Learning Management System Official User Guide

Application Setup

Running Backend

1. Open a terminal
2. Navigate to the backend directory
3. Within the directory, execute the command: *node server.js*

This will run the LMS' backend component on *port 3000*.

Running Backend

1. Open a terminal
2. Navigate to the frontend directory
3. Ensure that *npm* is installed on the frontend server
   a. Run `npm install` to install all the necessary packages
      ** This step only needs to be done once
4. Execute the command: `npm start` to run the frontend component on *port 3001*

Signing In

Once the system is running within a browser, you will need to sign in to make any changes.

1. Navigate to the top of the webpage
2. Input the following information:
   a. Username: `ADMIN`
   b. Password: `ADMIN`

Common Troubleshooting Problems

Here are some common issues associated with server setup:

Backside Errors on MacOS

If the backend throws an error upon startup, ensure that:

- XCode is installed and up to date

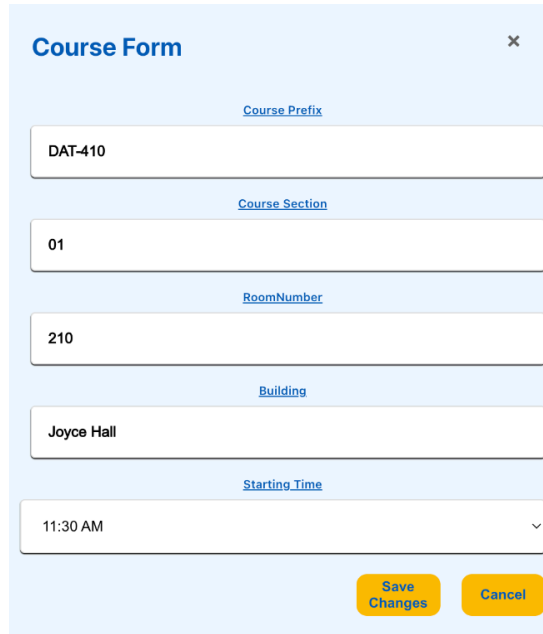If the issue persists, try reinstalling `express cors sqlite3`

Course Management

Create a Course

1. Navigate to the Course Management section
2. Click the `Add Course` button

This will produce a pop-up form

To create a course for: Section 1 of Machine Learning (DAT-410) that meets in Joyce Hall room 210 and starts at 11:30, fill out the form like so:

Course Form ✕

Course Prefix

DAT-410

Course Section

01

RoomNumber

210

Building

Joyce Hall

Starting Time

11:30 AM

Save Changes   Cancel

Update a Course

In the event that course information has changed:

1. Navigate to the Course Management Section
2. Find the course you need to update
3. Click on the `Edit` button within the `Actions` Column

A pop-up form will appear:

4. Navigate to the information that you wish to change.
5. Make your alterations.
6. Click `Save Changes` at the bottom of the form to amend your changes.

Delete a Course

In the event that a course must be removed from the system:

1. Navigate to the course you intend to delete
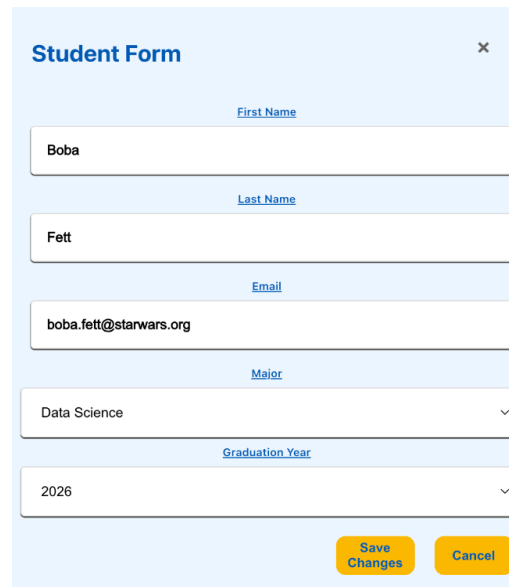2. Within the Actions column: find the `Delete` button
3. Click the `Delete` button

Student Management

Create a Student

1. Navigate to the `Student Management` section
2. Click `Add Student`

This will produce a form pop-up and allow you to enter the student's information.

To create a 2026 Data Science student named Boba Fett, with an associated email of boba.fett@starwars.org, follow this image:

Update a Student

1. Navigate to the `Student Management` section
2. Identify the Student you are looking to make changes to
3. Within that row, navigate to the `Actions` column
4. Select the `Edit` button.

By default, the values will be autofilled, allowing you to edit specific information without the need to retype all of the student's data.

5. Make the necessary changes
6. Select: `Save Changes` to append your changes to the Student Database.

Delete a Student

To remove a student who has left the school:

1. Navigate to the `Student Management` Section
2. Find the specific student within the table.
3. Navigate to the `Actions` Column for that student
4. Select delete to remove the student from the database.

Grades Management

Add Student Grades

To add associated grades to a student profile

1. Navigate to the `Student Grades Management` section.
2. Select: `Add Student's Grades`

This will create a pop-up form.

To input values for a specific student,

3. Identify the associated StudentID value.
   a. With the case of our previous student: Boba Fett's student ID is **294**
4. Identify the CourseID for the class associated with the grades.
   a. In this case, DAT-210 has a CourseID of **1**
5. Fill the associated grades following the image below:

Student Course Form   ✕

Student

294

Course

1

Quiz 1 Grade

95

Quiz 2 Grade

90

Project 1 Grade

87

Project 2 Grade

86

Final Exam Grade

92

Save Changes   Cancel

- **Note that if a student has yet to complete an assignment or an assignment has yet to be assigned:**
- Input a *0* for those grades

Student Course Form   ✕

Student

294

Course

1

Quiz 1 Grade

95

Quiz 2 Grade

90

Project 1 Grade

87

Project 2 Grade

0

Final Exam Grade

0

Save
Changes   Cancel

Update Student Grades

To update grades associated with a specific student:

1. Navigate to the `Student Grades Management` section.
2. Find the specific student you wish to edit:
3. Navigate to the `Actions` column
4. Select `Edit`

This will create a pop-up window.

5. Make the necessary changes
6. Select `Save Changes` to append your grade changes

Delete Student Grades

To remove a student's listed grades:

1. Identify the specific students-grades within the `Student Grades Management` section.
2. Navigate to that student's `Action` column
3. Select delete

Student's Courses Management

Associate a Student With a Course

To associate a specific student with a specific course:

1. Navigate to the `Student's Courses Management` section
2. Select `Add Student Courses`

This will create a pop-up window.

3. Within the pop-up window:
4. Click the `Select Student` dropdown
5. Select the desired student
6. Then click the `Select Course` dropdown
7. Select the desired course
8. Click `Save Changes` to confirm your changes

Update a Student-Course Pair

Navigate to the `Student's Courses Management` section:

1. Identify the Student-Course pair you wish to update
2. Within that row, select `Edit`

This will produce a pop-up window.

3. Make your necessary changes.
4. Click `Save Changes` to confirm your updates

Delete a Student-Course Pair

1. Navigate to the `Student's Courses Management` section
2. Identify the Student-Course pair you wish to delete
3. Within that row, select `Delete`