

Online course production, tracked end-to-end inside the LMS.

Old Dominion University's Center for Learning and Teaching (CLT) produces online courses for the university. We built a project-management LTI application for CLT director M'hammed Abdous to track the entire course-production process — integrated with ODU's Canvas LMS and existing systems.

CLIENT	REGION	ENGAGEMENT	PLATFORM
Old Dominion University	United States	Public university · Course-production LTI	LTI 1.3

Old Dominion University.

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OUTCOMES AT A GLANCE

End-to-end

production tracking

LTI

Canvas-native embed

Init → invoice

one workflow

Kanban + list

dashboards

THE BRIEF

The challenge & our solution.

THE CHALLENGE

Online course production ran across disconnected tools and spreadsheets — from agreement preparation to faculty invoices. CLT had no single place to track a course's progress, assign staff, monitor tasks, or follow payments from initiation through completion and maintenance.

THE SOLUTION

We engineered an LTI application embedded in the LMS that tracks the full course-production lifecycle: Kanban and list dashboards, project and task tracking, team and role management, questionnaires, templated email, review-and-approve flows and user activity — all integrated with Canvas LMS and CLT's existing systems.

How we delivered it.

01

LTI integration

Embedded the tool inside Canvas LMS via the LTI standard and wired it into CLT's existing systems — single sign-on, no new logins.

02

Production tracking

Modeled the full lifecycle from initiation to completion, payment and maintenance, with Kanban and list dashboards.

03

Tasks & teams

Built project and task tracking, staff assignment, team management and role-based access for CLT.

04

Review & invoicing

Added questionnaires, templated email, review-and-approve and activity tracking through to faculty invoices.

TECHNOLOGY STACK

• LTI 1.3

• Canvas LMS

• Ruby on Rails

• Kanban / Tasks

• Role-based access

• System integrations

INSIDE THE BUILD

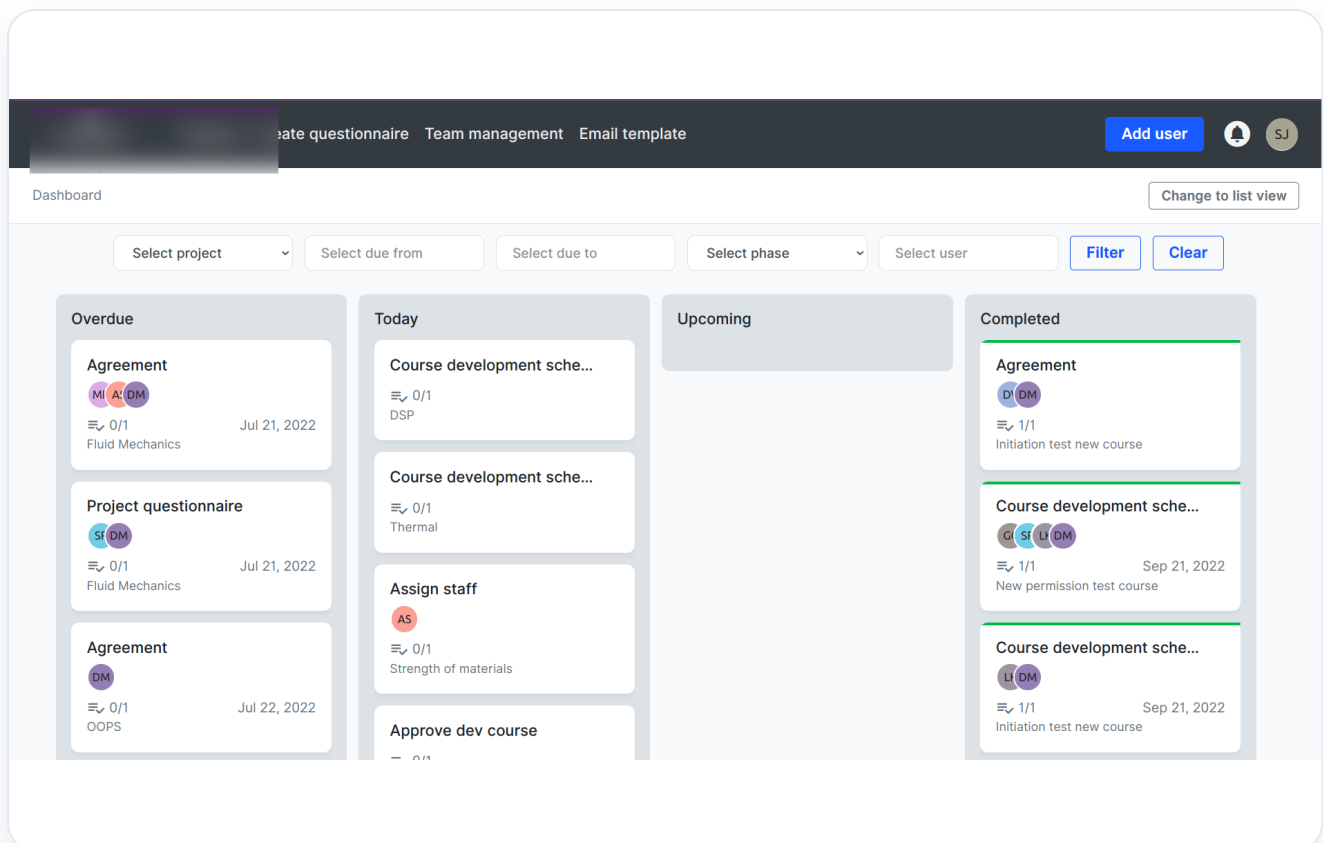
The complete walkthrough.

13 screens walk through the build end to end — the following pages cover each one.



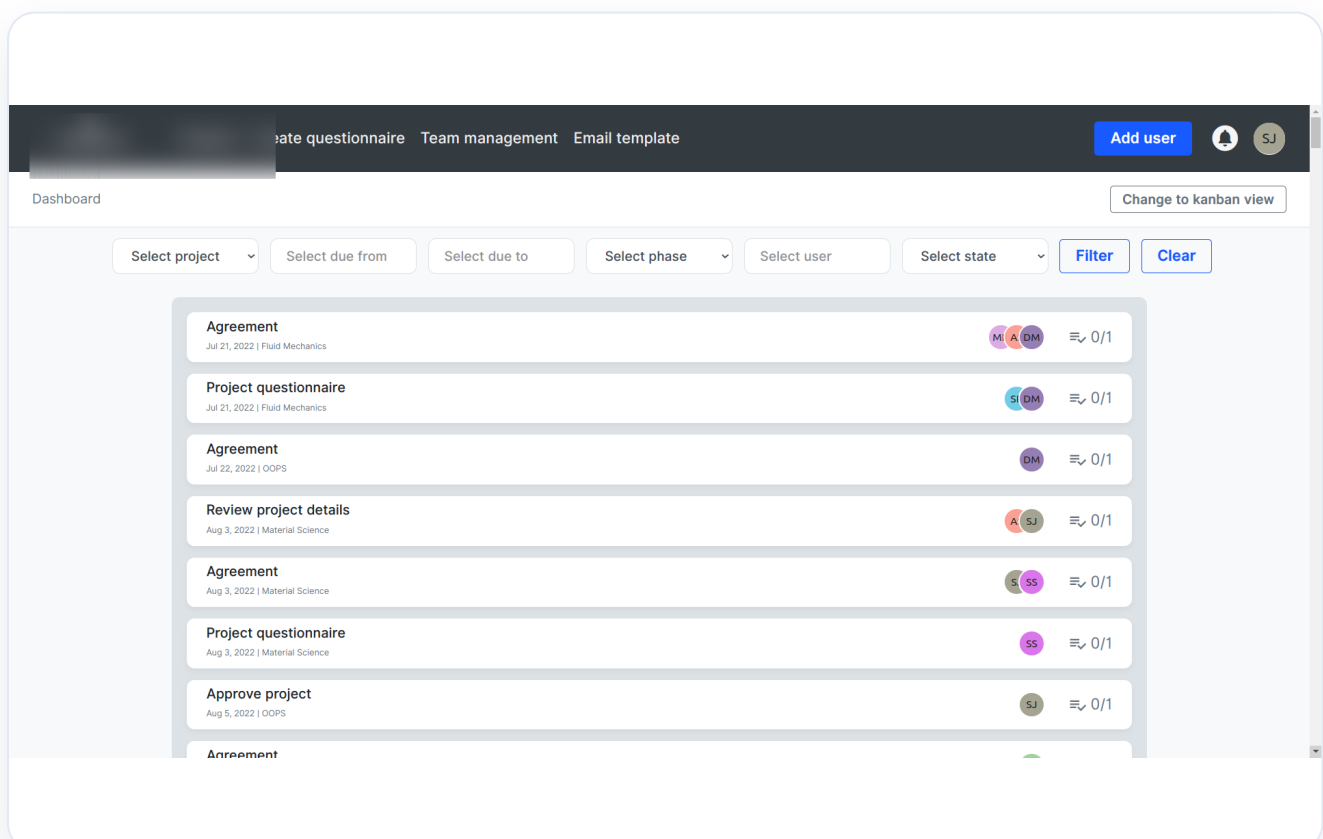
01 Dashboard — Kanban view

Course-production records move across stages on a Kanban board, so CLT can monitor work and keep every course progressing.



02 Dashboard — List view

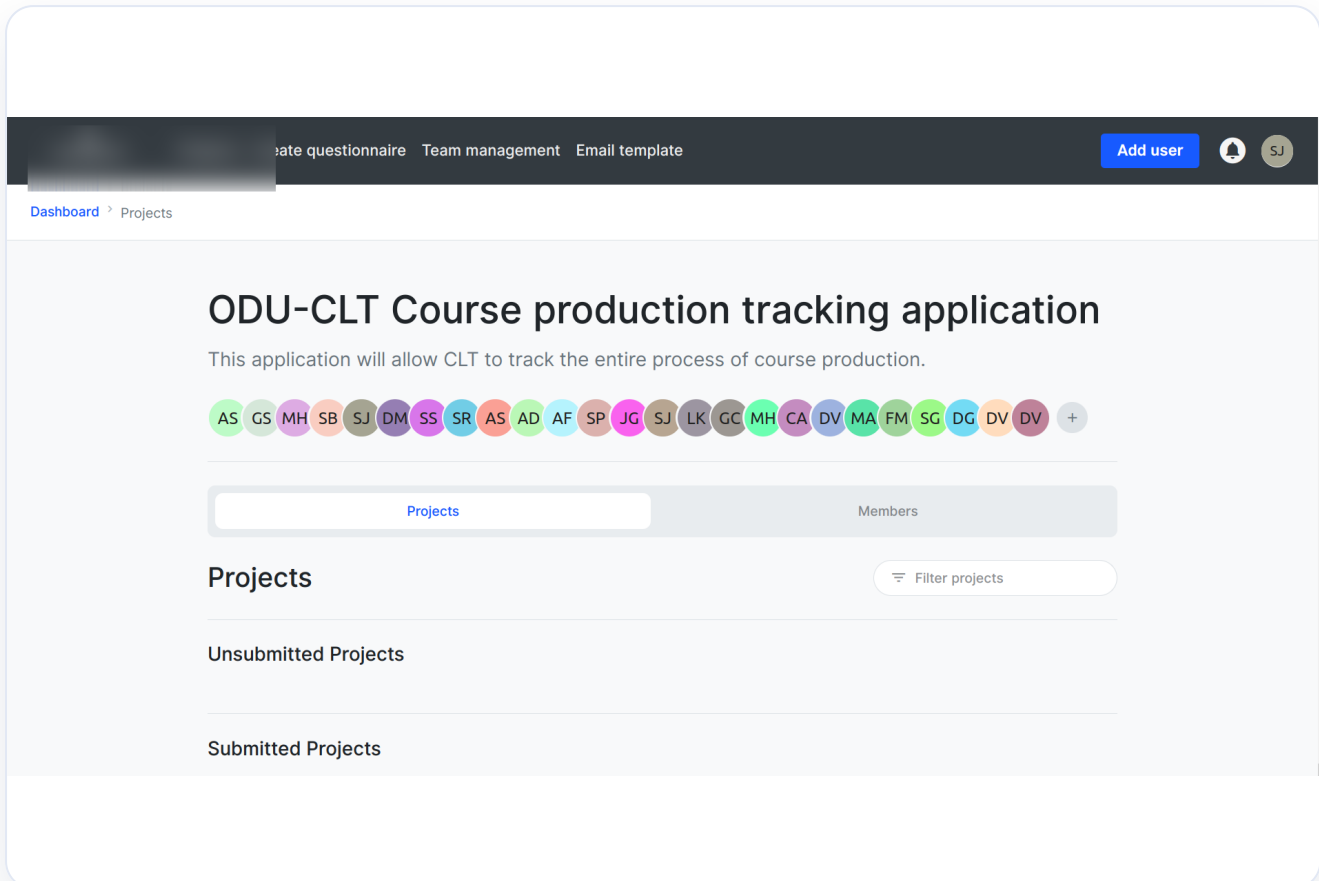
The same courses in a dense, sortable list — a different, detail-rich view of everything in production.



03

Projects list

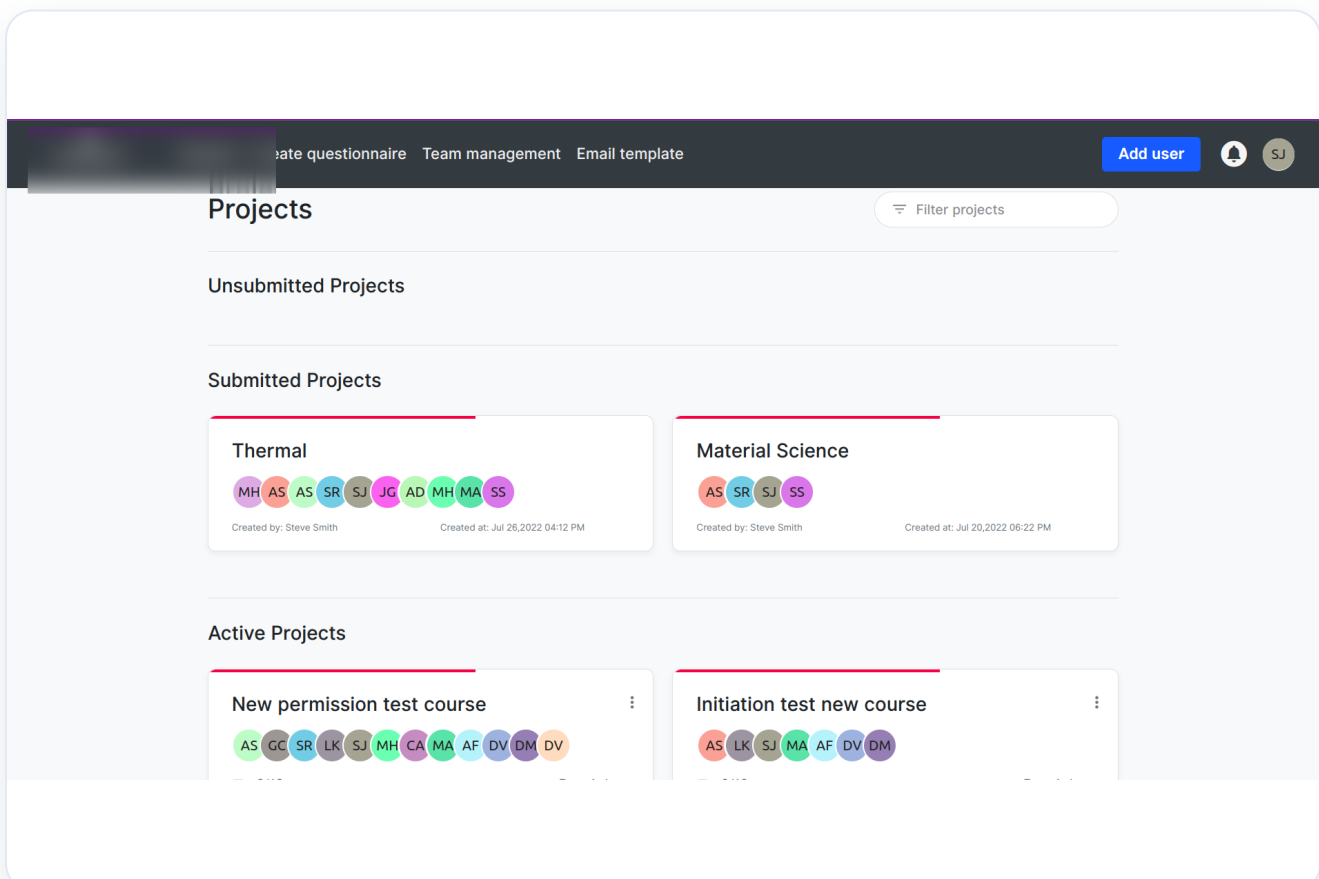
Every course-production project in one place, filtered by category or search.



04

Project in detail

A single project in depth — faculty, department, dates, budget, progress and milestones.



05

Questionnaire

Structured questionnaires capture faculty preferences and intent before production begins.

questionnaire Team management Email template [Add user](#)

New Question

Multiple Choice Non Mandatory

Type the Question here...

Choice 1

Choice 2

Choice 3

Choice 4

Choice 5

[+ Add another choice](#)

[cancel](#) [update question](#)

[+ New Question](#)

[Save](#) [Cancel](#)

06

Team management

Managers delegate tasks, set checkpoints and keep the production team on track.

questionnaire Team management Email template [Add user](#)

[Dashboard](#) > Team management

Users Teams Roles

[Add new](#)

S.No	Name	Manager	Members	Assign manager	Assign member	Delete
1	Multimedia	Curtly Ambrose	Michael Holding	Assign manager	Assign members	
2	Instructional Technologist	Jason Gillespie	Sanath Jayasuriya	Assign manager	Assign members	
3	Instructional Design	Lance Klusener	Greg Chappell	Assign manager	Assign members	
4	Graphics	Andrew Flintoff	Shaun Pollock	Assign manager	Assign members	

07

User role management

Role-based access controls who can reach confidential course and payment information.

The screenshot shows a web application interface for user role management. At the top, there is a dark navigation bar with a blurred profile picture on the left, and links for 'questionnaire', 'Team management', and 'Email template' in the center. On the right of the navigation bar are an 'Add user' button, a notification bell icon, and a user profile icon labeled 'SJ'. Below the navigation bar, a breadcrumb trail reads 'Dashboard > Team management'. The main content area has a light gray background. At the top of this area is a tabbed interface with three tabs: 'Users', 'Teams', and 'Roles'. The 'Roles' tab is currently selected. Below the tabs is a section titled 'Add new' with a plus icon. Underneath this is a table with four columns: 'S.No', 'Name', 'Edit', and 'Delete'. The table contains eight rows of predefined roles. Each row has a serial number, a role name, a blue pencil icon for editing, and a red trash can icon for deleting.

S.No	Name	Edit	Delete
1	Team Manager		
2	Team Lead		
3	Student Assistant		
4	Multimedia Designer		
5	Instructional Technologist		
6	Instructional Designer		
7	Graphic Designer		
8	Faculty Developer		

08

Email template

Pre-defined email layouts with reusable content and merge fields for production communications.

The screenshot shows a web application interface for creating email templates. The top navigation bar is identical to the previous screenshot, with the 'Email template' link now active. The breadcrumb trail reads 'Dashboard > Email template'. The main content area features a form for creating a new email template. The form is titled 'Email for' and includes a dropdown menu for 'Select template'. Below this is a 'Frequency' dropdown menu with 'Select frequency' as the placeholder. The 'Subject' field is a text input. The 'Content' field is a large text area. A blue 'Submit' button is located at the bottom right of the form.

Email for

Frequency

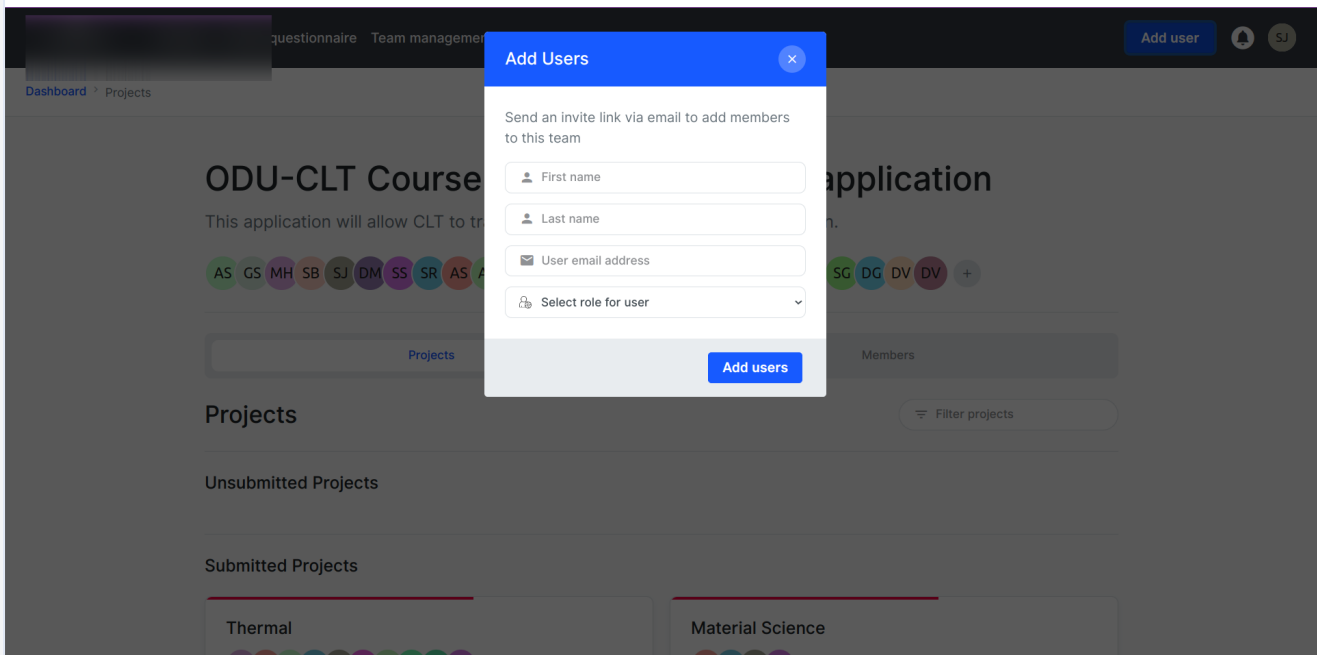
Subject

Content

09

Adding a user

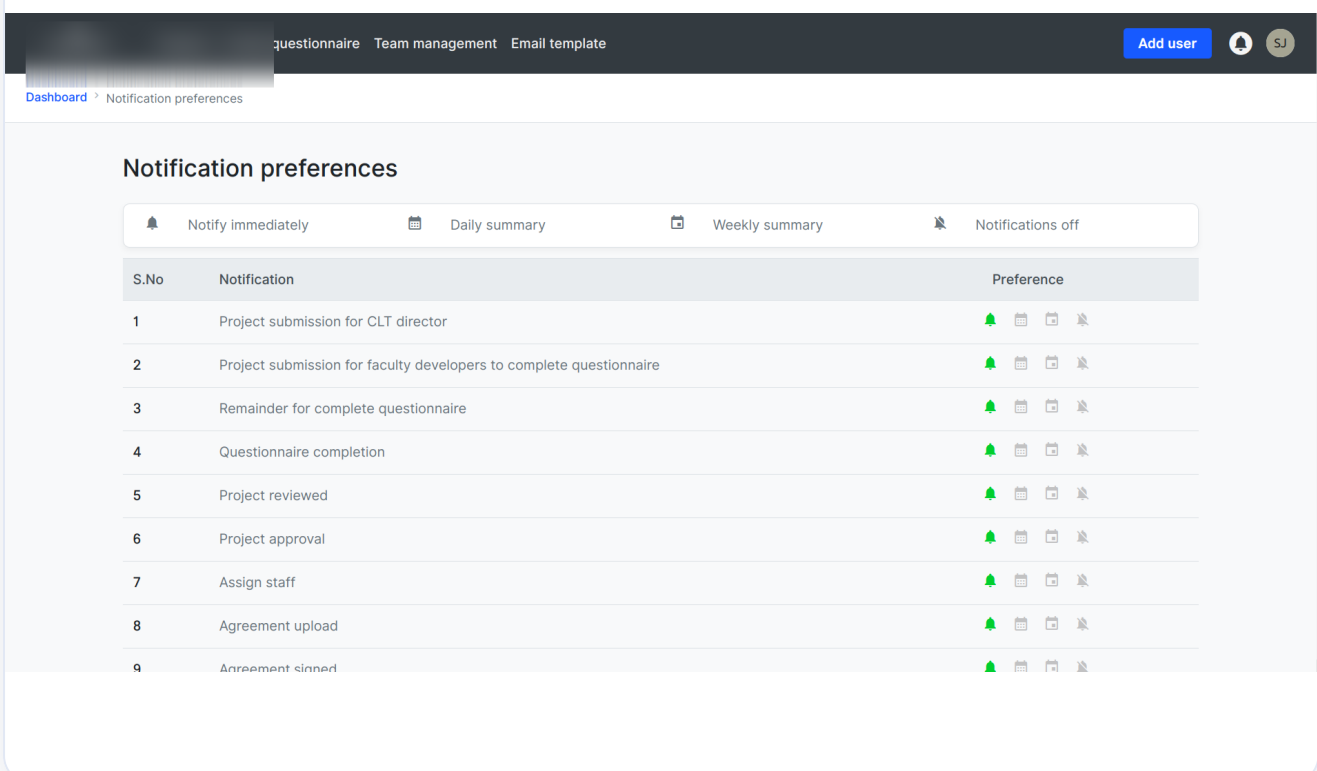
Invite teammates by email to join a production team in seconds.



10

Notification preferences

Each user chooses which production notifications they receive, and how.



11

Project task page

Track and manage a project and every task from initiation through to invoice.

The screenshot shows the 'Project task page' for a course titled 'Course - Data Structures'. The page header includes navigation links: 'questionnaire', 'Team management', and 'Email template', along with an 'Add user' button and user avatars. The breadcrumb trail is 'Dashboard > Projects > Data Structures'. The main heading is 'Course - Data Structures', followed by the subtitle 'The place where you can track and manage the project and it's tasks.' Below this is a progress bar with four colored circles (DG, MA, FM, SG) and a completion status of '1/14' and 'Due 44 days'. A tabbed interface shows 'Tasks', 'Files', and 'Activity'. The 'Tasks' section is active, displaying a list of tasks under the 'Initiation' category. The tasks are: 'Review project details' (Aug 05, 2022, assigned to CLT Director MA, 1/1 completed) and 'Project questionnaire' (Aug 05, 2022, assigned to Faculty Developer SG, DG, 0/1 completed).

12

Review & approve

Evaluate a completed project against its goals and sign it off — or request changes.

The screenshot shows the 'Review project details' page. The header is identical to the previous page. The breadcrumb trail is 'Dashboard > Projects > Data Structures > Review Project'. The main heading is 'Review project details', followed by the subtitle 'Review is the system used to assess the project request parameters.' Below this is a progress bar with a single green circle (MA) and a completion status of '1/1'. The 'Review' section contains a form with the following fields: 'Client college' (University College), 'Program' (UG), 'Course name' (Data Structures), 'Course number' (8391), and 'Subject' (ECE).

A full activity trail of who did what across every project and task.

questionnaireTeam managementEmail templateAdd user

Dashboard > Projects > Data Structures

Course - Data Structures

The place where you can track and manage the project and it's tasks.

DGMAFM SG

1/14Due 44 days

TasksFilesActivity

ActivityFilter activity

MA

M'hammed Abdous has reviewed the project Data Structures.

Jul 26,2022 12:29 PM

10

Engineered for measurable impact.

From agreement preparation to faculty invoices, the entire online course-production process is tracked in one LMS-integrated application.

ODU-CLT · Project Management LTI

Built and delivered by ZionStar

**End-
to-end**

production
tracking

LTI

Canvas-native
embed

**Init →
invoice**

one workflow

**Kanban
+ list**

dashboards

Want results like these for your learners?

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