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Section II

Operation Contracts of the “Alouer” System

Work Presented to

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18th of October 2024

<i>Revision Number</i>	<i>Date</i>	<i>Description of Changes</i>	<i>Author / Editor</i>	<i>Communication of Change</i>
1.0	2024-10-16	Initial version	Nirav Patel Laurenz Marius Gomez	Internal Announcement
1.1	2024-10-22	Refactored system sequence diagrams	Nirav Patel	Internal Announcement

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Administrator Use Cases

Enter Organization Offerings

Operation Contract for requestLessonCreation()

Contract CO1	requestLessonCreation
Operation	<code>requestLessonCreation()</code>
Cross References	Use Case: Enter Organization Offerings
Preconditions	<ol style="list-style-type: none">1. The administrator is logged into the system.2. The administrator has access to the lesson creation functionality.
Postconditions	<ol style="list-style-type: none">1. The system is prepared to receive information about a new lesson.

Operation Contract for selectLocation(location)

Contract CO2	selectLocation
Operation	<code>selectLocation(locationId: int)</code>
Cross References	Use Case: Enter Organization Offerings
Preconditions	<ol style="list-style-type: none">1. The administrator is logged into the system.2. The administrator has accessed the lesson creation interface and is viewing available locations.
Postconditions	<ol style="list-style-type: none">1. The selected location is stored for the lesson being created.2. (Associations): A relationship is established between the selected location and the upcoming lesson.

Operation Contract for enterLessonDetails(title, lessonType, startTime, endTime, schedule)

Contract CO3	enterLessonDetails
Operation	<pre>enterLessonDetails (title: String, lessonType: LessonType, startTime: Date, endTime: Date schedule: List<DayOfWeek>)</pre>

Cross References	Use Case: Enter Organization Offerings
Preconditions	<ol style="list-style-type: none"> 1. The administrator has selected a location for the lesson. 2. The administrator is ready to input lesson details.
Postconditions	<ol style="list-style-type: none"> 1. A new lesson instance is created in the system. 2. (Instance Creation): A new lesson object is created and stored in the database. 3. (Attribute Modification): The attributes of the lesson (title, type, start and end times, schedule) are set based on the administrator's input.

Delete User Account

Operation Contract for requestUserDeletion()

Contract CO4	requestUserDeletion
Operation	requestUserList()
Cross References	Use Case: Delete User Account
Preconditions	<ol style="list-style-type: none"> 1. The administrator is logged into the system. 2. The administrator has access to user management functionalities
Postconditions	<ol style="list-style-type: none"> 1. The system is ready to display a list of users eligible for deletion.

Operation Contract for specifyUserType(userType)

Contract CO5	selectUserToDelete
Operation	specifyUserType(userType: UserType)
Cross References	Use Case: Delete User Account
Preconditions	<ol style="list-style-type: none"> 1. The administrator has initiated the user deletion process. 2. The user type (Instructor or Client) is recognized by the system.
Postconditions	<ol style="list-style-type: none"> 1. The system filters and displays users of the specified type for deletion. 2. (Associations): A relationship is established between the specified user type and the displayed user list.

Operation Contract for inputId(id)

Contract CO6	inputId
Operation	inputId(id: int)
Cross References	Use Case: Delete User Account
Preconditions	<ol style="list-style-type: none">1. The administrator has selected a user type and the corresponding list is displayed.2. The administrator is prompted to input the ID of the user to be deleted.
Postconditions	<ol style="list-style-type: none">1. The user ID is stored for further processing.2. (Attribute Modification): The user ID attribute to be deleted is modified to reflect the ID entered by the administrator.

Operation Contract for confirmDeletion()

Contract CO6	confirmDeletion
Operation	confirmDeletion()
Cross References	Use Case: Delete User Account
Preconditions	<ol style="list-style-type: none">1. The administrator has input a valid user ID.2. The system has validated the user ID and is ready for confirmation.
Postconditions	<ol style="list-style-type: none">1. The system attempts to delete the specified user from the database.2. (Instance Creation or Deletion): The specified user account is deleted from the system, if the operation is successful.

Instructor Use Cases

Register as Instructor

Operation Contract for requestRegister()

Contract CO7	requestRegister
Operation	requestRegister()
Cross References	Use Case: Register as Instructor
Preconditions	<ol style="list-style-type: none">1. The user is on the registration page.2. The user has not yet registered as an instructor.
Postconditions	<ol style="list-style-type: none">1. The system prompts the user to fill out the registration form.2. (Associations): An association is established between the user and the registration process, indicating the user is in the process of registering.

Operation Contract for inputCredentials(firstName, lastName, email, password)

Contract CO8	inputCredentials
Operation	<pre>inputCredentials (firstName: String, lastName: String, email: String, password: String)</pre>
Cross References	Use Case: Register as Instructor
Preconditions	<ol style="list-style-type: none">1. The user has initiated the registration process.2. The registration form is displayed, prompting the user for their credentials.
Postconditions	<ol style="list-style-type: none">1. The credentials are validated and stored temporarily for processing.2. (Attribute Modification): The attributes (firstName, lastName, email, password) are modified to reflect the values entered by the user.

Accept Offering

Operation Contract for requestLessonAccepting()

Contract CO9	requestLessonAccepting
Operation	requestLessonAccepting()
Cross References	Use Case: Accept Offering
Preconditions	<ol style="list-style-type: none">1. The instructor is logged in to the system.2. The instructor has access to lesson offerings.
Postconditions	<ol style="list-style-type: none">1. The system displays available locations for lesson offerings.2. (Associations): An association is established between the instructor and the lesson offerings, indicating the instructor is in the process of accepting a lesson.

Operation Contract for selectLocation(locationId)

Contract CO10	selectLocation
Operation	selectLocation(locationId: int)
Cross References	Use Case: Accept Offering
Preconditions	<ol style="list-style-type: none">1. The instructor has requested lesson accepting.2. The list of locations is displayed for selection.
Postconditions	<ol style="list-style-type: none">1. The system retrieves and displays lessons available for the selected location.2. (Associations): An association is established between the selected location and the lessons offered at that location.

Operation Contract for selectLesson(lessonId)

Contract CO11	selectLesson
Operation	SelectLesson(lessonId: int)
Cross References	Use Case: Accept Offering
Preconditions	<ol style="list-style-type: none">1. The instructor has selected a location.2. The list of lessons for the chosen location is displayed.
Postconditions	<ol style="list-style-type: none">1. The system retrieves the selected lesson details and prepares for instructor assignment.2. (Instance Creation or Deletion): A new instance may be created to represent the instructor's acceptance of the lesson or to manage the assignment process.