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## Chapter 1

## Use case

## 1.1 Unidentified user

#### 1.1.1 Overview

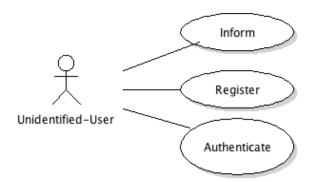


Figure 1.1: Unidentified user Use Case : Overview

### 1.1.2 Inform

An unidentified user will inform himself about the platform.

## 1.1.3 Register

An unidentified user who wants to access to the different features of the platform will have to register first.

### 1.1.4 Authenticate

An unidentified user authenticates to have access to the features if he has already passed the register step.

## 1.2 Student

## 1.2.1 Overview

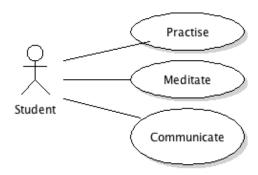


Figure 1.2: Student Use Case : Overview

## 1.2.2 Practise

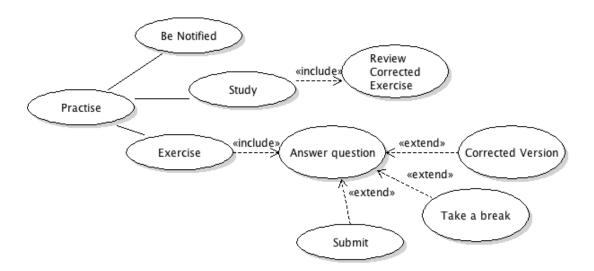


Figure 1.3: Student Use Case : Practise

## Be notified

The student will be notified for new events.

#### Study

The student can study by reviewing corrected exercises.

#### Exercise

The student can exercise himself by doing exercises written by the teacher.

#### **Answer Question**

The student will answer a set of different type of question.

#### Corrected Version

The student will have optionally access to the corrected version.

#### Take a break

The student can take a break and resume the exercise later.

#### Submit

The student can submit his answer form and be graded by the platform.

#### 1.2.3 Meditate

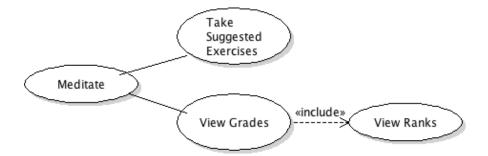


Figure 1.4: Student Use Case : Meditate

#### Take suggested exercises

The student can access and take a set of exercises according to their grade.

### View Grades

The student can see their grade for each exercises.

#### View Ranks

The student can compare himself with other student.

## 1.3 Teacher

## 1.3.1 Overview

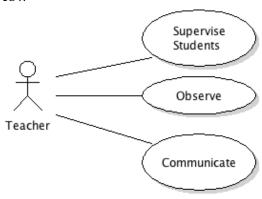


Figure 1.5: Teacher Use Case : Overview

## 1.3.2 Supervise

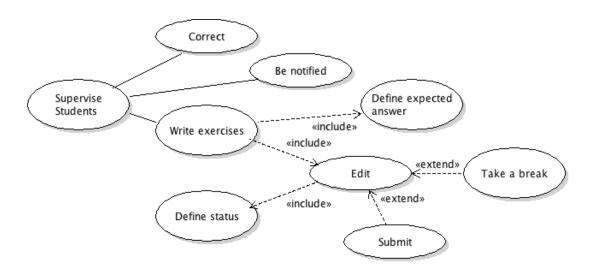


Figure 1.6: Teacher Use Case : Supervise

#### Correct

The teacher has to correct questions on which he has not define an answer.

#### Be Notified

The teacher will be notified by events. For instance the teacher will be notified when one of his exercises is online.

#### Write exercises

The teacher supervises his students by writing exercises.

#### Define expected answer

When the teacher writes exercises, he can optionally define an expected answer.

#### Edit

The teacher can edit an exercise written by him at anytime.

#### **Define Status**

The teacher can define status for his exercise such as date, deadline, priority. Release condition can also be defined. For instance, every student who have failed to complete the exercise 1.4 will be notified some other exercises.

#### Take a break

The teacher can take a break about writing his exercise, to resume it later.

#### Submit

The teacher submit his exercise which can be viewed by student according to the exercise status defined by the teacher.

#### 1.3.3 Observe

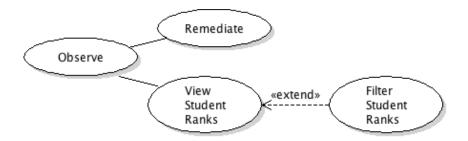


Figure 1.7: Teacher Use Case : Observe

#### Rank

The teacher can see all the grades of students who took his exercises.

#### Filter

The teacher can filter the grades according to some parameters. The parameters can be the number of a group, the year.

#### Remediate

Then the teacher can provide exercises for a group of students in difficulties according to their grade.

## 1.4 Administrator

## 1.4.1 Overview

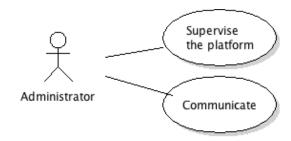


Figure 1.8: Administrator Use Case: Overview

## 1.4.2 Supervise the platform

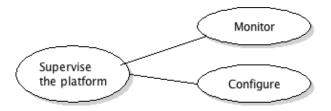


Figure 1.9: Administrator Use Case : Overview

#### Monitor

The administrator can monitor the log.

## Configure

The administrator can configure the platform.

## 1.5 Common registered user



Figure 1.10: Registered user Use Case : Communicate

## 1.5.1 Communicate

#### Send Mail

Identifed user communicate by mail exchange.

## Send Instant Message

Identifed user communicate by instant message exchange.

## Chapter 2

# Dynamic analysis

Chapter 3

Static analysis

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