

Final Presentation



ABOUT THE PROJECT

The screenshot shows a blog post on a Beaver LMS platform. The title is "Room for Improvement in beaver". The post discusses potential solutions and enhancements for the system. It includes sections for "Disadvantages of beaver" and "Advantages of Beaver". The "Disadvantages" section highlights challenges like potential drawbacks and a need for a holistic perspective. The "Advantages" section emphasizes benefits such as centralized management, user-friendly design, and detailed program insights. The post is dated October 20, 2023.

Room for Improvement in beaver

No system is perfect, and Beaver is no exception. Recognizing its challenges is the first step toward improvement. In this post, we will explore potential solutions and enhancements that can address the drawbacks highlighted in our previous discussion. Addressing the Challenges Easing the Learning Curve Solution: Offering comprehensive training sessions and creating user-friendly tutorials can...

Disadvantages of beaver

While Beaver offers a range of powerful features and tools to streamline the educational experience, like all systems, it's not without its challenges. This post aims to provide a balanced view by highlighting some of the potential disadvantages of the system. Potential Drawbacks: Conclusion It's essential to approach Beaver with a holistic perspective. While it...

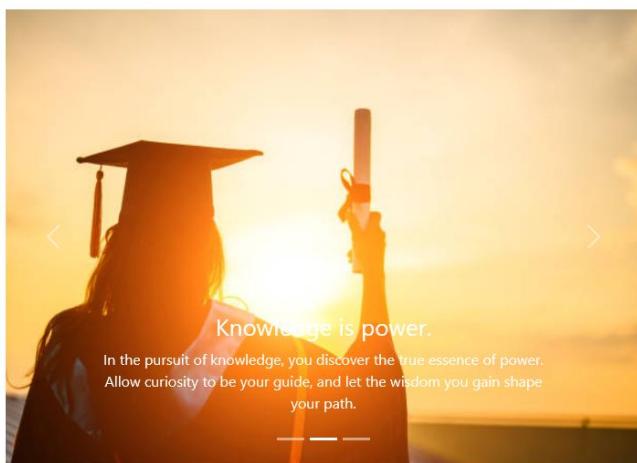
October 20, 2023

Advantages of Beaver

In today's digital era, educational institutions are constantly seeking ways to enhance the educational experience for both students and staff. One such solution is Beaver, a web-based platform tailored for the seamless management and administration of academic programs. Let's dive into the benefits of this innovative system. Features and Benefits Centralized Management All aspects of...

October 20, 2023

- Beaver is a learning management system designed to cater to the needs of students and make their learning experience worthwhile.
- Features:
 - o Centralized Management
 - o User-Friendly design
 - o Detailed Program Insights
 - o Role-Specific Tools and features like analytics and reporting
 - o Blog that users can follow to keep up with latest features and get in touch.



Department Overview

Welcome to the Computing Department, where innovation meets education. Our department is committed to fostering a dynamic and enriching environment for students, faculty, and researchers in the ever-evolving field of computing.

Our Mission

Our mission is simple yet profound: to empower individuals and organizations to unlock their full potential through seamless and accessible learning experiences. We believe that education should be a lifelong journey, and our platform is designed to make learning engaging, efficient, and effective.

Our Vision

We envision a world where education knows no boundaries. With our Learning Management System, we aim to break down geographical, economic, and social barriers to education, making quality learning accessible to everyone, everywhere. We dream of a future where every learner has the tools and resources they need to thrive in an ever-evolving world.

Contact Us

For inquiries or to get in touch with our department, please feel free to [contact us](#).

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Pages before Login

Page : Home Page

- **Lecture component : HTML, CSS, React**
- **For pages before Login, React components renders the header of the website. It uses HTML tags and CSS classes to structure and style the content, and the Link component from react-router-dom to create page links.**
- **Overall, React, HTML, and CSS work together to create the structure, presentation, and behavior of each component**

Pages before Login

Page : Services

Beaver LMS 

Services

Dive into our range of services, meticulously designed to offer a holistic learning experience!

Intuitive Platform Navigation
With a focus on user-friendliness, our platform guarantees a hassle-free experience. Whether you're a student, instructor, administrator, quality assurance officer, or program coordinator, navigating our system is a breeze.

Analytics & Reporting
For Students: Track your

Page : About Us

Beaver LMS 

About Us

Welcome to our Learning Management System, where learning meets innovation. We are dedicated to revolutionizing education and training through cutting-edge technology and a passion for knowledge.

Our Mission

At Learning Management System, our mission is simple yet profound: to empower individuals and organizations to unlock their full potential through seamless and accessible learning experiences. We believe that education should be a lifelong journey, and our platform is designed to make learning engaging, efficient, and effective.

What sets us apart

- Innovative Technology:** We leverage the latest advancements in technology, including artificial intelligence and machine learning, to create a dynamic and personalized learning experience for every user.

Page : Contact Us

Beaver LMS 

Contact Us

If you have any questions, feedback, or inquiries, please do not hesitate to get in touch with us. We are here to assist you.

Contact Information

Email: [Contact Email]
Phone: [Contact Phone Number]
Address: [Department Address]

Contact Form

Name

Email address

Message

Submit

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REGISTER PAGE

The screenshot shows a registration form titled "Beaver LMS". It includes fields for Name, Username, Email, Mobile, Identification Number, Password, and Role selection. A "Submit" button is at the bottom, and a link to "Click to login" is at the bottom left.

Beaver LMS

Name
Enter name

Username
Enter username

Email
Enter email

Mobile
Enter mobile

Identification Number
Enter identification number

Password
Enter password

Role
Select Role

Submit

Already have an account? [Click to login](#)

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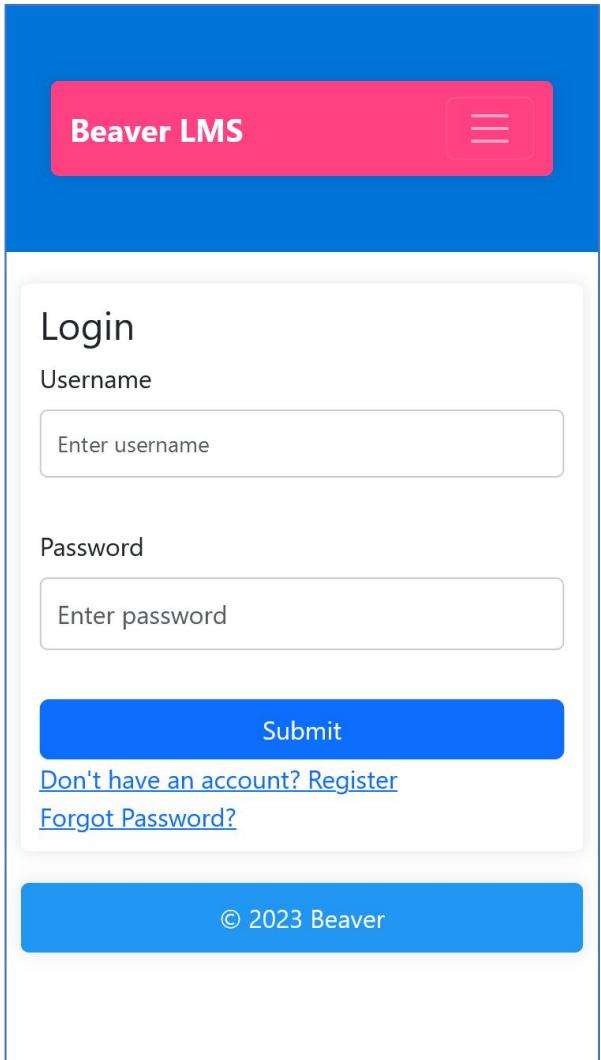
Validation Code Snippet

```
// validate request
$rules = [
    'name' => 'required|string',
    'username' =>
'required|string|unique:users,username',
    'email' =>
'required|email|unique:users,email',
    'password' => 'required|string',
    'mobile' => 'required|string',
    'identification_number' =>
'required|string|unique:users,identification_number',
    'role_id' =>
'required|integer|exists:roles,id',
];

$validator = Validator::make($request->all(),
$rules);
if ($validator->fails()) {
    return response()->json([
        'status' => 'failed',
        'message'
=>implode(",",$validator->errors()->all()),
        'data' => $validator->errors()
    ], 400);
}
```

Once the user details are validated, the user account is created and email is sent for verification.

LOGIN PAGE



Authentication Code Snippet

```
// attempt login
if (auth()->attempt($request->only('username',
'password'))) {
    // get user
    $user = auth()->user();

    // check if user is verified
    if (!$user->hasVerifiedEmail()) {
        $user->sendEmailVerificationNotification();

        return response()->json([
            'status' => 'unverified',
            'message' => 'Email not verified. Check
your email for verification link.',
            'data' => null
        ], 401);
    }
}
```

Email Verification



Hello!

Please click the button below to verify your email address.

Verify Email Address

If you did not create an account, no further action is required.

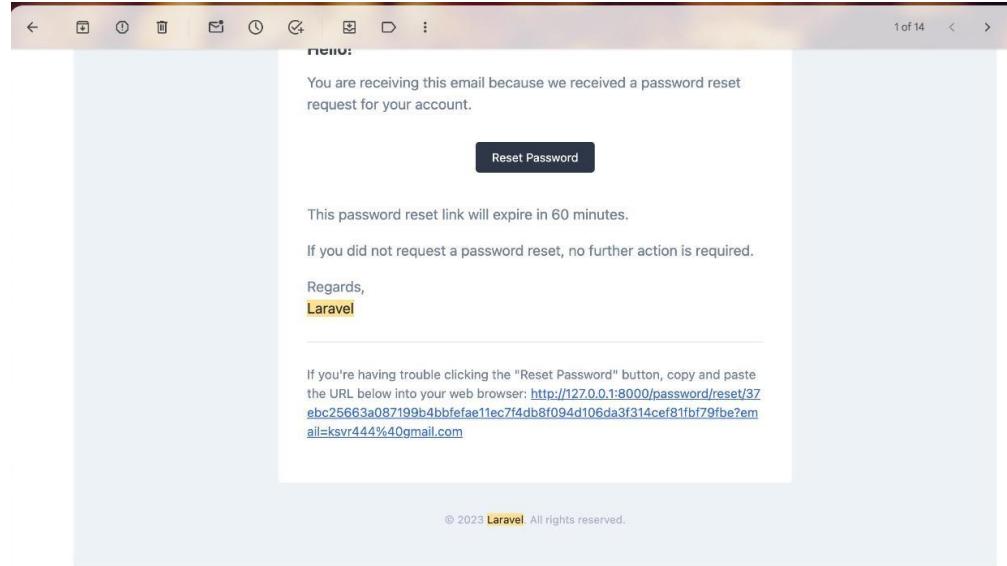
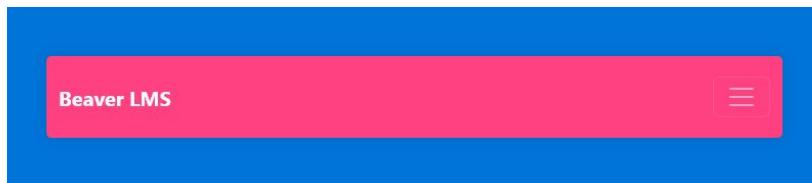
Regards,
Laravel

If you're having trouble clicking the "Verify Email Address" button, copy and paste the URL below into your web browser: <https://laravel.sxk3962.uta.cloud/api/email/verify/19/0004d62e5bee11c869b6523953fc5ee98a056d7a?expires=1701027608&signature=b448aae1cfde8b851f878e5e612fd6fed3c3dd8ef012d07ccb33653cf362f643>

FORGOT PASSWORD PAGE

```
public function changePassword(Request $request){  
    // validate request  
    $rules = [  
        'old_password' => 'required|string',  
        'new_password' => 'required|string',  
    ];  
    $validator = Validator::make($request->all(),$rules);  
  
    if ($validator->fails()){  
        return response()->json([  
            'status' => 'failed',  
            'message'  
        =>implode(",",$validator->errors()->all()),  
            'data' => $validator->errors()  
        ], 400);  
    }  
  
    // get user  
    $user = $request->user();  
  
    // check if old password is correct  
    if (!auth()->attempt(['username' => $user->username,  
'password' => $request->old_password])) {  
        return response()->json([  
            'status' => 'failed',  
            'message' => 'Invalid old password.',  
            'data' => null  
        ], 401);  
    }else{  
        // update password  
        $user->password = bcrypt($request->new_password);  
        $user->save();  
  
        // return response  
        return response()->json([  
            'status' => 'success',  
            'message' => 'Password changed successfully.',  
            'data' => null  
        ], 200);  
    }  
}
```

FORGOT PASSWORD PAGE





Pages Common to all Roles

DASHBOARD VIEW

Beaver Logo

- Dashboard
- Courses
- Profile
- Grades
- Feedback
- Chat
- Logout

Welcome, student!

Enrolled Course: 2

Exams Done: 8

Average Score: 72%

Performance Overview

Exam	Average Score	Grade
Machine Learning Exam	50.00%	D
ML Exam 2	87.00%	A
CC Exam 2	80.00%	A
DAA Exam	90.00%	A
CC exam	86.00%	A

Grades

Feedback

Chat

Logout

DAMT Exam	70.00%	B
final exam	80.00%	A
db_exam1	29.00%	F

Student Performance

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COMMON PAGES FOR EACH ROLE: USER PROFILE

≡

Welcome, coord!

User Profile

Name:

Username:

Email:

Identification Number:

Mobile:

[Save Changes](#)

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COMMON PAGES FOR EACH ROLE: CHAT

Beaver Logo

- Dashboard
- Courses
- Profile
- Grades
- Feedback
- Chat
- Logout

Welcome, student!

Admin

Name	Username	Chat
Nderu	nderu	Chat
admin	admin	Chat
admin_sai	admin_sai	Chat

Course Instructors

Name	Username	Chat
Wesley Dexter	delaney	Chat
Katrina	katrina	Chat
instructor	instructor	Chat

Beaver Logo

- Dashboard
- Courses
- Profile
- Grades
- Feedback
- Chat
- Logout

Welcome, student!

instructor
instructor

Hello professor 2023-11-27T04:10:13.000000Z

i have a doubt regarding the upcoming quiz. Can we please connect? 2023-11-27T04:10:46.000000Z

Sure! My office hours are on TuThurs, 1 to 2 PM. 2023-11-27T04:11:34.000000Z

Type your message... Send



Improvement

Improvement: Sentiment Analysis on Student Feedback

Incorporated a sentiment analysis feature to systematically evaluate student feedback aiming to gain deeper insights into student perspectives.

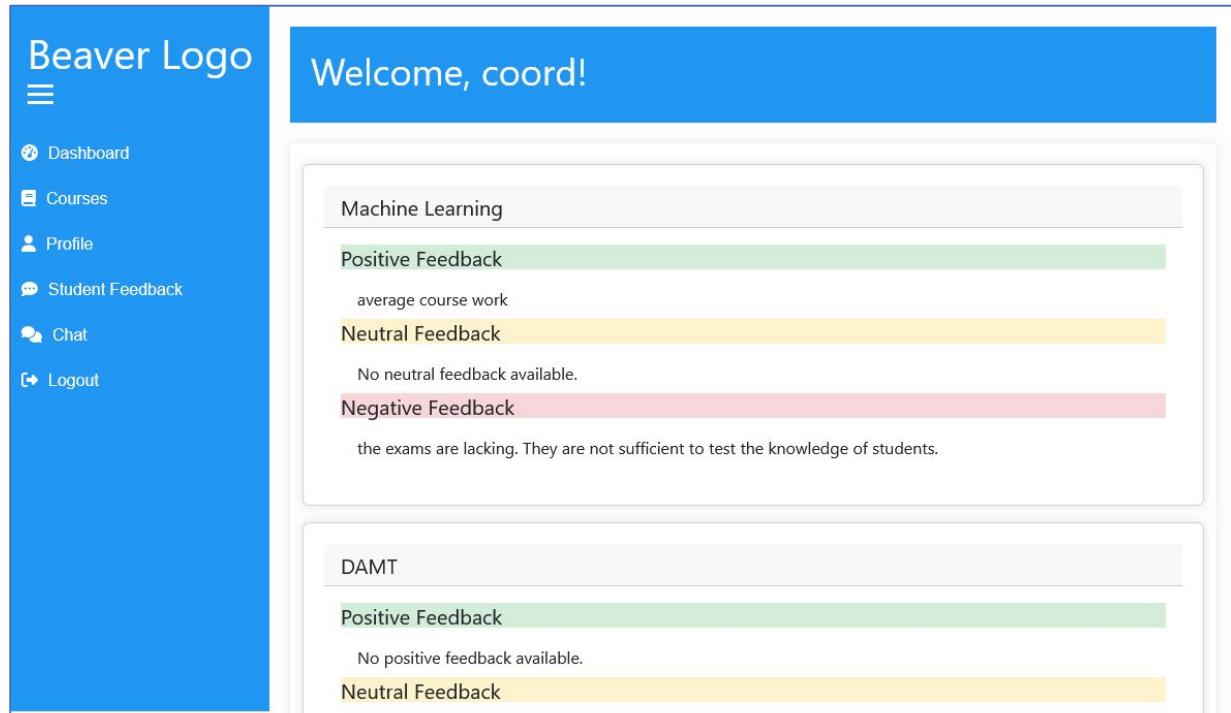
The students can share feedback regarding the courses and the instructor.

The screenshot shows a user interface for adding feedback. On the left is a sidebar with the 'Beaver Logo' logo and a menu with icons for Dashboard, Courses, Profile, Grades, Feedback, Chat, and Logout. The main area has a blue header bar with the text 'Welcome, student!'. Below this is a form titled 'Add Feedback' with fields for 'Course Id:' (a dropdown menu labeled 'Select Course'), 'Instructor Name:' (a dropdown menu labeled 'Select Instructor'), and 'Feedback:' (a text area with placeholder text 'Enter your feedback for the course or the instructor'). At the bottom right of the form is a blue button labeled 'Submit Feedback'. A copyright notice '© 2023 Beaver' is at the bottom of the page.

Improvement: Sentiment Analysis on Student Feedback

The Program Coordinators and the Quality Assurance officers can use sentiment analysis outcomes to guide strategic improvements in the academic program, with a focus on refining teaching methodologies and enhancing overall program quality based on the feedback offered by the students.

The feedback is categorized into positive, negative, and neutral to help identify the type of feedback a course receives.



Improvement: Sentiment Analysis on Student Feedback

Code Snippets

```
private function
analyzeSentiment($text) {
    $response =
Http::withHeaders([
    'X-RapidAPI-Key' =>
config('services.rapidapi.key'),
    'X-RapidAPI-Host' =>
config('services.rapidapi.host')
])->get('https://'.
config('services.rapidapi.host')
. '/analyze', [
    'text' => $text
]);
}

return $response->json();
}
```

```
public function index(){
    $feedbackData = Feedback::with('course')
        ->get()->groupBy('course_id')->map(function ($feedbacks,
$courseId) {
            return [
                'course' => Course::find($courseId)->name,
                'feedbacks' => [
                    'positive' => $feedbacks->where('feedback_type',
'positive')->values(),
                    'neutral' => $feedbacks->where('feedback_type',
'neutral')->values(),
                    'negative' => $feedbacks->where('feedback_type',
'negative')->values(),
                ]
            ];
        })
        ->filter(function ($courseFeedback) {
            // Only include courses with at least one feedback
            return $courseFeedback['feedbacks']['positive']->count() > 0
                || $courseFeedback['feedbacks']['neutral']->count() > 0
                || $courseFeedback['feedbacks']['negative']->count() > 0;
        });
    return response()->json(['data' => $feedbackData], 200);
}
```



Role Specific Views: PROGRAM COORDINATOR

PROGRAM COORDINATOR VIEW: COURSES -> COURSE DETAILS

Welcome, coord!

Available Courses

Course	Instructor	Action
Machine Learning	instructor	
Cloud Computing	N/A	
DAA	N/A	
DAMT	instructor	
WDM	instructor2	
database system	instructor	

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Welcome, coord!

Course Details

Machine Learning

Training machines

Course Objectives

Name	Description
Technology is key	As above
The goal is the way	The goal is the way bwana
Niko	Niko na nanii

Exams

Name	Date	Exam Type	Exam Format	Max Score	Passing Score
Machine Learning Exam	2023-10-30 00:00:00	Quiz	Practical Exam	100	70
ML Exam 2	2023-10-30 00:00:00	Quiz	Practical Exam	100	70
final exam	2023-11-23 00:00:00	Final Exam	Multiple Choice	100	60

QA Feedback

Comment on:	Comment Date	Comment
Machine Learning Exam	2023-11-12T09:11:28.000000Z	Very haswa bwana
Machine Learning Exam	2023-11-12T09:11:44.000000Z	Very haswa bwana
Machine Learning	2023-11-13T07:34:37.000000Z	Very good



Role Specific Views: STUDENT

STUDENT VIEW: COURSES

Beaver Logo



Dashboard

Courses

Profile

Grades

Feedback

Chat

Logout

Welcome, student!

Available Courses

Course	Description	Enrol	View
Machine Learning	Training machines		
Cloud Computing	CC		
DAA	Design		
DAMT	Analysis techniques Techniques		
WDM	Web Data Management		
database system	regarding databases		

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STUDENT VIEW: COURSES -> COURSE DETAILS

Beaver Logo

≡

- Dashboard
- Courses
- Profile
- Grades
- Feedback
- Chat
- Logout

Welcome, student!

Course Details

Machine Learning
Training machines

Course Objectives

Name	Description
Technology is key	As above
The goal is the way	The goal is the way bwana
Niko	Niko na nanii

Exams

STUDENT VIEW: GRADES

Beaver Logo
≡

Welcome, student!

- Dashboard
- Courses
- Profile
- Grades
- Chat
- Logout

Exam	Course	Date	Score
Machine Learning Exam	Machine Learning	2023-10-30 00:00:00	50.00
ML Exam 2	Machine Learning	2023-10-30 00:00:00	87.00
CC Exam 2	Cloud Computing	2023-10-30 00:00:00	80.00
DAA Exam	DAA	2023-11-13 00:00:00	90.00
CC exam	Cloud Computing	2023-11-23 00:00:00	86.00
DAMT Exam	DAMT	2023-11-30 00:00:00	70.00
final exam	Machine Learning	2023-11-23 00:00:00	80.00
db_exam1	database system	2023-11-17 00:00:00	29.00



Role Specific Views: INSTRUCTOR

INSTRUCTOR VIEW: COURSES

Beaver Logo



Dashboard

Courses

Exams

Profile

Chat

Logout

Welcome, instructor!

Available Courses

[Add Course](#)

Course	Instructor	Action
Machine Learning	instructor	
Cloud Computing	N/A	
DAA	N/A	
DAMT	instructor	
WDM	instructor2	
database system	instructor	

INSTRUCTOR VIEW: COURSES -> ADD COURSES

Beaver Logo



- Dashboard
- Courses
- Exams
- Profile
- Chat
- Logout

Welcome, instructor!

Add Course

Course Name:

Course Description:

Add Course

INSTRUCTOR VIEW: COURSES -> COURSE DETAILS

Welcome, instructor!

Course Details

Machine Learning

Training machines

Course Objectives

Add Course Objective

Name	Description
Technology is key	As above
The goal is the way	The goal is the way bwana
Niko	Niko na nanii

Exams

Name	Date	Exam Type	Exam Format	Max Score	Passing Score
Machine Learning Exam	2023-10-30 00:00:00	Quiz	Practical Exam	100	70
ML Exam 2	2023-10-30 00:00:00	Quiz	Practical Exam	100	70
final exam	2023-11-23 00:00:00	Final Exam	Multiple Choice	100	60

Name	Date	Exam Type	Exam Format	Max Score	Passing Score
Machine Learning Exam	2023-10-30 00:00:00	Quiz	Practical Exam	100	70
ML Exam 2	2023-10-30 00:00:00	Quiz	Practical Exam	100	70
final exam	2023-11-23 00:00:00	Final Exam	Multiple Choice	100	60

QA Feedback

Comment on:	Comment Date	Comment
Machine Learning Exam	2023-11-12T09:11:28.000000Z	Very haswa bwana
Machine Learning Exam	2023-11-12T09:11:44.000000Z	Very haswa bwana
Machine Learning Exam	2023-11-13T07:34:37.000000Z	Very good
Machine Learning Exam	2023-11-13T07:36:11.000000Z	Very good
Machine Learning Exam	2023-11-13T07:36:36.000000Z	Very good
Machine Learning Exam	2023-11-13T07:36:00.000000Z	Very good
Machine Learning Exam	2023-11-13T07:38:32.000000Z	Very good
Machine Learning Exam	2023-11-13T11:48:06.000000Z	Very good
Machine Learning Exam	2023-11-13T12:02:50.000000Z	Sample maneno
Technology is key	2023-11-13T12:03:32.000000Z	This is an interesting one
The goal is the way	2023-11-17T02:21:54.000000Z	lolglhjhjgjhlgg

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INSTRUCTOR VIEW: COURSES -> ADD OBJECTIVES

Beaver Logo
≡

- Dashboard
- Courses
- Exams
- Profile
- Chat

Logout

Welcome, instructor!

Add Course Objective

Objective Name:

Course Objective:

Add Course Objective

INSTRUCTOR VIEW: EXAMS

Beaver Logo



Dashboard

Courses

Exams

Profile

Chat

Logout

Welcome, instructor!

Exams

Add Exam

Name	Date	Exam Type	Exam Format	Max Score	Passing Score	Action
Machine Learning Exam	2023-10-30 00:00:00	Quiz	Practical Exam	100	70	
ML Exam 2	2023-10-30 00:00:00	Quiz	Practical Exam	100	70	
CC Exam 2	2023-10-30 00:00:00	Quiz	Practical Exam	100	70	
DAA Exam	2023-11-13 00:00:00	Midterm Exams	Multiple Choice	100	80	
CC exam	2023-11-23 00:00:00	Quiz	Practical Exam	45	35	
DAMT Exam	2023-11-30 00:00:00	Final Exam	Essay	100	70	
final exam	2023-11-23 00:00:00	Final Exam	Multiple Choice	100	60	
db_exam1	2023-11-17 00:00:00	Quiz	Multiple Choice	50	25	

INSTRUCTOR VIEW: EXAMS -> ADD EXAM

Beaver Logo
≡

Welcome, instructor!

Dashboard
Courses
Exams
Profile
Chat
Logout

Add Exam

Exam Name:

Course id:

 Select Course

Select Exam Type:

 Select Exam Type

Select Exam Format:

 Select Exam Format

Max Score

Passing Score

Exam Date:

 mm / dd / yyyy

Add Exam

INSTRUCTOR VIEW: EXAMS -> ADD STUDENT PERFORMANCE

Beaver Logo



- Dashboard
- Courses
- Exams
- Profile
- Chat
- Logout

Welcome, instructor!

Add Student Performance

Select Student:

-- select an option --

Score:

Save Changes



Role Specific Views: QUALITY ASSURANCE

QUALITY ASSURANCE VIEW: COURSES -> COURSE DETAILS

≡

Welcome, qa!

Available Courses

Course	Instructor	Action
Machine Learning	instructor	
Cloud Computing	N/A	
DAA	N/A	
DAMT	instructor	
WDM	instructor2	
database system	instructor	

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≡

Welcome, qa!

Course Details

Cloud Computing

CC

Course Objectives

Name	Description
CC is cloud	CC is cloud

Exams

Name	Date	Exam Type	Exam Format	Max Score	Passing Score
CC Exam 2	2023-10-30 00:00:00	Quiz	Practical Exam	100	70
CC exam	2023-11-23 00:00:00	Quiz	Practical Exam	45	35

QA Feedback

[Add QA Feedback](#)

Comment on:	Comment Date	Comment
CC Exam 2	2023-11-13T12:07:30.000000Z	Acturial hapa na pale

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QUALITY ASSURANCE VIEW: COURSES -> ADD Q.A. FEEDBACK

Beaver Logo
≡

Welcome, qa!

- Dashboard
- Courses
- Profile
- Chat

Logout

Add Feedback

Comment On:

-- select an option --

Course Objective

-- select an option --

Exam

-- select an option --

Comment:

Add Feedback



Role Specific Views: ADMINISTRATOR

ADMIN VIEW: ISSUE MANAGEMENT

Beaver Logo
≡

- Dashboard
- Courses
- Profile
- Chat
- Issue Management
- User Management
- Logout

Welcome, admin!

Create Ticket

Issue Title:

Description:

Priority:

 Select Priority

Create Ticket

Issue Management

Name	Description	Priority Level	Status	Action
Chelsea vs City	Ticket ya hapa na pale haiko vile inafaa	High	In Progress	
Ticket Moja	Ticket ya hapa na pale haiko vile inafaa	High	In Progress	
Nayo nayo	Nayo nayo	Medium	Completed	
Okay, basi	Basi nayo nayo	Medium	Completed	
Nelly Teren Teren	Teren Teren	Medium	Completed	
Sample Ticket	Ticket mfano	Medium	In Progress	

ADMIN VIEW: USER MANAGEMENT

Beaver Logo
≡

- Dashboard
- Courses
- Profile
- Chat
- Issue Management
- User Management
- Logout

Welcome, admin!

User Management

[Add User](#)

Identification Number	Name	Email	Username	Action
89089	Wesley Dexter	delaney@gmail.com	delaney	
890002	student 2	mwinisheshe@gmail.com	mwinisheshe	
9432423	Sammy Lubengo	lubengo@gmail.com	lubengo	
432432123	Beryl	beryl@gmail.com	beryl	
67867932	Nderu	nderu@gmail.com	nderu	
3954353	Kelly	kelly@gmail.com	kelly	
123456789	John Doe	john.doe@example.com	john.doe	

ADMIN VIEW: USER MANAGEMENT -> ADD USER

Beaver Logo
≡

- Dashboard
- Courses
- Profile
- Chat
- Issue Management
- User Management
- Logout

Welcome, admin!

User Management

Add User

Name:

Username:

Email:

Identification No:

Mobile No:

Role:

Password:

Add User

CHALLENGES FACED

Team dynamics: Disparities in work styles, personality issues, or a lack of cohesiveness can all be obstacles to overcome when working in a team. We overcame these obstacles by managing the team well and communicating well to guarantee the project's successful completion.

Technical issue(s): When we moved our website to the UTA cloud, it stopped functioning flawlessly, even though it was operating perfectly on our local server. Most of the technical issues were related to hosting on UTA cloud and figuring out how to deploy our application without breaking anything.

How will this project add to our portfolio?

- We gained new technical stack that we can add to our portfolio.
- We have a project to showcase and prove our skills.



Thank You