${\it Hack\ Dojo}: {\it Reverse\ Engineering}$ 

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### Chapter 1

## Use case

### 1.1 Free-user

### 1.1.1 General Use Case

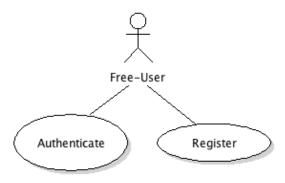


Figure 1.1: Free-User Use Case : Overview

A free user is a user non identified by the platform. He has the following features :

### 1.1.2 Register

Register a free-user to have access to the different features Information needed are

### 1.1.3 Authenticate

Identify free-user and if registered give him access to the different features

### 1.2 Student

### 1.2.1 General Use Case

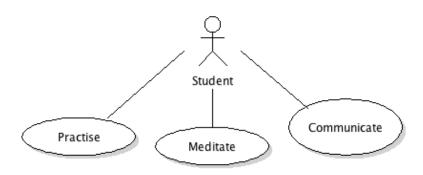


Figure 1.2: Student Use Case: Overview

A user identify as a student has three major action which are Practise, Meditate and Communicate.

### 1.2.2 Practise

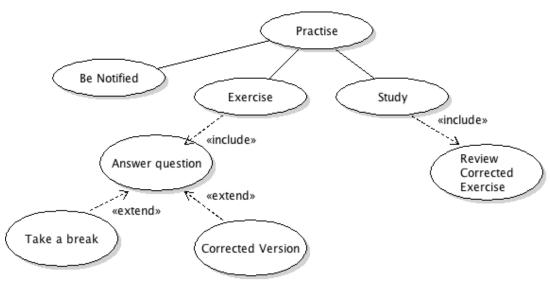


Figure 1.3: Student Use Case : Practise

A student exercises for getting better. He/She answers questions.

### 1.2.3 Meditate

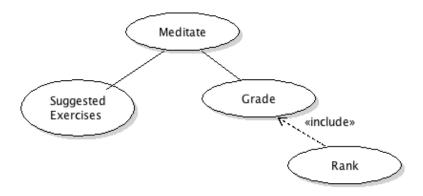


Figure 1.4: Student Use Case : Meditate

### Suggested Exercises

The platform will provide exercises depending on student's weaknesses.

#### $\mathbf{Grade}$

Student can see their grade for each exercises.

### 1.3 Teacher

### 1.3.1 General Use Case

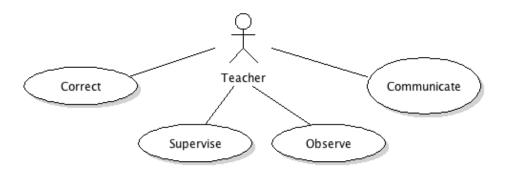


Figure 1.5: Teacher Use Case : Overview

### 1.3.2 Supervise

A teacher writes exercises.

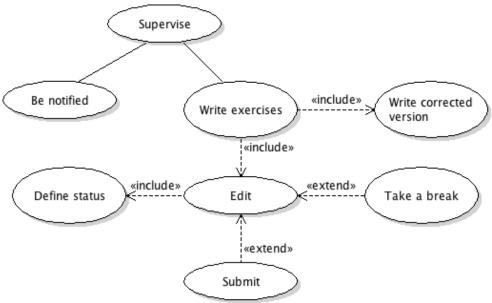


Figure 1.6: Teacher Use Case : Supervise

### 1.3.3 Observe

A teacher observes his students about how they get through on his/her exercise.

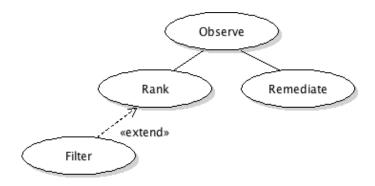


Figure 1.7: Teacher Use Case : Observe

### 1.4 Administrator

### 1.4.1 General Use Case

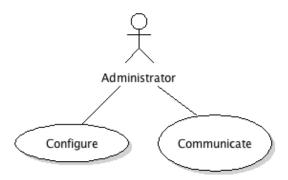


Figure 1.8: Administrator Use Case : Overview

### 1.4.2 Configure

The administrator task is to configure the platform.

### 1.5 Common registered user

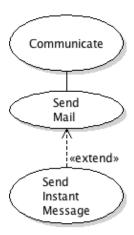


Figure 1.9: Registered user Use Case : Communicate

### 1.5.1 Communicate

Registered user can communicate each other.

### 1.5.2 Send Mail

Communication provide by mail exchange.

### 1.5.3 Send Instant Message

Communication provide by instant message exchange.

## Chapter 2

# Dynamic analysis

Chapter 3

Static analysis