

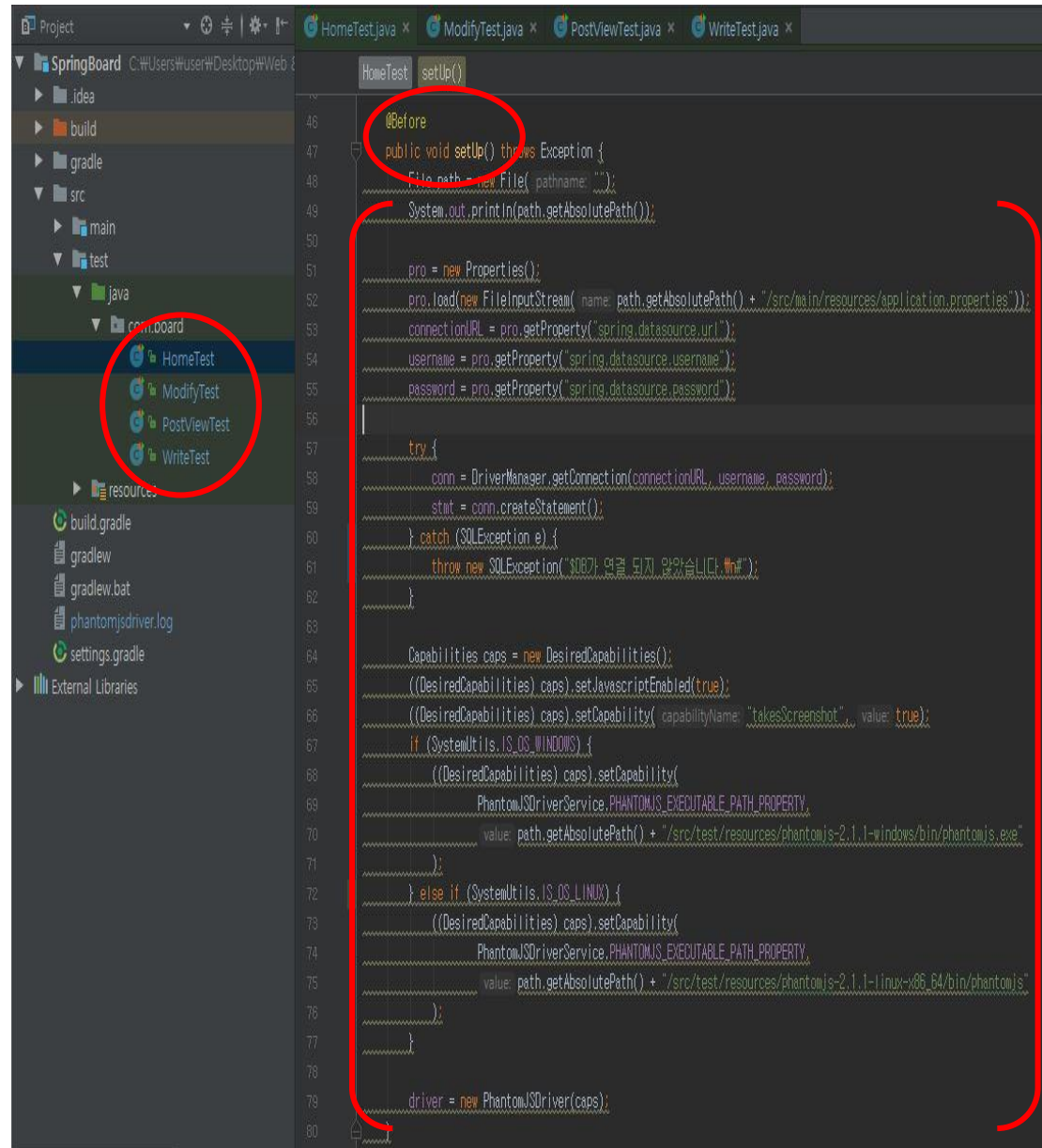
# 캡스톤 디자인 2

## 코드 아카데미 중간발표

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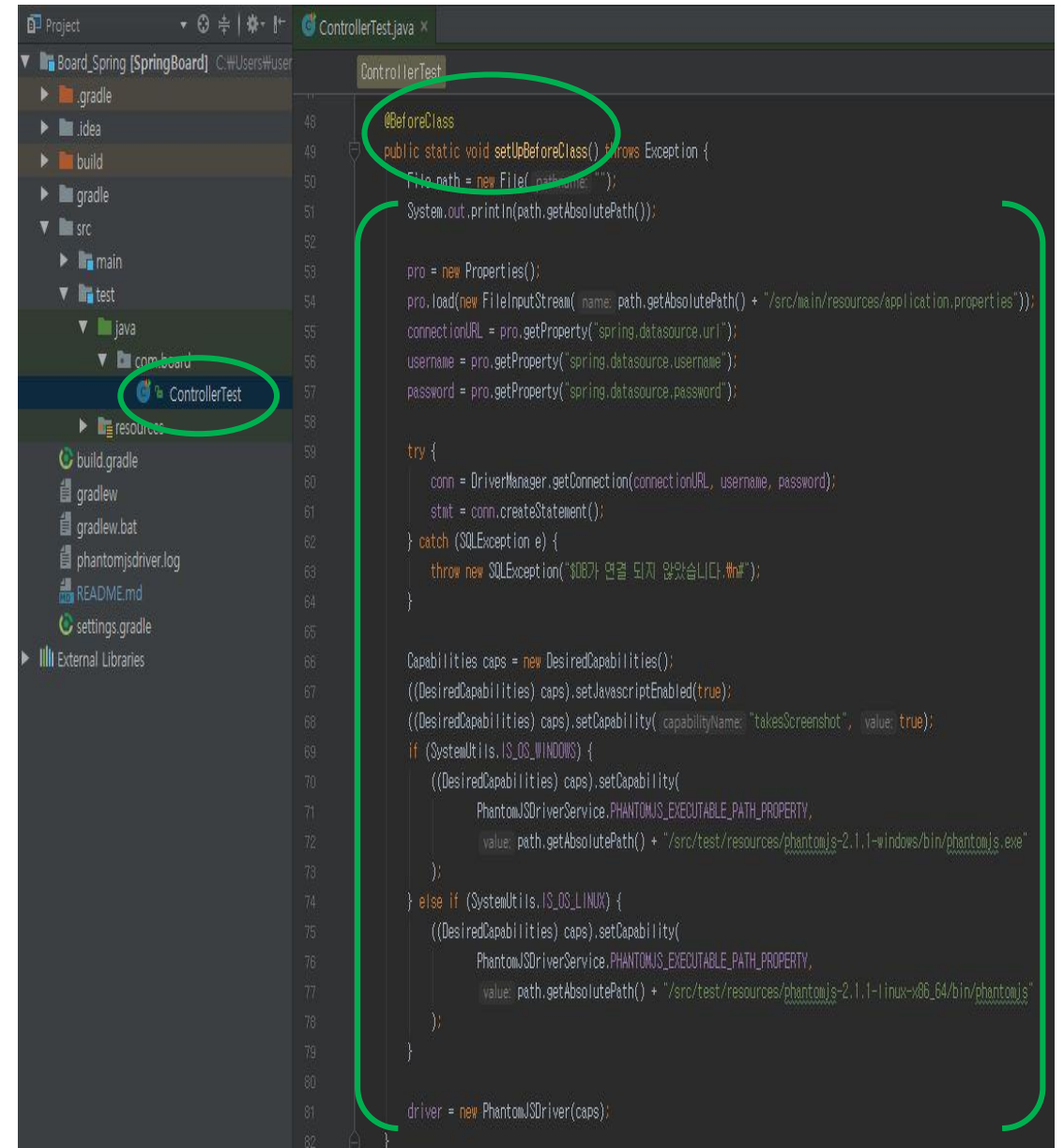
# **1. Refactoring**

## Refactoring 1 – 코드 중복 제거 및 성능 향상



```
Project: SpringBoard C:\Users\User\Desktop\Web2
HomeTest.java x ModifyTest.java x PostViewTest.java x WriteTest.java x

HomeTest
46 @Before
47 public void setUp() throws Exception {
48     File path = new File( "pathname: "" );
49     System.out.println(path.getAbsolutePath());
50
51     pro = new Properties();
52     pro.load(new FileInputStream( name: path.getAbsolutePath() + "/src/main/resources/application.properties" ));
53     connectionURL = pro.getProperty( "spring.datasource.url" );
54     username = pro.getProperty( "spring.datasource.username" );
55     password = pro.getProperty( "spring.datasource.password" );
56
57     try {
58         conn = DriverManager.getConnection(connectionURL, username, password);
59         stmt = conn.createStatement();
60     } catch (SQLException e) {
61         throw new SQLException( "DB가 연결 되지 않았습니다. ##" );
62     }
63
64     Capabilities caps = new DesiredCapabilities();
65     ((DesiredCapabilities) caps).setJavascriptEnabled(true);
66     ((DesiredCapabilities) caps).setCapability( capabilityName: "takesScreenshot", value: true );
67     if (SystemUtils.IS_OS_WINDOWS) {
68         ((DesiredCapabilities) caps).setCapability(
69             PhantomJSDriverService.PHANTOMJS_EXECUTABLE_PATH_PROPERTY,
70             value: path.getAbsolutePath() + "/src/test/resources/phantomjs-2.1.1-windows/bin/phantomjs.exe"
71         );
72     } else if (SystemUtils.IS_OS_LINUX) {
73         ((DesiredCapabilities) caps).setCapability(
74             PhantomJSDriverService.PHANTOMJS_EXECUTABLE_PATH_PROPERTY,
75             value: path.getAbsolutePath() + "/src/test/resources/phantomjs-2.1.1-linux-x86_64/bin/phantomjs"
76         );
77     }
78
79     driver = new PhantomJSDriver(caps);
80 }
```



```
Project: Board_Spring [SpringBoard] C:\Users\User
ControllerTest.java x

ControllerTest
48 @BeforeClass
49 public static void setUpBeforeClass() throws Exception {
50     File path = new File( "pathname: "" );
51     System.out.println(path.getAbsolutePath());
52
53     pro = new Properties();
54     pro.load(new FileInputStream( name: path.getAbsolutePath() + "/src/main/resources/application.properties" ));
55     connectionURL = pro.getProperty( "spring.datasource.url" );
56     username = pro.getProperty( "spring.datasource.username" );
57     password = pro.getProperty( "spring.datasource.password" );
58
59     try {
60         conn = DriverManager.getConnection(connectionURL, username, password);
61         stmt = conn.createStatement();
62     } catch (SQLException e) {
63         throw new SQLException( "DB가 연결 되지 않았습니다. ##" );
64     }
65
66     Capabilities caps = new DesiredCapabilities();
67     ((DesiredCapabilities) caps).setJavascriptEnabled(true);
68     ((DesiredCapabilities) caps).setCapability( capabilityName: "takesScreenshot", value: true );
69     if (SystemUtils.IS_OS_WINDOWS) {
70         ((DesiredCapabilities) caps).setCapability(
71             PhantomJSDriverService.PHANTOMJS_EXECUTABLE_PATH_PROPERTY,
72             value: path.getAbsolutePath() + "/src/test/resources/phantomjs-2.1.1-windows/bin/phantomjs.exe"
73         );
74     } else if (SystemUtils.IS_OS_LINUX) {
75         ((DesiredCapabilities) caps).setCapability(
76             PhantomJSDriverService.PHANTOMJS_EXECUTABLE_PATH_PROPERTY,
77             value: path.getAbsolutePath() + "/src/test/resources/phantomjs-2.1.1-linux-x86_64/bin/phantomjs"
78         );
79     }
80
81     driver = new PhantomJSDriver(caps);
82 }
```

- 변수명 규칙(camelCase)

- 변수명 규칙(camelCase)


```

app/controllers/applicants_controller.rb
... @@ -1,6 +1,6 @@
1 1 class ApplicantsController < ApplicationController
2 - before_action :set_applicant, only: [:show]
3 - before_action :set_docker, only: [:update]
2 + before_action :setApplicant, only: [:show]
3 + before_action :setDocker, only: [:update]
4 4
5 5 def index
6 6 @applicants = Applicant.all
... @@ -34,12 +34,12 @@ def building
34 34 require 'timers'
35 35 timers = Timers::Group.new
36 36
37 - paused_timer = timers.every(7) { puts 'Timer started' }
37 + pausedTimer = timers.every(7) { puts 'Timer started' }
38 38
39 - paused_timer.resume
39 + pausedTimer.resume
40 40 10.times { timers.wait } # will fire 10 times
41 41
42 - @docker = get_docker @applicant.id
42 + @docker = getDocker @applicant.id
43 43
44 44 @docker.delete(force: true)
45 45
... @@ -52,7 +52,7 @@ def building
52 52 render :show
53 53 end
54 54
55 - def get_docker(id)
55 + def getDocker(id)
56 56 begin

```

## Refactoring 2

### - 변수명 규칙(camelCase)

|   |   |
|---|---|
| 29  app/assets/javascripts/challenges.coffee |   |
| 30 @@ -3,14 +3,14 @@  |   |
| 3 # You can use CoffeeScript in this file: http://coffeescript.org/   | 3 # You can use CoffeeScript in this file: http://coffeescript.org/ |
| 4 \$ cnt=1  | 4 \$ cnt=1  |
| 5 \$(document).ready(->   | 5 \$(document).ready(->   |
| 6 - \$(''.gradeTest').click(->Waitime());   | 6 + \$(''.gradeTest').click(->waitime());                           |
| 7 );  | 7 );  |
| 8   | 8   |
| 9 \$(document).on('turbolinks:load', ->   | 9 \$(document).on('turbolinks:load', ->                             |
| 10 - ShowScores();  | 10 + showScores();  |
| 11 );   | 11 );   |
| 12  | 12  |
| 13 -Showlog ==>   | 13 +showlog ==>   |
| 14 \$.ajax({  | 14 \$.ajax({  |
| 15 type: 'GET',   | 15 type: 'GET',   |
| 16 url: '/applicants/logging/' + \$('#current_id').val(),   | 16 url: '/applicants/logging/' + \$('#current_id').val(),           |
| 17  | 17  |
| 18 @@ -20,7 +20,7 @@ Showlog ==>  |   |
| 19 if(json=="&&cnt<4)   | 19 if(json=="&&cnt<4)   |
| 20 \$(''.result').html("don't touch button. retry - "+ cnt)   | 20 \$(''.result').html("don't touch button. retry - "+ cnt)         |
| 21 \$ cnt=cnt+1   | 21 \$ cnt=cnt+1   |
| 22 setTimeout(Showlog,25000)  | 22 + setTimeout(showlog,25000)                                      |
| 23 -  | 23 +  |
| 24 else if(cnt==4)  | 24 else if(cnt==4)  |
| 25 \$(''.result').html("Time Over. Please, Restart.")   | 25 \$(''.result').html("Time Over. Please, Restart.")               |
| 26 }  | 26 }  |
| 27 @@ -30,38 +30,35 @@ Showlog ==>  |   |
| 28 }  | 28 }  |
| 29 );   | 29 );   |
| 30  | 30  |
| 31 -ShowScore ==>   | 31 +showScores ==>  |
| 32  | 32  |
| 33 \$.ajax({  | 33 \$.ajax({  |
| 34 type:'GET',  | 34 type:'GET',  |
| 35 url:'/applicants/score/' + \$('#current_id').val(),  | 35 url:'/applicants/score/' + \$('#current_id').val(),              |
| 36 dataType:'html'  | 36 dataType:'html'  |
| 37 success: (json)->{   | 37 success: (json)->{   |
| 38 - \$(''.resultPoint').html(json+' /100 point')   | 38 + \$(''.scorePoint').html(json+' /100 point')                    |
| 39 }  | 39 }  |
| 40 }  | 40 }  |
| 41 );   | 41 );   |
| 42  | 42  |
| 43 -ShowScores ==>  | 43 +  |
|   | 44 +runAjax = ->  |
|   | 45 + showLog();   |
| 46 \$.ajax({  | 46 \$.ajax({  |
| 47 type:'GET',  | 47 type:'GET',  |
| 48 url:'/applicants/score/' + \$('#current_id').val(),  | 48 url:'/applicants/score/' + \$('#current_id').val(),              |
| 49 dataType:'html'  | 49 dataType:'html'  |
| 50 success: (json)->{   | 50 success: (json)->{   |
| 51 - \$(''.scorePoint').html(json+' /100 point')  | 51 + \$(''.resultPoint').html(json+' /100 point')                   |
| 52 }  | 52 }  |
| 53 }  | 53 );   |
| 54 -  |   |
| 55 -  |   |
| 56 -RunAjax = ->  |   |
| 57 - ShowLog();   |   |
| 58 - ShowScore();   |   |
| 59 cnt=1  | 54 cnt=1  |
| 60 - \$(''.gradeTest').click(->Waitime());  | 55 + \$(''.gradeTest').click(->waitime());                          |
| 61  | 56  |
| 62 -Waitime ==>   | 57 +waitime ==>   |
| 63 \$(''.result').html('Ready');  | 58 \$(''.result').html('Ready');                                    |
| 64 \$(''.resultPoint').html('??/100 point');  | 59 \$(''.resultPoint').html('??/100 point');                        |
| 65 \$(''.gradeTest').unbind("click");   | 60 \$(''.gradeTest').unbind("click");                               |
| 66 \$ dt = new Date()   | 61 \$ dt = new Date()   |
| 67 \$ dt.setSeconds(dt.getSeconds()+60);  | 62 \$ dt.setSeconds(dt.getSeconds()+60);                            |
| 68 \$(''.result').html("Prediction Time - "+dt.toTimeString())  | 63 \$(''.result').html("Prediction Time - "+dt.toTimeString())      |
| 69 - setTimeout(RunAjax, 60000);  | 64 + setTimeout(runAjax, 60000);                                    |

## Refactoring 3 – 절대 경로를 상대 경로로 수정

```
- $project_unzip_path = "/home/hong/RubymineProjects/Web_Rails/unzip"
+ $project_unzip_path = "#{__dir__}/../../unzip"
```

```
require 'timers'
timers = Timers::Group.new
```

```
@@ -79,7 +79,7 @@ def update
```

```
format.html {redirect_to @applicant.challenge, notice: 'Applicant was successfully updated'}
```

```
if @applicant.attachment != nil
```

[illegible]

```
- output = system("rm -f -r /home/hong/RubymineProjects/Web_Rails/unzip/#{@applicant.id}/")
```

```
+         output = system("rm -f -r #{__dir__}/../../unzip/#{@applicant.id}/")
```

```
output = system("unzip -o ./public/#{@applicant.attachment} -d ./unzip/#{@applicant.id} ")
```

```
puts "unzip : #{output}"
```

## Refactoring 4 – 포트번호 오류 수정

```
$project_unzip_path =  
+ $applicantPort=0  
+ $createPort=5000  
+ $runPort=6000
```

```
def create_spring_test_docker  
  begin  
    $applicantPort= $createPort + @applicant.id  
    @docker = Docker::Container.create(  
      'name': "applicant_#{@applicant.id}_test",  
      'Image': 'dennischa50/board',  
      'Tty': true,  
      'Interactive': true,  
      'ExposedPorts': { '8080/tcp' => {} },  
      'HostConfig': { 'PortBindings': { '8080/tcp' => [{ 'HostPort': "100#{@applicant.id}" }]}},  
      'HostConfig': { 'PortBindings': { '8080/tcp' => [{ 'HostPort': "#{$applicantPort}" }]}},  
      'Binds': ["#{$project_unzip_path}/#{@applicant.id}:/home"]  
    )  
    @docker.start
```

```
def create_spring_run_docker  
+ $applicantPort= $runPort + @applicant.id  
  @docker = Docker::Container.create(  
    'name': "applicant_#{@applicant.id}_run",  
    'Image': 'dennischa50/board',  
    'Tty': true,  
    'Interactive': true,  
    'ExposedPorts': { '8080/tcp' => {} },  
    'HostConfig': { 'PortBindings': { '8080/tcp' => [{ 'HostPort': "110#{@applicant.id}" }]}},  
+    'HostConfig': { 'PortBindings': { '8080/tcp' => [{ 'HostPort': "#{$applicantPort}" }]}},  
    'Binds': ["#{$project_unzip_path}/#{@applicant.id}:/home"]  
  )  
  @docker.start
```

## **2. Database Structure modify**



수정 전

### applicants

| id           |
|--------------|
| name         |
| email        |
| token        |
| score        |
| language     |
| challenge_id |
| created_at   |
| updated_at   |
| attachment   |
| attachments3 |
| log          |

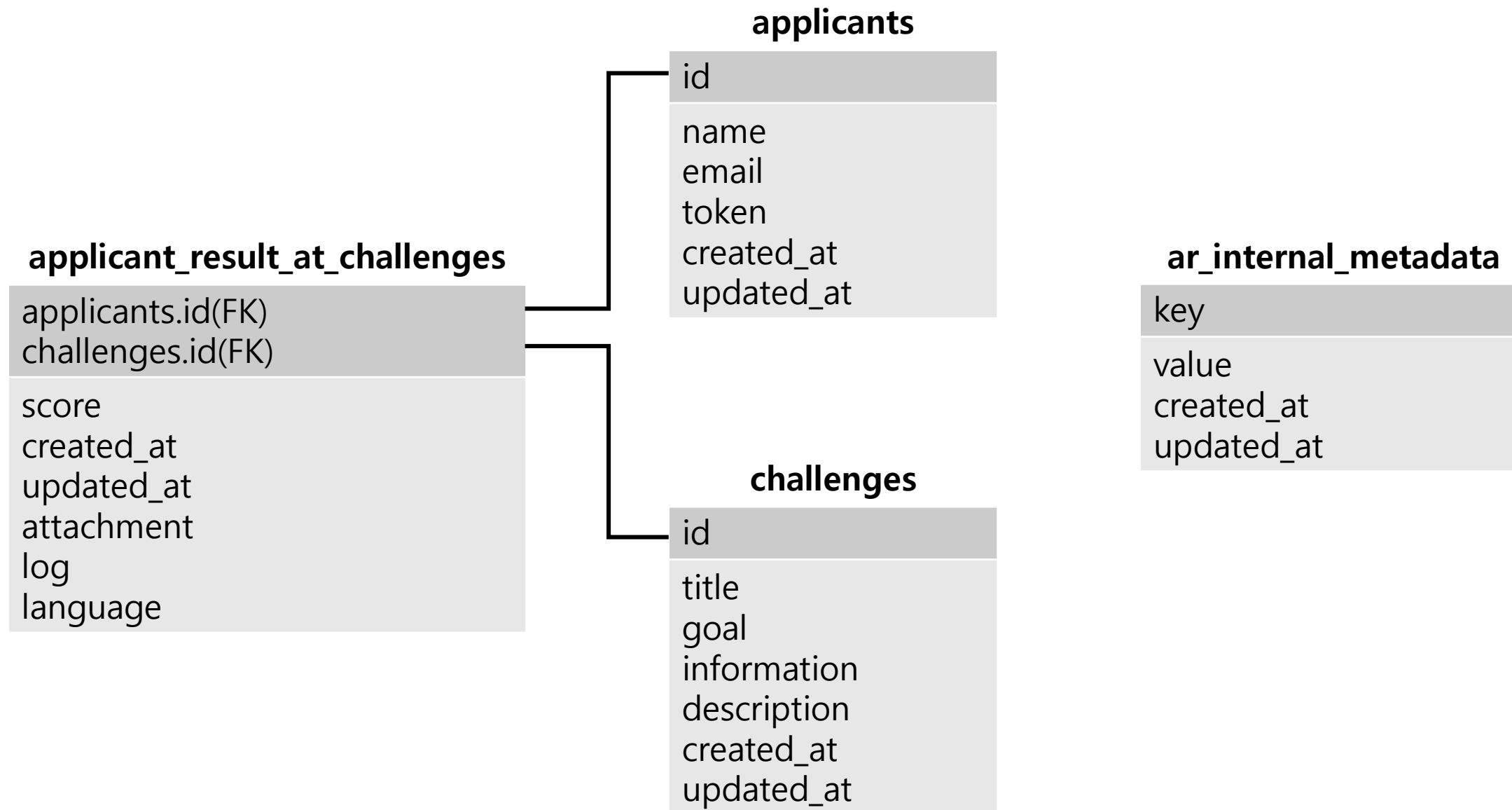
### challenges

| id          |
|-------------|
| title       |
| goal        |
| information |
| description |
| created_at  |
| updated_at  |

### ar\_internal\_metadata

| key        |
|------------|
| value      |
| created_at |
| updated_at |

수정 후



## db migration 파일 생성

7 ■■■■■ db/migrate/20171025065528\_remove\_details\_to\_applicants.rb

```
...    @@ -0,0 +1,7 @@
1  +class RemoveDetailsToApplicants < ActiveRecord::Migration[5.0]
2  +  def change
3  +    remove_column :applicants, :score, :integer
4  +    remove_column :applicants, :language, :string
5  +    remove_column :applicants, :challenge_id, :integer
6  +  end
7  +end
```

7 ■■■■■ db/migrate/20171025072316\_remove\_attributes\_to\_applicants.rb

```
...    @@ -0,0 +1,7 @@
1  +class RemoveAttributesToApplicants < ActiveRecord::Migration[5.0]
2  +  def change
3  +    remove_column :applicants, :attachment, :string
4  +    remove_column :applicants, :attachments3, :string
5  +    remove_column :applicants, :log, :text
6  +  end
7  +end
```

14 ■■■■■ db/migrate/20171025074412\_create\_applicant\_result\_at\_challenges.rb

```
...    @@ -0,0 +1,14 @@
1  +class CreateApplicantResultAtChallenges < ActiveRecord::Migration[5.0]
2  +  def change
3  +    create_table :applicant_result_at_challenges do |t|
4  +      t.belongs_to :challenges, index:true
5  +      t.belongs_to :applicants, index:true
6  +      t.integer :score
7  +      t.string :attachment
8  +      t.text :log
9  +      t.string :language
10  +
11  +      t.timestamps
12  +    end
13  +  end
14  +end
```

# db schema 파일 수정

```
ActiveRecord::Schema.define(version: 20170117021736) do
```

```
  create_table "applicants", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
    t.string   "name"
    t.string   "email"
    t.string   "token"
    t.integer  "score"
    t.string   "language",          default: "SpringBoot"
    t.integer  "challenge_id"
    t.datetime "created_at",          null: false
    t.datetime "updated_at",          null: false
    t.string   "attachment"
    t.string   "attachments3"
    t.text     "log",                 limit: 65535
    t.index ["challenge_id"], name: "index_applicants_on_challenge_id", using: :btree
  end
```

```
  create_table "challenges", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
    t.string   "title"
    t.string   "goal"
    t.text     "information", limit: 65535
    t.string   "description"
    t.datetime "created_at",          null: false
    t.datetime "updated_at",          null: false
  end
```

```
end
```

```
ActiveRecord::Schema.define(version: 20171025074412) do
```

```
  create_table "applicant_result_at_challenges", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
    t.integer  "challenges_id"
    t.integer  "applicants_id"
    t.integer  "score"
    t.string   "attachment"
    t.text     "log",                 limit: 65535
    t.string   "language"
    t.datetime "created_at",          null: false
    t.datetime "updated_at",          null: false
    t.index ["applicants_id"], name: "index_applicant_result_at_challenges_on_applicants_id", using: :btree
    t.index ["challenges_id"], name: "index_applicant_result_at_challenges_on_challenges_id", using: :btree
  end
```

```
  create_table "applicants", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
    t.string   "name"
    t.string   "email"
    t.string   "token"
    t.datetime "created_at", null: false
    t.datetime "updated_at", null: false
  end
```

```
  create_table "challenges", force: :cascade, options: "ENGINE=InnoDB DEFAULT CHARSET=utf8" do |t|
    t.string   "title"
    t.string   "goal"
    t.text     "information", limit: 65535
    t.string   "description"
    t.datetime "created_at",          null: false
    t.datetime "updated_at",          null: false
  end
```

```
end
```