Model

Package in package "

Model
Version Phase 1.0 Proposed lapor created on 2/27/2021. Last modified 2/27/2021

Analyse

Package in package 'Model'

Analyse Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 9/4/2018

Cas d'utilisation

Package in package 'Analyse'

Cas d'utilisation Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 9/4/2018

Diagramme de contexte diagram

Use Case diagram in package 'Cas d'utilisation'

 $\label{eq:Diagramme} Diagramme de contexte \\ Version 1.0 \\ francois created on 9/4/2018. Last modified 2/3/2021$

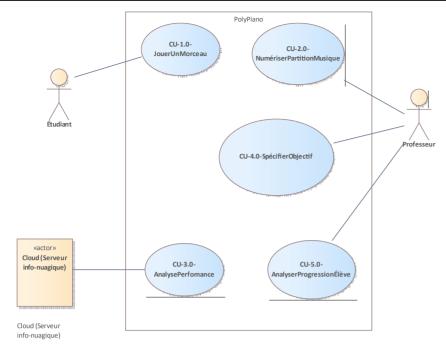
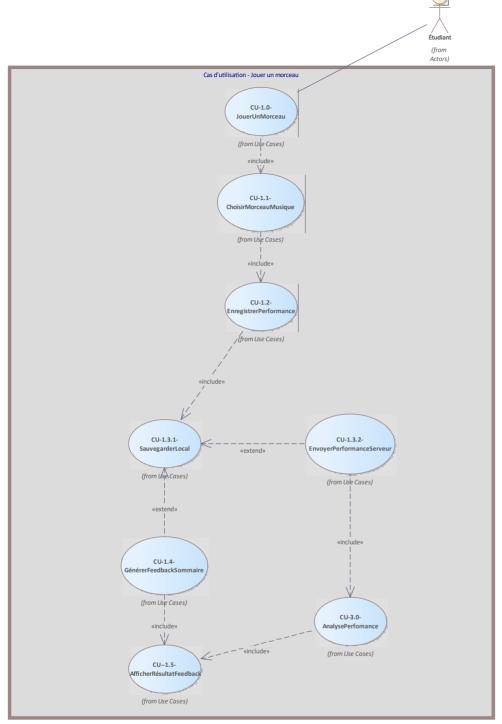


Figure 1: Diagramme de contexte

Diagramme des cas d'utilisation CU-1 diagram

Use Case diagram in package 'Cas d'utilisation'

Diagramme des cas d'utilisation CU-1 Version 1.0 lapor created on 2/3/2021. Last modified 2/3/2021



Page 3 of 30

Figure 2: Diagramme des cas d'utilisation CU-1

Diagramme des cas d'utilisation CU-2 diagram

Use Case diagram in package 'Cas d'utilisation'

Diagramme des cas d'utilisation CU-2 Version 1.0 lapor created on 2/3/2021. Last modified 2/13/2021

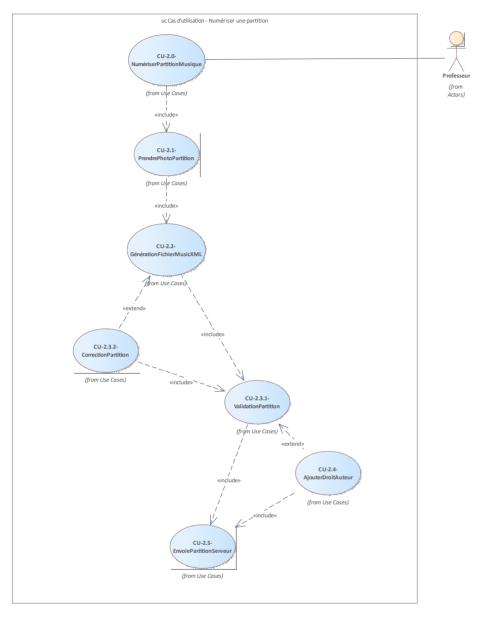


Figure 3: Diagramme des cas d'utilisation CU-2

Diagramme des cas d'utilisation CU-3 diagram

Use Case diagram in package 'Cas d'utilisation'

 $\label{eq:Diagramme} Diagramme \ des \ cas \ d'utilisation \ CU-3 \\ Version \ 1.0 \\ lapor \ created \ on \ 2/3/2021. \ Last \ modified \ 2/13/2021$

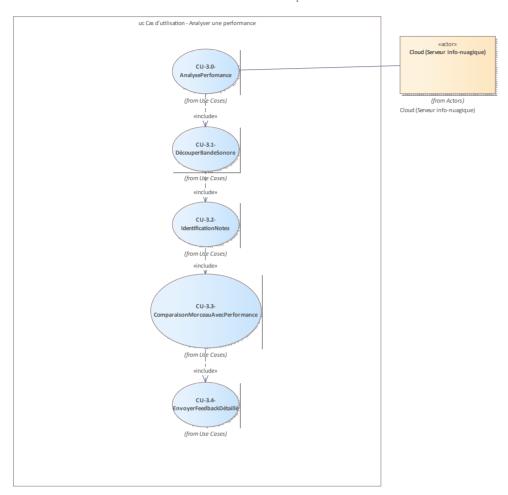


Figure 4: Diagramme des cas d'utilisation CU-3

Actors

Package in package 'Cas d'utilisation'

Contains Actors that represent the roles that users play with respect to the system.

Use Cases

Package in package 'Cas d'utilisation'

Contains Use Case that represent the value or goal that the Actors wish to achieve.

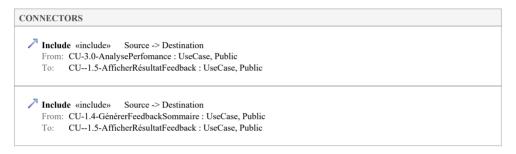
Use Cases
Version 1.0 Phase 1.0 Proposed
francois created on 9/4/2018. Last modified 2/3/2021

SCENARIOS Basic Path. Basic Path

CU--1.5-AfficherRésultatFeedback

UseCase in package 'Use Cases'

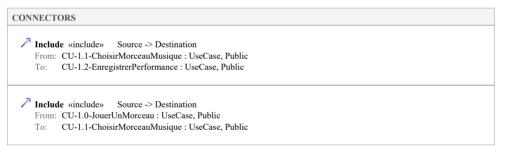
CU--1.5-AfficherRésultatFeedback Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021



CU-1.1-ChoisirMorceauMusique

UseCase in package 'Use Cases'

CU-1.1-ChoisirMorceauMusique Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021



CU-1.2-EnregistrerPerformance

UseCase in package 'Use Cases'

CU-1.2-EnregistrerPerformance Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Include «include» Source -> Destination

From: CU-1.2-EnregistrerPerformance: UseCase, Public To: CU-1.3.1-SauvegarderLocal: UseCase, Public

✓ Include «include» Source -> Destination

From: CU-1.1-ChoisirMorceauMusique: UseCase, Public To: CU-1.2-EnregistrerPerformance : UseCase, Public

CU-1.3.1-SauvegarderLocal

UseCase in package 'Use Cases'

CU-1.3.1-SauvegarderLocal Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Extend «extend» Source -> Destination

From: CU-1.4-GénérerFeedbackSommaire: UseCase, Public ${\tt To:} \hspace{0.5cm} {\tt CU-1.3.1-SauvegarderLocal: Use Case, Public}$



Extend «extend» Source -> Destination

From: CU-1.3.2-EnvoyerPerformanceServeur: UseCase, Public

To: CU-1.3.1-SauvegarderLocal : UseCase, Public



Include «include» Source -> Destination

From: CU-1.2-EnregistrerPerformance: UseCase, Public To: CU-1.3.1-SauvegarderLocal: UseCase, Public

CU-1.3.2-EnvoyerPerformanceServeur

UseCase in package 'Use Cases'

CU-1.3.2-EnvoyerPerformanceServeur Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS

CONNECTORS

Extend «extend» Source -> Destination

From: CU-1.3.2-EnvoyerPerformanceServeur: UseCase, Public

CU-1.3.1-SauvegarderLocal : UseCase, Public

✓ Include «include» Source -> Destination

From: CU-1.3.2-EnvoyerPerformanceServeur: UseCase, Public

CU-3.0-AnalysePerfomance : UseCase, Public

CU-1.4-GénérerFeedbackSommaire

UseCase in package 'Use Cases'

CU-1.4-GénérerFeedbackSommaire Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Extend «extend» Source -> Destination

From: CU-1.4-GénérerFeedbackSommaire: UseCase, Public To: CU-1.3.1-SauvegarderLocal : UseCase, Public



Include «include» Source → Destination

From: CU-1.4-GénérerFeedbackSommaire: UseCase, Public CU--1.5-AfficherRésultatFeedback : UseCase, Public

CU-2.1-PrendrePhotoPartition

UseCase in package 'Use Cases'

CU-2.1-PrendrePhotoPartition Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Include «include» Source -> Destination

From: CU-2.1-PrendrePhotoPartition: UseCase, Public To: CU-2.2-GénérationFichierMusicXML : UseCase, Public



✓ Include «include» Source -> Destination

From: CU-2.0-NumériserPartitionMusique: UseCase, Public To: CU-2.1-PrendrePhotoPartition: UseCase, Public

CU-2.2-GénérationFichierMusicXML

UseCase in package 'Use Cases'

> CU-2.2-GénérationFichierMusicXML Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS

✓ Include «include» Source -> Destination

From: CU-2.2-GénérationFichierMusicXML: UseCase, Public To: CU-2.3.1-ValidationPartition : UseCase, Public

Include «include» Source -> Destination

From: CU-2.1-PrendrePhotoPartition: UseCase, Public CU-2.2-GénérationFichierMusicXML : UseCase, Public

Extend «extend» Source -> Destination

From: CU-2.3.2-CorrectionPartition: UseCase, Public CU-2.2-GénérationFichierMusicXML : UseCase, Public

CU-2.3.1-ValidationPartition

UseCase in package 'Use Cases'

CU-2.3.1-ValidationPartition Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS

Include «include» Source -> Destination

From: CU-2.3.1-ValidationPartition: UseCase, Public CU-2.5-EnvoiePartitionServeur : UseCase, Public

Extend «extend» Source -> Destination

From: CU-2.4-AjouterDroitAuteur: UseCase, Public CU-2.3.1-ValidationPartition : UseCase, Public

✓ Include «include» Source → Destination

From: CU-2.3.2-CorrectionPartition: UseCase, Public CU-2.3.1-ValidationPartition: UseCase, Public

✓ Include «include» Source -> Destination

From: CU-2.2-GénérationFichierMusicXML: UseCase, Public CU-2.3.1-ValidationPartition: UseCase, Public

CU-2.3.2-CorrectionPartition

UseCase in package 'Use Cases'

CU-2.3.2-CorrectionPartition Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Include «include» Source -> Destination

From: CU-2.3.2-CorrectionPartition: UseCase, Public To: CU-2.3.1-ValidationPartition: UseCase, Public

Extend «extend» Source -> Destination

From: CU-2.3.2-CorrectionPartition: UseCase, Public To: CU-2.2-GénérationFichierMusicXML : UseCase, Public

CU-2.4-AjouterDroitAuteur

UseCase in package 'Use Cases'

CU-2.4-AjouterDroitAuteur Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Extend «extend» Source -> Destination

From: CU-2.4-AjouterDroitAuteur: UseCase, Public To: CU-2.3.1-ValidationPartition: UseCase, Public



✓ Include «include» Source -> Destination

From: CU-2.4-AjouterDroitAuteur: UseCase, Public To: CU-2.5-EnvoiePartitionServeur : UseCase, Public

CU-2.5-EnvoiePartitionServeur

UseCase in package 'Use Cases'

CU-2.5-EnvoiePartitionServeur Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Include «include» Source -> Destination

From: CU-2.3.1-ValidationPartition: UseCase, Public To: CU-2.5-EnvoiePartitionServeur : UseCase, Public



✓ Include «include» Source -> Destination

From: CU-2.4-AjouterDroitAuteur: UseCase, Public To: CU-2.5-EnvoiePartitionServeur : UseCase, Public

CU-3.0-AnalysePerfomance

UseCase in package 'Use Cases'

L'IA analyse la performance de l'étudiant et génère un feedback automatiquement

Étudiant: Recevoir un feedback instantanément en dérangeant personne. Professeur: Économiser du temps pour analyser la performance de ses étudiants

> CU-3.0-AnalysePerfomance Version 1.0 Phase 1.0 Proposed lapor created on 1/31/2021. Last modified 2/13/2021

CONNECTORS

Include «include»

Source -> Destination

From: CU-3.0-AnalysePerfomance: UseCase, Public

To: CU--1.5-AfficherRésultatFeedback : UseCase, Public

Include «include» Source -> Destination

From: CU-3.0-AnalysePerfomance: UseCase, Public To: CU-3.1-DécouperBandeSonore : UseCase, Public

Association Unspecified

From: Cloud (Serveur info-nuagique) : Actor, Public To: CU-3.0-AnalysePerfomance : UseCase, Public

Include «include» Source -> Destination

From: CU-1.3.2-EnvoyerPerformanceServeur: UseCase, Public

To: CU-3.0-AnalysePerfomance : UseCase, Public

PRE-CONDITION CONSTRAINT

Avoir la bande sonnore relié à la requête

[Approved, weight is 0]

SCENARIOS

- Basic Path. Analyse de la performance
- 1. Attendre de recevoir une requête d'analyse

Uses:

2. Cherche la bande sonore dans la base de donnée

Uses:

3. Séparer chaque note dans l'enregistrement

4. Identifier les notes jouées

Uses:

SCENARIOS

5. Comparer les notes avec les notes de la partition

6. Comparer la performance de l'étudiant à ses objectifs

7. Générer une rétroaction selon l'analyse

8. Envoyer la rétroaction à l'utilisateur

Uses:

POST CONDITION CONSTRAINT

% L'utilisateur reçois son feedback

[Approved, weight is 0]

CU-3.1-DécouperBandeSonore

UseCase in package 'Use Cases'

CU-3.1-DécouperBandeSonore Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



✓ Include «include» Source -> Destination

From: CU-3.1-DécouperBandeSonore : UseCase, Public To: CU-3.2-IdentificationNotes: UseCase, Public



✓ Include «include» Source -> Destination

From: CU-3.0-AnalysePerfomance: UseCase, Public To: CU-3.1-DécouperBandeSonore : UseCase, Public

CU-3.2-IdentificationNotes

UseCase in package 'Use Cases'

CU-3.2-IdentificationNotes Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS

CONNECTORS

Include «include» Source -> Destination

From: CU-3.2-IdentificationNotes: UseCase, Public

CU-3.3-ComparaisonMorceauAvecPerformance : UseCase, Public

✓ Include «include» Source -> Destination

From: CU-3.1-DécouperBandeSonore : UseCase, Public CU-3.2-IdentificationNotes: UseCase, Public

CU-3.3-ComparaisonMorceauAvecPerformance

UseCase in package 'Use Cases'

CU-3.3-ComparaisonMorceauAvecPerformance Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



✓ Include «include» Source -> Destination

From: CU-3.3-ComparaisonMorceauAvecPerformance: UseCase, Public

CU-3.4-EnvoyerFeedbackDétaillé : UseCase, Public

Include «include» Source → Destination

From: CU-3.2-IdentificationNotes: UseCase, Public

CU-3.3-ComparaisonMorceauAvecPerformance : UseCase, Public

CU-3.4-EnvoyerFeedbackDétaillé

UseCase in package 'Use Cases'

CU-3.4-EnvoyerFeedbackDétaillé Version 1.0 Phase 1.0 Proposed lapor created on 2/3/2021. Last modified 2/3/2021

CONNECTORS



Include «include» Source -> Destination

From: CU-3.3-ComparaisonMorceauAvecPerformance: UseCase, Public

To: CU-3.4-EnvoyerFeedbackDétaillé: UseCase, Public

CU-4.0-SpécifierObjectif

UseCase in package 'Use Cases'

Spécifier les objectifs d'apprentissage pour un étudiant ou plusieurs étudiants

CU-4.0-SpécifierObjectif Version 1.0 Phase 1.0 Proposed lapor created on 1/31/2021. Last modified 2/3/2021

CONNECTORS

Association Unspecified

From: CU-4.0-SpécifierObjectif: UseCase, Public

To: Professeur : Actor, Public

CU-5.0-AnalyserProgressionÉlève

UseCase in package 'Use Cases'

Regarder les différents rapport créer par l'application pour analyser la progression de ses élèves.

CU-5.0-AnalyserProgressionÉlève Version 1.0 Phase 1.0 Proposed lapor created on 1/31/2021. Last modified 2/3/2021

CONNECTORS



Association Unspecified

From: Professeur : Actor, Public

To: CU-5.0-AnalyserProgressionÉlève : UseCase, Public

CU-1.0-JouerUnMorceau

UseCase in package 'Use Cases'

L'étudiant enregistre sa performance au piano

Étudiant: pour recevoir un feedback et s'améliorer Professeur: pour pouvoir suivre la progression de ses élèves

> CU-1.0-JouerUnMorceau Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 2/13/2021

CONNECTORS



✓ Include «include» Source -> Destination From: CU-1.0-JouerUnMorceau: UseCase, Public

CU-1.1-ChoisirMorceauMusique : UseCase, Public



Association Unspecified

From: Étudiant : Actor, Public

CU-1.0-JouerUnMorceau : UseCase, Public

PRE-CONDITION CONSTRAINT

The professeur à ajouté au moins une partition

[Approved, weight is 0]

SCENARIOS
Basic Path. Scénario avec connexion internet
1. Appuyer sur le boutton jouer Uses:
2. Afficher le menu des différentes partitions disponible Uses:
3. Sélectionner une partition à jouer Uses:
4. Afficher la partition et débuter l'enregistrement Uses:
5. Jouer le morceaux Uses:
6. Arrêter l'enregistrement à la fin de la performance Uses:
7. Sauvegarder la performance en local Uses:
8. Envoyer la performance au serveur Uses:
Alternate: 8a. Scénario sans connexion internet 9. Analyser de la performance par l'IA Uses:
10. Afficher le feedback Uses:
Alternate. Scénario sans connexion internet
1. Générer un feedback sommaire Uses:

27 February, 2021

[Approved, weight is 0]

Use Case Details

Taire partie d'un cours

SCENARIOS

2. retourner à l'étape 10

Uses:

POST CONDITION CONSTRAINT

h L'étudiant reçoit son feedback

[Approved, weight is 0]

CU-2.0-NumériserPartitionMusique

UseCase in package 'Use Cases'

Prendre une photo d'une partition pour la convertir dans l'application

Étudiant: Avoir une variété différente de pièce à jouer Professeur: Proposer de nouveaux défis aux étudiants

CU-2.0-NumériserPartitionMusique Version 1.0 Phase 1.0 Proposed françois created on 9/4/2018. Last modified 2/13/2021

CONNECTORS

Include «include» Source -> Destination

From: CU-2.0-NumériserPartitionMusique: UseCase, Public CU-2.1-PrendrePhotoPartition: UseCase, Public

Association Unspecified From: Professeur : Actor, Public

CU-2.0-NumériserPartitionMusique : UseCase, Public

PRE-CONDITION CONSTRAINT

D'utilisateur est connecté en tant que professeur

[Approved, weight is 0]

SCENARIOS

Basic Path. Numérier une partition

1. Appuyer sur le boutton "Ajouter une partition"

2. Ouvrir une fenêtre avec la caméra

Jse Case Details	27 February, 202
SCENARIOS	
Uses:	
3. Prendre une photo Uses:	
4. Afficher la photo prise Uses:	
5. Confirmer ou reprendre une nouvelle photo Uses:	
6. Convertir la photo en format "MusicXML" Uses:	
7. Afficher la partition convertie et demander la validation Uses:	
8. Valider la conversion de la partition Uses:	
Alternate: δa. Correction de la partition 9. Afficher l'option des droits d'auteur Uses:	
10. Appuyer sur l'option de sauter cette étape Uses:	
Alternate: 10a. Ajout des droits d'auteur 11. Envoyer la partition au serveur Uses:	
Alternate. Correction de la partition	
Appuyer sur l'option de correction de la partition Uses:	
2. Afficher une interface d'édition Uses:	
3. Correction de la partition Uses:	
4. Enregistrer les modifications Uses:	

Use Case Details	27 February, 2021
SCENARIOS	

Alternate. Ajout des droits d'auteur

1. Appuyer sur l'option des droits d'auteurs $$\rm U_{Ses}:$

2. Afficher l'interface d'ajout des droits d'auteurs

3. Ajouter l'information demandé

Uses:

POST CONDITION CONSTRAINT

😘 La partition est ajouté dans le système

[Approved, weight is 0]

Diagramme de concept

Package in package 'Analyse'

Diagramme de concept Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 9/4/2018

Diagramme de concept diagram

Class diagram in package 'Diagramme de concept'

Diagramme de concept Version 1.0 françois created on 9/4/2018. Last modified 2/17/2021

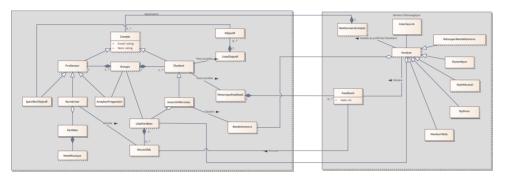


Figure 5: Diagramme de concept

Association

Association in package 'Diagramme de concept'

Association
Version 1.0 Phase 1.0 Proposed
lapor created on 2/17/2021. Last modified 2/17/2021

PrimitiveType1

PrimitiveType in package 'Diagramme de concept'

PrimitiveType1 Version 1.0 Phase 1.0 Proposed lapor created on 2/17/2021. Last modified 2/17/2021

Composantes

Package in package 'Model'

Composantes Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 9/4/2018

Conception

Package in package 'Model'

Conception
Version 1.0 Phase 1.0 Proposed
francois created on 9/4/2018. Last modified 9/4/2018

Diagramme d'interaction

Package in package 'Conception'

Diagramme d'interaction Version 1.0 Phase 1.0 Proposed lapor created on 2/27/2021. Last modified 2/27/2021

Diagramme d'interaction diagram

Interaction diagram in package 'Diagramme d'interaction'

 $\label{eq:Diagramme d'interaction} Diagramme d'interaction \\ Version 1.0 \\ lapor created on 2/27/2021. Last modified 2/27/2021 \\$

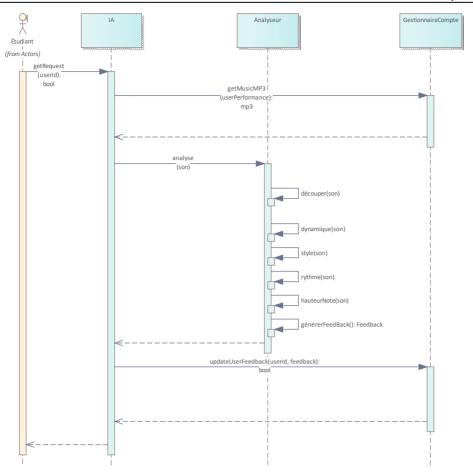


Figure 6: Diagramme d'interaction

Diagramme de classes

Package in package 'Conception'

Diagramme de classes Version 1.0 Phase 1.0 Proposed françois created on 9/4/2018. Last modified 9/4/2018

Diagramme de classe diagram

Class diagram in package 'Diagramme de classes'

Diagramme de classe Version 1.0 françois created on 9/4/2018. Last modified 2/27/2021

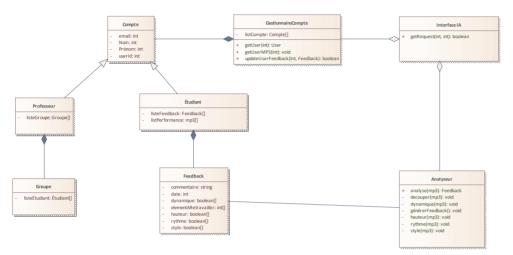


Figure 7: Diagramme de classe

Diagramme de classes Grasp diagram

Class diagram in package 'Diagramme de classes'

Diagramme de classes Grasp Version 1.0 lapor created on 2/27/2021. Last modified 2/27/2021

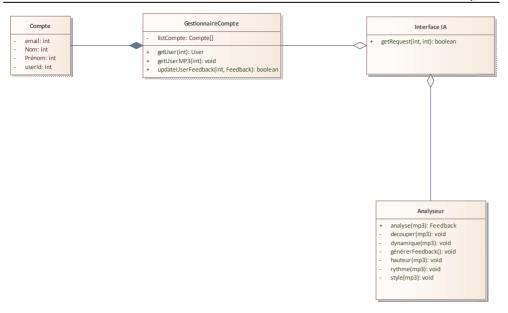


Figure 8: Diagramme de classes Grasp

Diagramme de paquetage

Package in package 'Conception'

Diagramme de paquetage Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 9/4/2018

Diagramme de paquetage diagram

Package diagram in package 'Diagramme de paquetage'

Diagramme de paquetage Version 1.0 françois created on 9/4/2018. Last modified 9/26/2018



Figure 9: Diagramme de paquetage

PackageA diagram

Package diagram in package 'Diagramme de paquetage'

PackageA Version 1.0 francois created on 9/26/2018. Last modified 9/26/2018

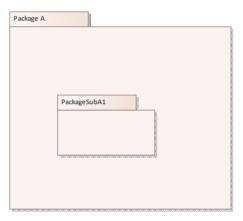


Figure 10: PackageA

PackageSubA1

Package in package 'Diagramme de paquetage'

PackageSubA1 Version 1.0 Phase 1.0 Proposed francois created on 9/26/2018. Last modified 9/26/2018

Package A

Package in package 'Diagramme de paquetage'

Notes that describe Package A.

Package A Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 9/4/2018

Package B

Package in package 'Diagramme de paquetage'

Notes that describe Package B.

Package B Version 1.0 Phase 1.0 Proposed francois created on 9/4/2018. Last modified 9/4/2018

Déploiement

Package in package 'Model'

Déploiement Version 1.0 Phase 1.0 Proposed françois created on 9/4/2018. Last modified 9/4/2018