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Chapter 1

Dojo use case

1.1 Unidentified user

1.1.1 Overview

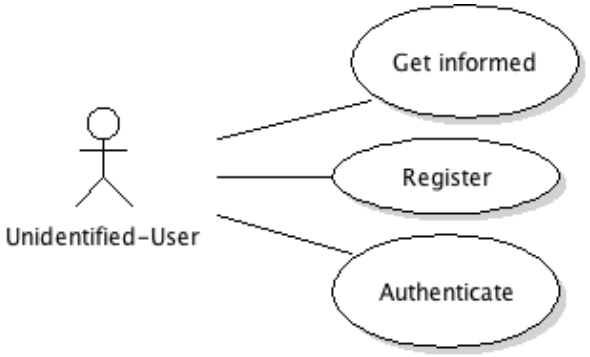

Figure 1.1: Unidentified user Use Case : Overview

1.1.2 Get informed

An unidentified user gets inform about the platform.

1.1.3 Register

An unidentified user who wants to access to the features of the platform has to register first.

1.1.4 Authenticate

An unidentified user authenticates to have access to the features is already registered.

1.2 Student

1.2.1 Overview

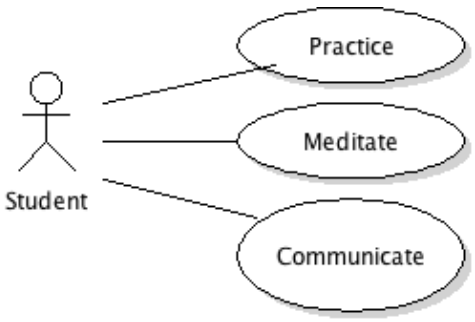

Figure 1.2: Student Use Case : Overview

1.2.2 Practice

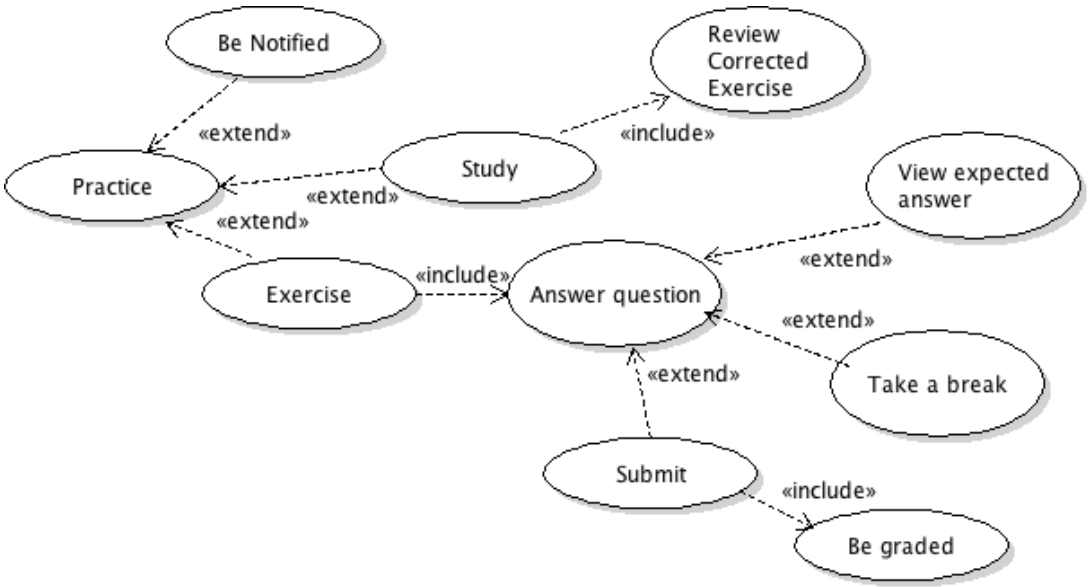

Figure 1.3: Student Use Case : Practice

Be notified

The student is notified for new events.

Study

The student studies by reviewing corrected exercises.

Exercise

The student exercises by answering questions.

Answer question

The student answers a set of question.

View expected answer

The student has optionally access to the corrected version.

Take a break

The student takes a break and resume the exercise later.

Submit

The student can submit his answer form.

Be graded

The student is also graded by the platform AFTER he submits his answer form.

1.2.3 Meditate

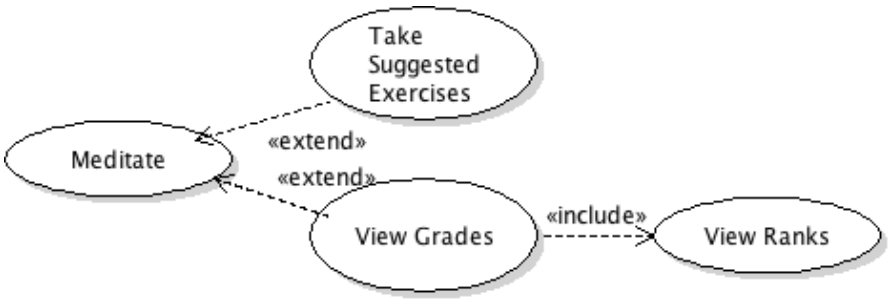

Figure 1.4: Student Use Case : Meditate

Take suggested exercises

The student access and starts 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 students.

1.3 Teacher

1.3.1 Overview

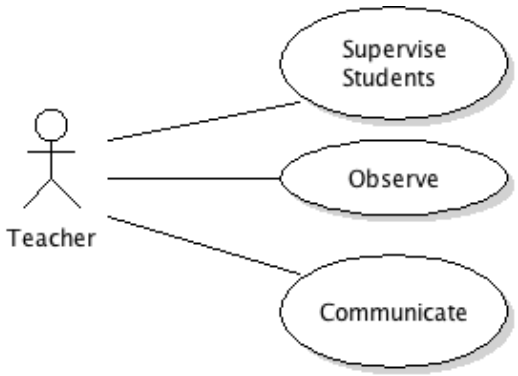

Figure 1.5: Teacher Use Case : Overview

1.3.2 Supervise students

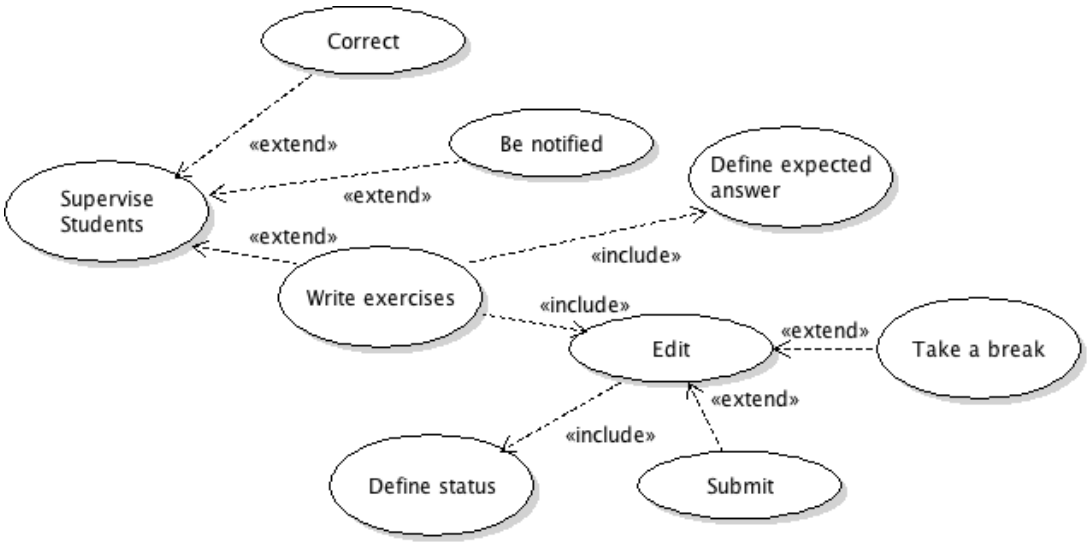

Figure 1.6: Teacher Use Case : Supervise students

Correct

The teacher has to grade students answers for questions which have no expected answers.

Be Notified

The teacher will be notified of 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 any exercise at anytime.

Define Status

The teacher attaches a status to an exercise.

Take a break

The teacher can resume his exercise later.

Submit

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

1.3.3 Observe

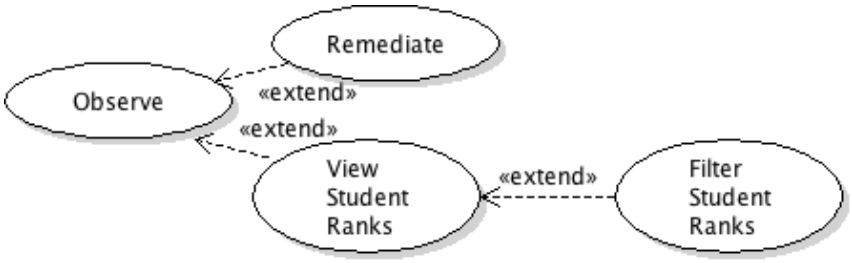

Figure 1.7: Teacher Use Case : Observe

Rank

The teacher sees 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 identifier of a group, the year for instance.

Remediate

The teacher can provide exercises for a group of students in trouble with some specific subject of the course according to their grades.

1.4 Administrator

1.4.1 Overview

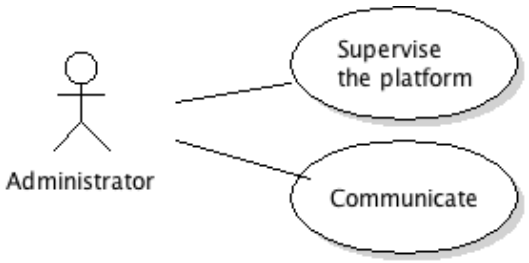

Figure 1.8: Administrator Use Case : Overview

1.4.2 Supervise the platform

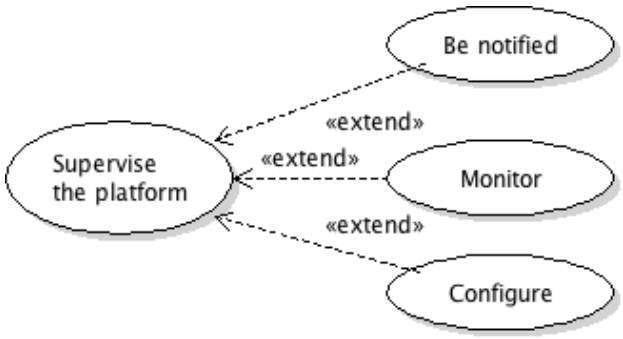

Figure 1.9: Administrator Use Case : Supervise the platform

Be notified

The administrator will be notified by events such as critical issue.

Monitor

The administrator inspects the log.

Configure

The administrator configures the platform.

1.5 Common registered user

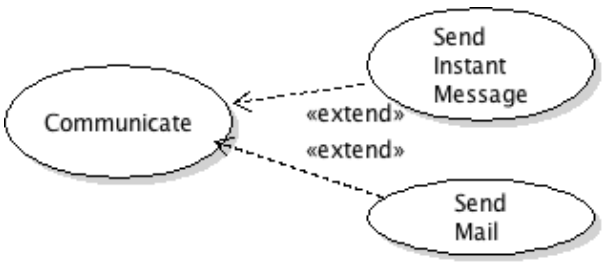

Figure 1.10: Registered user Use Case : Communicate

1.5.1 Communicate

Send Mail

Identifed user communicate by mail exchange.

Send Instant Message

Identifed user communicate by instant message exchange.

Chapter 2

Dojo diagram package

2.1 Overview

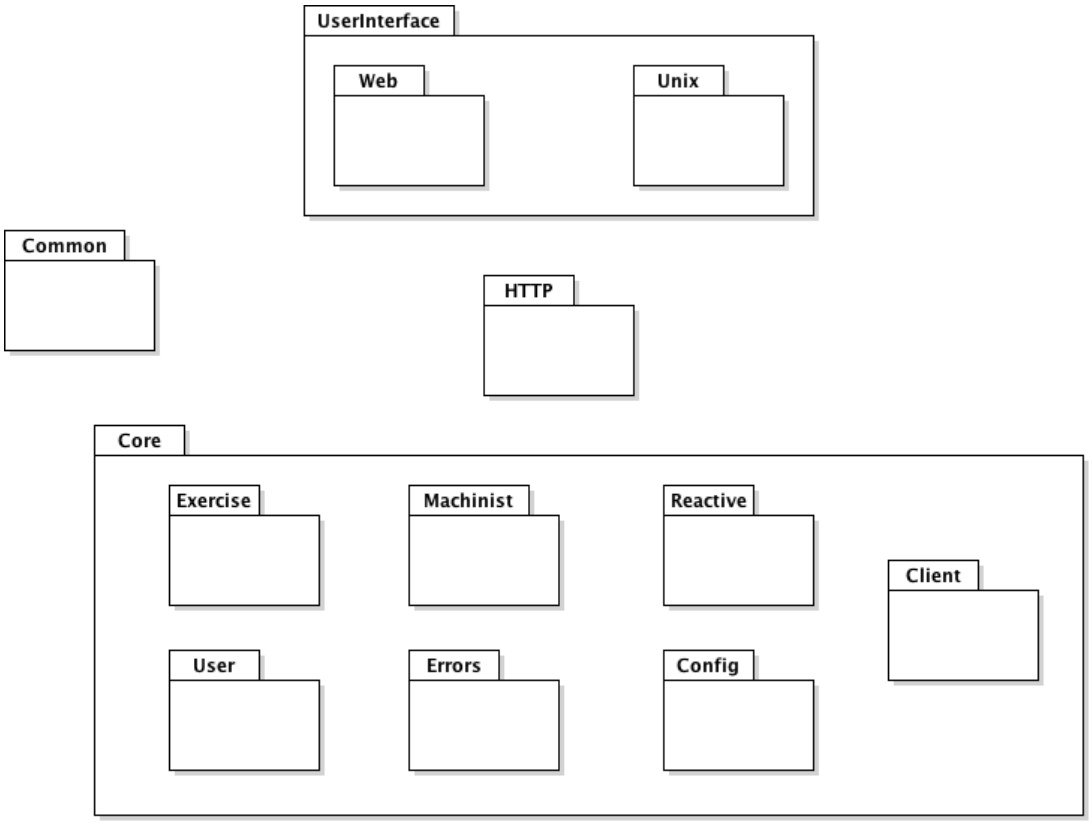

Figure 2.1: Diagram package : Overview

2.2 User Interface

This package holds every interface for the user.

2.2.1 Web

This package holds units which define the Web Interface

2.2.2 Unix

This package holds units which define a Shell Interface for Unix user.

2.3 HTTP

This package holds the web services which allow the user interface to communicate with the core.

2.4 Core

This package holds the logical platform units.

2.4.1 Exercise

This package holds units which define exercise entities.

2.4.2 Machinist

This package holds units which define machinist entities.

2.4.3 Reactive

This package holds units which define reactive entities.

2.4.4 User

This package holds units which define user entities.

2.4.5 Client

This package holds units which define client.

2.4.6 Errors

This package holds units which define errors entities.

2.5 Common

This package holds every units which are used in each package.

Chapter 3

Diagram class

3.1 User Interface

3.1.1 Web

3.2 HTTP

3.3 Core

3.3.1 Exercise

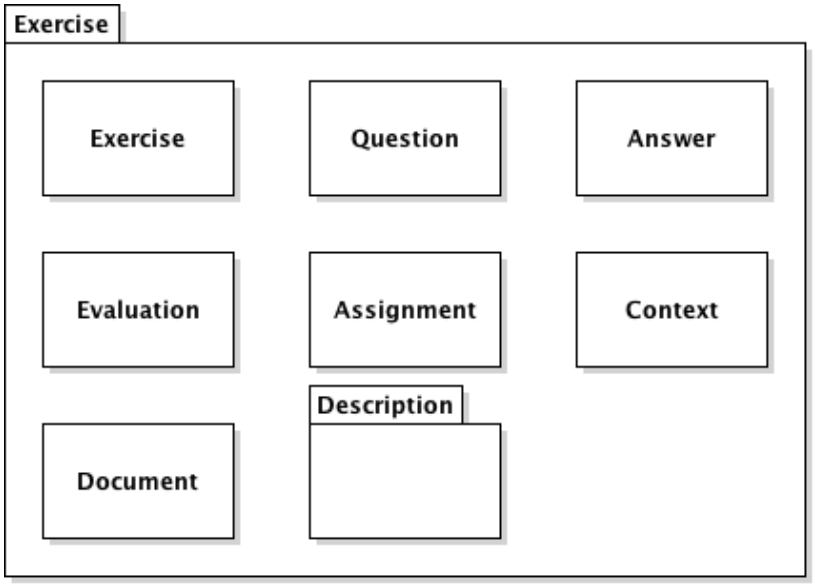

Figure 3.1: Exercise diagram class : Overview

3.3.2 Machinist

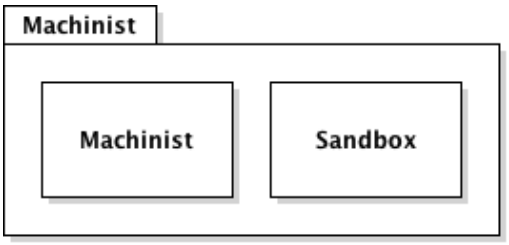

Figure 3.2: Machinist diagram class : Overview

3.3.3 Reactive

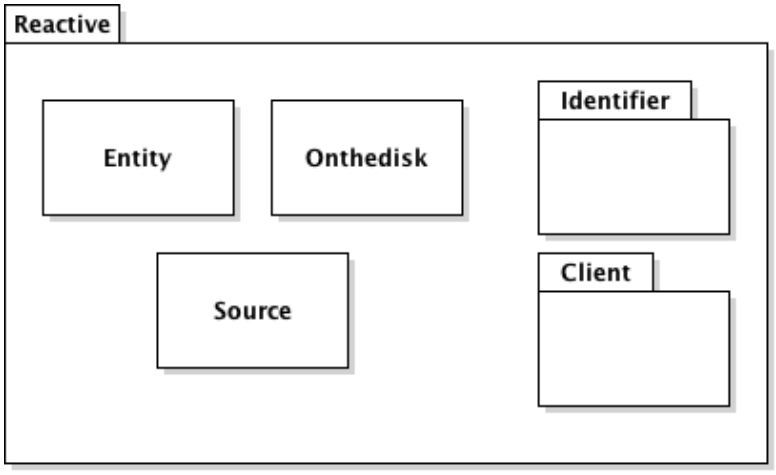

Figure 3.3: Reactive diagram class : Overview

3.3.4 Reactive : Identifier

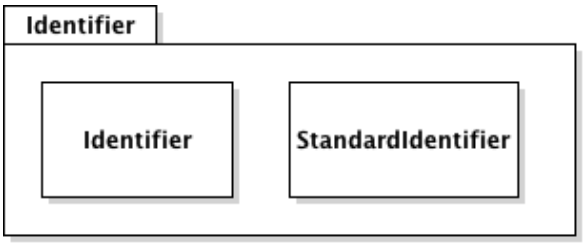

Figure 3.4: Reactive diagram class : Identifier

3.3.5 Reactive : Client

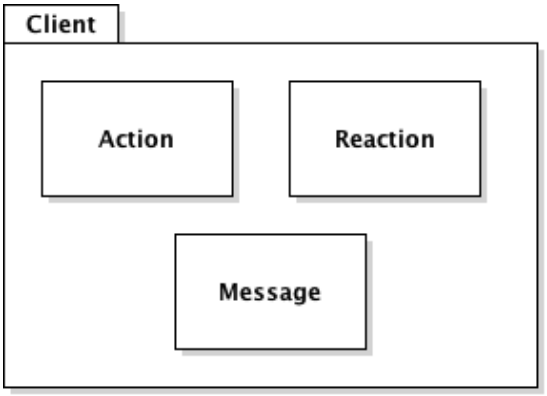

Figure 3.5: Reactive diagram class : Client

3.3.6 User

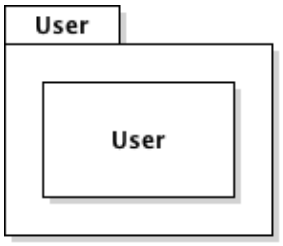

Figure 3.6: User diagram class : Overview

3.3.7 Config

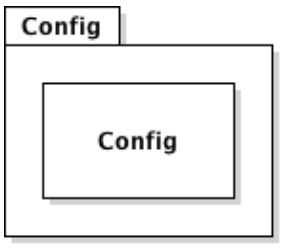

Figure 3.7: Config diagram class : Overview

3.3.8 Errors

3.3.9 Common

3.4 Common

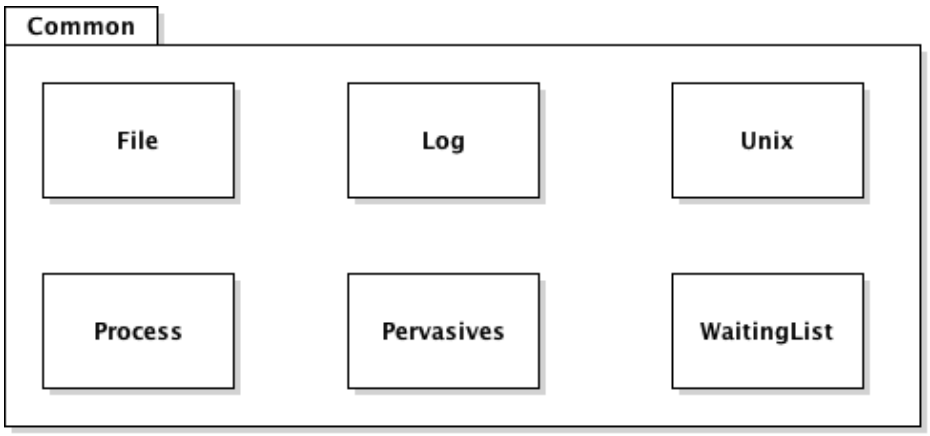

Figure 3.8: Common diagram class : Overview

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