rent_id]
  video_type_id INT [not null, ref: > lut_video_type.video_type_id]
  video_url varchar [not null]
```

```
  created_at DATETIME [not null, default: `now()`]

  indexes {
    rent_id
    video_type_id
  }
}
```