



UCU+ MERCHANDISE HUB: EMPOWERING INSTRUCTORS AND STUDENTS WITH EXCLUSIVE UNIVERSITY MERCHANDISE THROUGH A SMART DIGITAL PLATFORM

A Project Presented to the Faculty of
Urdaneta City University
Computer Engineering

In-Partial Fulfillment of the Requirements for the Subject

Q233 Software Design – Final Website Project

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INTRODUCTION

Overview of the Project

Universities play a vital role in shaping the lives of instructors and students by fostering a strong sense of identity and belonging. Exclusive university merchandise allows them to express pride in their institution representing not just their academic journey, but also the shared experiences and lasting memories they create. Wearing or using these university merchandise strengthens their connection to the university community throughout their time on campus.

The traditional manual setup for selling university merchandise at Urdaneta City University (UCU), particularly within the College of Engineering and Architecture (CEA), presents several challenges such as limited operating hours, low product availability, long wait times and absence of personalized shopping options make it difficult for instructors and students to conveniently access exclusive university merchandise in a way that suits their schedules and preferences. This outdated system underscores the need for a more accessible and user-friendly solution.

To address these challenges, this study developed a user-friendly smart digital platform that allows instructors and students to conveniently access exclusive university merchandise online. The platform streamlines the purchasing process by offering a personalized shopping experience. Optimized for both desktop and mobile views, it ensures a smooth and efficient experience for all users making it easy to explore and navigate anytime, anywhere. This project aims to bridge the gap between the demand for accessible university merchandise and the limitations of the traditional manual selling process while also fostering school spirit, promoting convenience and embracing digital innovation within the university community.



The UCU+ Merchandise Hub modernizes the purchasing process for university merchandise by replacing manual transactions with a smart user-friendly digital platform accessible across devices. It enables students and instructors to conveniently shop for exclusive items while also integrating academic tools and resources. This enhances the overall campus experience and strengthens the connection between academic life and university identity.

Objectives of the Project

This study aims to develop a smart digital platform that empowers instructors and students by providing convenient access to exclusive university merchandise, thereby enhancing the overall online purchasing experience.

- 1. To develop a user-friendly digital platform that enables instructors and students to easily browse, select, and purchase exclusive university merchandise.
- 2. To enhance digital marketing strategies that boost product visibility, improve availability, and drive higher sales.
- 3. To streamline the purchasing process and ensure a convenient shopping experience across both desktop and mobile devices.

Target Audience

Instructors and students are seeking for more efficient alternative to the traditional manual process of ordering department-specific merchandise. They need a reliable and accessible platform to conveniently purchase exclusive merchandise that reflect their department identity and strengthen their connection to the university. Traditionally, this process involved filling out physical order forms, making in-person payments, and facing limited product availability often resulting in delays and inconvenience.



This study focuses on developing a smart digital platform tailored for the College of Engineering and Architecture at Urdaneta City University. It aims to provide an efficient and convenient way for instructors and students to access and purchase exclusive university merchandise such as Department Shirts, ID Laces, Tumblers, and Tote Bags. Each merchandise are featuring program-specific logos and designs that foster pride, unity, and a sense of belonging.

The platform targets students aged 18 to 25, ranging from first-year undergraduates to graduating seniors, as well as instructors aged 25 to 60, who are academic professionals and educators. Students are future engineers, architects, and technologists, while instructors are experts in various fields of engineering and architecture. Both groups are tech-savvy, highly engaged in university activities and eager to represent their academic disciplines.

This digital platform offers a faster, more organized and user-friendly purchasing experience allowing users to select product sizes and quantities based on their preferences. It is exclusively designed for the College of Engineering and Architecture with no merchandise from other colleges included. Despite current limitations, the platform presents opportunities for growth aiming to become an essential part of the digital experience for instructors and students within the College of Engineering and Architecture.



ALL WEBSITE FEATURES

UCU+ Student and Instructor Portal Dashboard

The **UCU+ Student Portal Dashboard** is designed to streamline access to both academic and shopping functions. It consolidates key academic information such as enrolled subjects, academic calendar and grades, allowing students to manage their studies efficiently.

Meanwhile, the **UCU+ Instructor Portal Dashboard** features a simple and organized dashboard that helps instructors manage their academic responsibilities with ease. It offers a convenient overview of essential tools including upcoming subjects, weekly schedules, room assignments, syllabus, and student lists. Instructors can also manage their grades and the academic calendar to stay on top of their teaching commitments.

Both portals provide direct access to the UCU+ Merchandise Hub, Payment Section and My Purchases, enabling users to browse and purchase official university merchandise without leaving the platform. Users can update their account information through the settings tool and securely log out at any time.

UCU+ Merchandise Hub

The **UCU+ Merchandise Hub** is the main platform for exploring and purchasing official university merchandise. It is designed to provide a smooth user experience with interactive visuals and a well-organized product catalog. The **Image Gallery** showcases high-quality photos of shirts, accessories, and exclusive items, allowing users to view products from multiple angles using a full-screen preview. The **Product Catalog** features a wide range of items from the College of Engineering and Architecture including Department Shirts, ID Laces, Tumblers, and



Tote Bags. Items are grouped into categories for easy browsing, with dropdown menus for selecting size and quantity. A simple "Add to Cart" button lets users place items into the built-in **Shopping Cart**, where they can review selections, update quantities, or remove products before proceeding to checkout. This helps users manage their purchases easily in one place.

To make shopping more efficient the platform includes powerful **Search and Sorting Functions.** The search bar helps users find items using keywords while sorting options such as All, Shirts, ID Laces, and Bundles make it easier to navigate the catalog. After selecting items users may proceed to the **Payment System**, which supports GCash, Maya, Bank Transfer, and Cash on Delivery. A QR code is also available for quick mobile payments. Users can enter delivery details, track their payment history, and receive transaction confirmations ensuring a secure and convenient shopping experience with flexible payment options.

Academic Calendar

The **Academic Calendar** is integrated into the UCU+ Student and Instructor Portal Dashboard that essential tool for managing academic activities. It provides a detailed dates such as the start and end of semesters, registration periods, holidays, exams, and assignment deadlines. One key feature is the **Pending Assignments**, which are automatically added to the calendar. Students can easily track upcoming and overdue tasks, while the instructors can see due dates, submission periods, and grading schedules to better manage their courses. The calendar stays updated and syncs with each users schedule ensuring that both students and instructors are always informed of important academic events.



In addition, **Event Calendar** highlights university events like orientations, seminars, sports fests and club activities. This helps students and instructors stay engaged with campus life and plan around both academic and extracurricular events. With its clear layout and timely reminders, the Academic Calendar improves time management and supports success across the UCU+ community.

Enrolled Subjects

The **Enrolled Subjects** section in the UCU+ Student and Instructor Portal Dashboard provides a centralized view of all active courses for the current term. **Students** can see their enrolled subjects with course codes, titles, instructor names, and schedules making it easy to access materials and stay updated. **Instructors** can view upcoming subjects, room schedules, syllabus and monitor student enrollment. This dual-function feature ensures both students and faculty have the tools they need for a smooth academic experience all in one easy-to-use portal.

Grades Overview

The **Grades** section in the UCU+ Instructor and Student Portal Dashboard offers a clear and organized view of student performance. Instructors can select courses, view enrolled students, and manage grades for prelim, midterm, and final exams. The system automatically calculates averages and allows real-time updates with a simple "Save" action. This feature ensures efficient grade tracking, promotes transparency, and helps both students and faculty effectively monitor academic progress.



Secure Login

The platform offers a secure and user-friendly login system for both students and instructors. Students log in using their "Student ID" and "Password", with a "Forgot Password" feature that enables password resets via Email or Student ID that verified through a one-time PIN to ensure secure changes. New users can register quickly using trusted third-party accounts such as Google+, Google Play Store, or Facebook. Instructors who sign up through third-party accounts can log in using their associated email and password credentials.

All accounts are protected with security hash encryption, ensuring that personal and academic data remain safe from unauthorized access. Admin access is role-based, granting system privileges only to verified personnel. The Admin Panel provides tools for secure and efficient user management maintaining platform integrity and guard user privacy at all times.

Settings

The **Settings** provide essential account management tools for students, instructors, and administrators. **Students** settings can update personal details like name, email, and password, enable two-factor authentication, manage sessions, and set notification preferences via email or SMS. A "Danger Zone" is available to deactivate or permanently delete their account.

Instructor settings allow instructors to manage their account securely. The page displays a welcome message and a password change form. Instructors can enter their current password, set a new password, and confirm the new password. Clicking the "Change Password" button saves the update to the admin dashboard. Overall, the settings ensure that all users can securely manage their profiles and customize their platform experience.



Notifications

The Notification feature helps students and instructors receive important updates quickly. Students get alerts about grades, exams, events, and announcements, as well as reminders for deadlines and meetings. Instructors get notifications about class schedules, student work, grading deadlines, and news, along with reminders for meetings and events.

Both students and instructors can receive notifications through Email or SMS Notifications. Instructors can update their notification preferences anytime in their account settings. The system connects to school records and calendars to send updates automatically.

Contact Form

The UCU+ Merchandise Hub features a clean responsive "Contact Us" popup on the main page of the platform. The centered modal includes a close (X) button for easy exit without refreshing. Users can enter their name, email, subject and message, then submit via a "Send Message" button. The simple layout makes it quick and easy for users to reach out with questions or feedback improving communication with the UCU+ support team.

Admin Dashboard

The Admin Dashboard is the main control panel for managing the UCU+ Merchandise Hub. It provides real-time updates on the total number of students, products, orders and overall revenue through the overview panel. It also features quick-access sections like Product Management, Low Stock Products, Recent Orders, and Recent Users. Admins can easily manage product listings, monitor low-stock items, track recent orders, and review new user accounts.



From the sidebar, they can access Products, Orders, User Dashboard, and Logout. These sections allow full control over merchandise, order processing, user account management, and secure sign-out process protecting the platform from unauthorized access.

Blog Section

The UCU+ Merchandise Hub includes a Blog section that is linked from the main page and connected to the Announcements. This section keeps students, staff, and alumni updated with the latest merchandise releases, campus events, and university news. This interactive space keeps users informed and involved, it also strengthens their connection with the university. Regular updates ensure the content remains relevant and aligned with UCU's vibrant academic and cultural life.



TECHNOLOGIES AND TOOLS

The UCU+ Merchandise Hub uses a combination of frontend, backend, database, supporting technologies and tools to build a responsive website.

FRONTEND

- **HTML** Builds the structure of the website.
- **CSS** Styles the layout, colors, and fonts.
- JavaScript Adds interactivity such as clicks and real-time updates.
- Jinja2 Template engine for rendering dynamic HTML.
- **Bootstrap (via CDN)** CSS framework for responsive design.
- Material Design Icons (via CDN) Icon font for navigation and buttons.
- **jQuery (via CDN)** JavaScript library for dynamic features.
- Google Fonts (Roboto, Ubuntu) Custom fonts for clean typography.
- Custom CSS/JS Project-specific styles and scripts.

BACKEND

- Flask Lightweight web framework.
- Werkzeug WSGI utility library.
- **Jinja2** HTML template engine.
- **Flask-MySQL** MySQL support for Flask.
- MySQL Connector Python Connects Python to MySQL.
- **Flask-SQLAIchemy** ORM for database management.
- Flask-Migrate Handles database migrations.
- Flask-Login Manages user sessions.
- **Flask-Bcrypt** Secure password hashing.
- Flask-OAuth OAuth integration for Flask.



- **Google OAuth2** Google sign-in authentication.
- PyJWT JSON Web Token encoding/decoding.
- Python-dotenv Loads environment variables.
- Flask-Mail Sends emails from Flask.
- **Pillow** Image processing library.
- Flask-WTF Simplifies form handling.
- Email-validator Validates email addresses.
- Requests Makes HTTP requests.
- Oauthlib OAuth protocol support.
- **Requests-oauthlib** OAuth for requests library.
- **Flask-DebugToolbar** Debugging interface for Flask.
- Python-dateutil Date and time utilities.
- **Pytz** Timezone handling.

DATABASE

- MySQL Connector Python Connects Python to MySQL databases.
- Flask-MySQL Integrates MySQL with Flask.
- Flask-SQLAlchemy ORM for managing database models.
- **Flask-Migrate** Handles database schema migrations.

CORE FRAMEWORK

- Flask Main web framework for building the website.
- Werkzeug Handles HTTP requests and responses.
- Jinja2 Renders dynamic HTML templates.



AUTHENTICATION & SECURITY

- Flask-Login Manages user login sessions.
- Flask-Bcrypt Hashes passwords securely.
- Flask-OAuth Adds OAuth login support.
- Google OAuth2 Enables Google account login.
- PyJWT Creates and verifies JSON Web Tokens.

PAYMENT PROCESSING

- **GCash** Philippine mobile wallet integration
- Maya Philippine digital wallet integration
- Bank Transfer Manual or API-based bank payments

UTILITIES

- **Python-dotenv** Loads settings from .env files.
- **Flask-Mail** Sends emails from the app.
- **Pillow** Handles image uploads and editing.
- **Flask-WTF** Manages web forms and validation.
- **Email-validator** Checks if email addresses are valid.
- Requests Makes HTTP API calls.
- Oauthlib Provides OAuth protocol support.
- Requests-oauthlib Adds OAuth to requests.

DEVELOPMENT TOOLS

- **Flask-DebugToolbar** Debugging panel during development.
- **Python-dateutil** Advanced date/time functions.
- Pytz Handles timezones in date/time data.

SYSTEM REQUIREMENTS

- **Python** Version 3.8
- **MySQL** Version 8.0 (for database support)
- **Pip** Python package manager (to install and manage dependencies)

TIMELINE

The development of the UCU+ Merchandise Hub follows a structured, week-by-week timeline to ensure timely and efficient delivery. A Gantt chart is used to visually track progress and manage each phase of the project, from planning to deployment. Each phase contains clearly defined tasks and milestones that guide the team toward successful implementation.

PROCESS	Website Development Process							
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Finalize Project Proposal								
Wireframing and UI Design								
Front-End Development								
Back-End Integration & Database Connection								
Testing, Debugging and Deployment								





UCU+ MERCHANDISE HUB USER MANUAL

Welcome to the UCU+ Merchandise Hub. This guide will help you quickly learn how to access the platform, log in, browse products, place orders, and track your purchases. Clear steps and visuals are provided to ensure a smooth and user-friendly experience for everyone.

INSTRUCTOR GUIDE

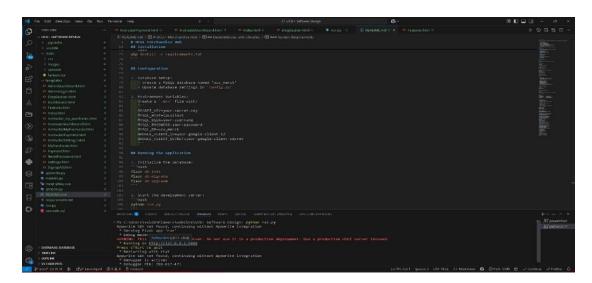
HOW TO ACCESS THE SITE?

Step 1: Run the Flask application by entering: python run.py

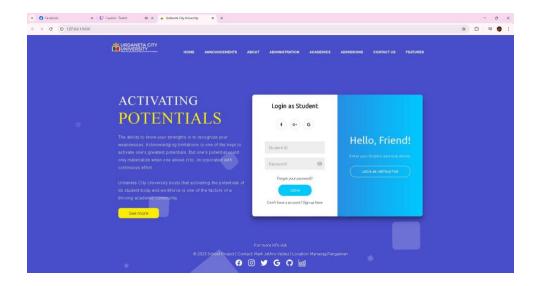
```
PROBLEMS 8 OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS QUERY RESULTS (PREVIEW) SPELL CHECKER ISSUES

PS C:\Users\valde\Flowers\website\UCU+ Software Design> python run.py[]
```

Step 2: Once the server is running, click or enter the link: http://127.0.0.1:5000.



Step 3: After clicking the link, then it will be directed to the website homepage.



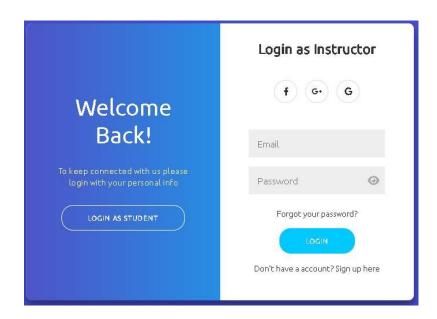




HOW TO LOG IN/CREATE AN ACCOUNT?

Login as Instructor:

Step 1: Instructors who signed up using third-party accounts (e.g., Facebook, Google, or Google Play Store) can log in by entering their associated email and password.



Step 2: After entering the email and password, click the "**LOGIN**" button to directly enter to the **UCU+ Merchandise Hub** platform.

Forgot your password?

Step 1: Click on **"Forgot your Password?"** on the login page. You will be automatically directed to a forgot password modal. Enter your registered email address, and a one-time **PIN (OTP)** will be sent to your email.

Forgot Password	×
Enter your email or student ID to reset your password.	
Email or Student ID	
Enter your email or student ID	
Reset Password	

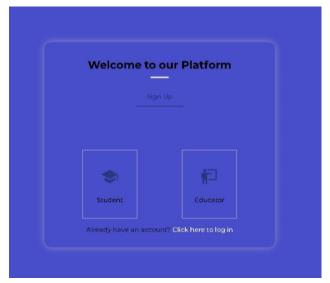


Step 2: After receiving the **OTP**, you will be redirected to the Reset Password modal. Enter the following details including the OTP, New Password and Confirm your New Password. Then click the "**Reset**" button to securely change your password.

-	
	Reset
	DOMESTIC CO.
P	assword
Ple	ease enter your new password.
отр	
NewPa	ssword
Confirm	n Password
R	ESET PASSWORD



HOW TO CREATE AN ACCOUNT AS INSTRUCTOR?



Step 1: New user can click the "Signup Here" option in the log in page, which will open the Sign Up modal. From there, click the "Educator" to proceed on the Instructor Registration modal.

Step 2: In the Instructor Registration modal, new users should fill this following information such as Full Name, Email Address, Password, Confirm Password, Institution and Subject/Specialty. After completing the form, click the "Create Account" button to successfully register an instructor account.

Note: Make sure the email you use is active and accessible, as it will be used for verification and password recovery.

Welcome to our Platform	
Instructor Desistantian	
Instructor Registration	
Full Name	
Enter your full name	
Email Address	
Enter your email address	
Password	
Create a password	
Confirm Password	
Confirm your password	
Institution	
Enteryour institution	
Subject/Specialty	
Enter your subject or specialty	
Create Account	
Back to Options	



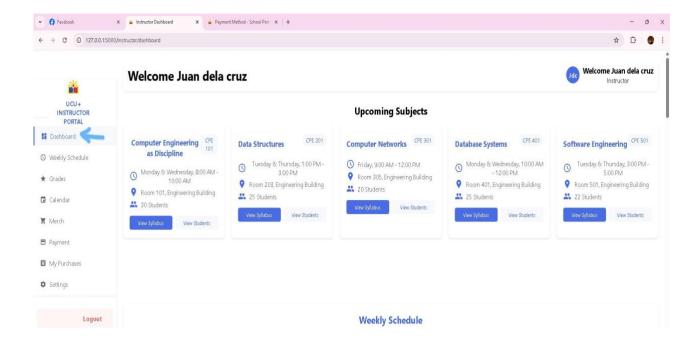


INSTRUCTIONS FOR USING KEY FEATURES

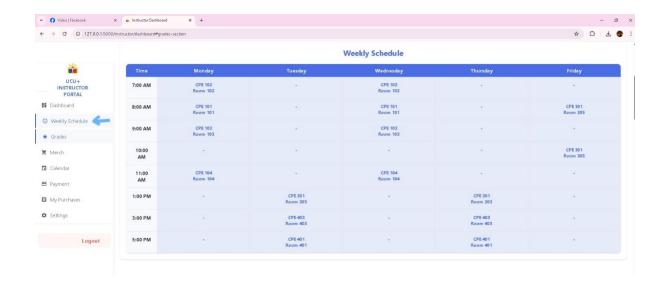
UCU+ INSTRUCTOR PORTAL DASHBOARD

Step 1: After logging in, you will be directed to the UCU+ Instructor Dashboard.

Click on the "Dashboard" tab to view your "Upcoming Subjects".



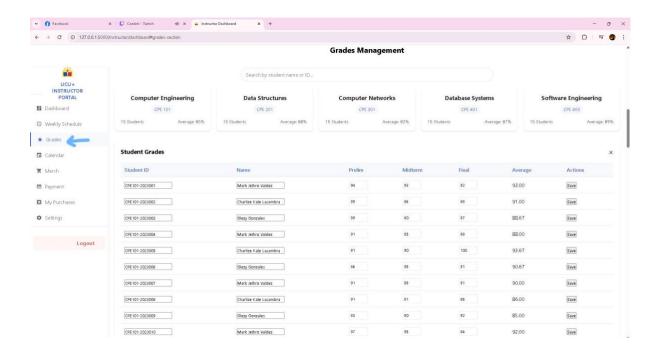
Step 2: After clicking the "**Dashboard**" tab, select "**Weekly Schedule**" to view your scheduled classes and activities for the week.



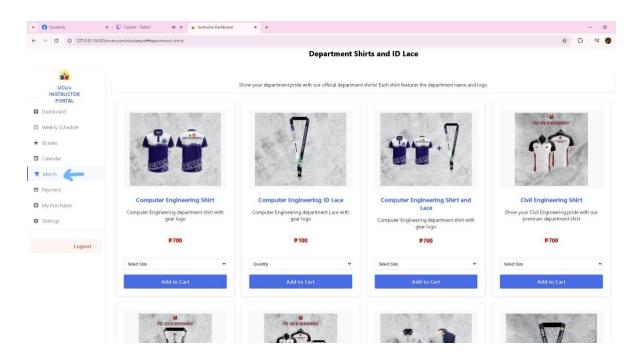




Step 3: After selecting the "**Weekly Schedule**" tab, click on "**Grades**" to access the Grades Management section, where in you can view and manage your students grades.



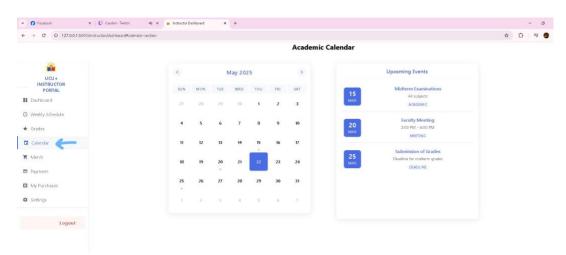
Step 4: After clicking the **"Grades"** tab, click on **"Merch"** to open the official **UCU+ Merchandise Hub**. Here, you can browse, select, and purchase exclusive university merchandise.



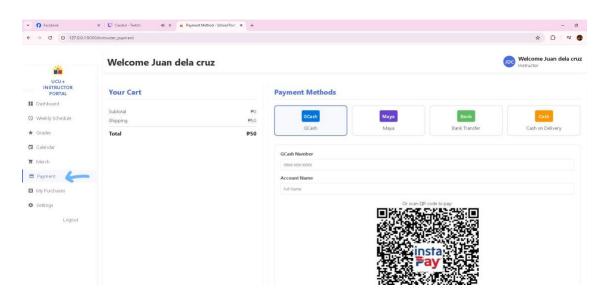




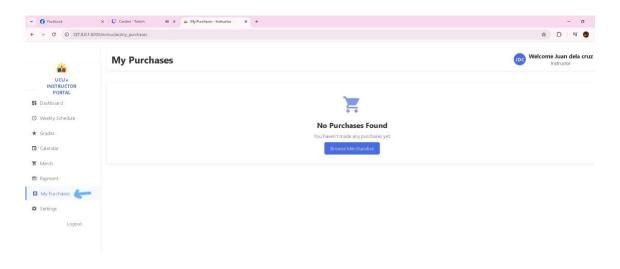
Step 5: After selecting the "Merch" tab, click on "Calendar" to view upcoming university events and important dates.



Step 6: After selecting the "Calendar" tab, click on "Payments" to view and manage your payment details and transaction history.



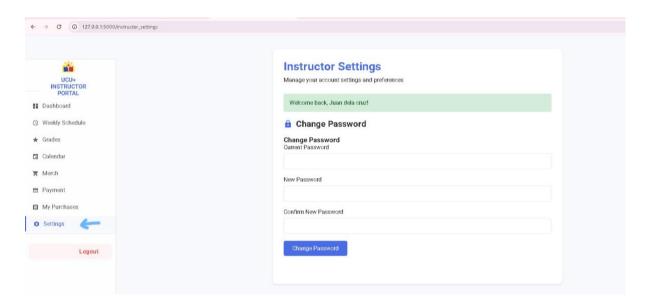
Step 7: After selecting the "**Payments**" tab, click on "**My Purchases**" to view a detailed list of your past and current merchandise transactions.



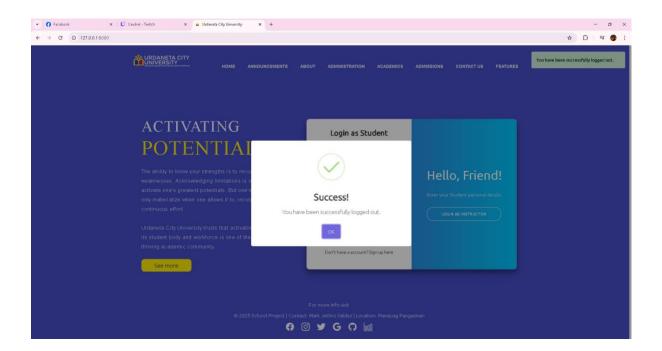




Step 8: After selecting the "My Purchases" tab, click on "Settings" to update your account information, preferences, and other personal settings.



Step 9: After selecting the "**Settings**" tab, click on "**Logout**" to securely sign out of your UCU+ Instructor account.



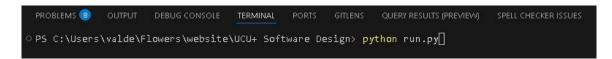




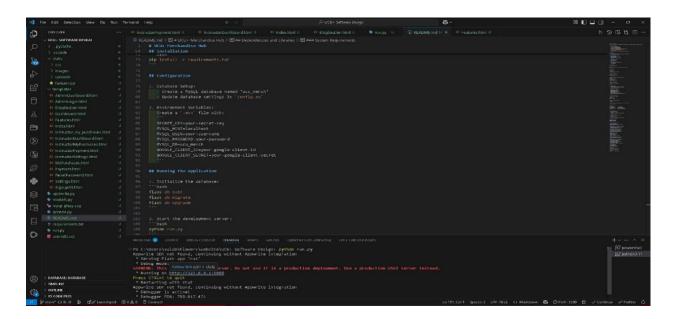
STUDENTS GUIDE

HOW TO ACCESS THE SITE?

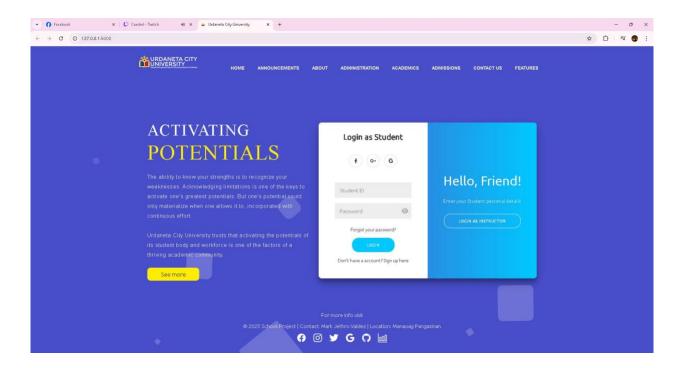
Step 1: Run the Flask application by entering: python run.py



Step 2: Once the server is running, click or enter the link: http://127.0.0.1:5000.



Step 3: After clicking the link, then it will be directed to the website homepage.



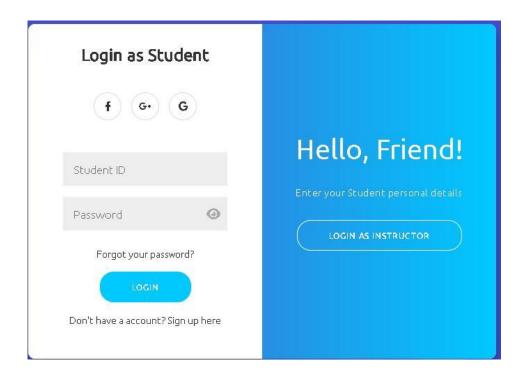




HOW TO LOG IN/CREATE AN ACCOUNT?

Log in as Student:

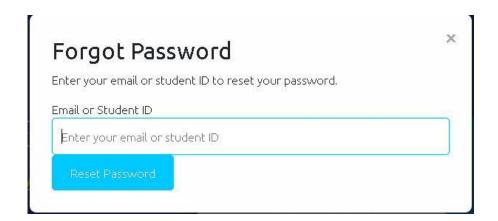
Step 1: Students log in using their "Student ID" and "Password".



Step 2: After entering the Student ID and Password, click the "**LOGIN**" button to directly enter to the **UCU+ Merchandise Hub** platform.

Forgot Password?

Step 1: Click on "**Forgot your Password?**" on the login page. You will be automatically directed to the Forgot Password modal. Enter your Student ID or Email Address, and a one-time PIN (OTP) will be sent to your email to verify your identity.

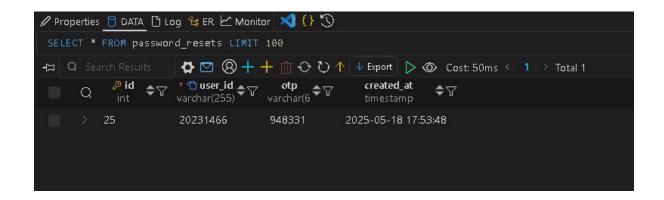




Step 2: After receiving the **OTP**, you will be redirected to the Reset Password modal. Enter the following details including the OTP, New Password and Confirm your New Password. Then click the "**Reset**" button to securely change your password.

Reset	
Password	
Please enter your new password.	
ОТР	
New Password	
Confirm Password	
RESET PASSWORD	

Note: For now, the OTP is only visible in the database.

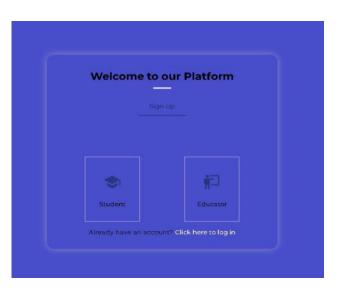


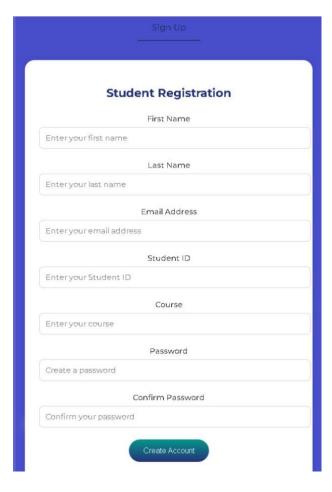




HOW TO CREATE AN ACCOUNT AS STUDENTS?

Step 1: New user can click the "Signup Her" option in the log in page, which will open the Sign Up modal. From there, click the "Student" to proceed on the Instructor Registration modal.





Step 2: In the Student Registration modal, new users should fill this following information such as First Name, Last Name, Email Address, Student ID, Course, Password, and Confirm Password. After completing the form, click the "Create Account" button to successfully register an student account.

Note: Make sure the email you use is active and accessible, as it will be used for verification and password recover.

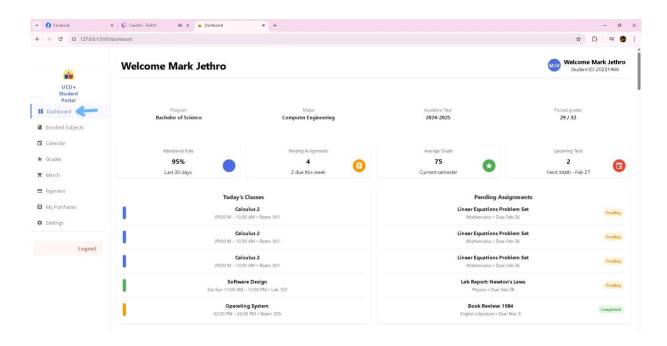




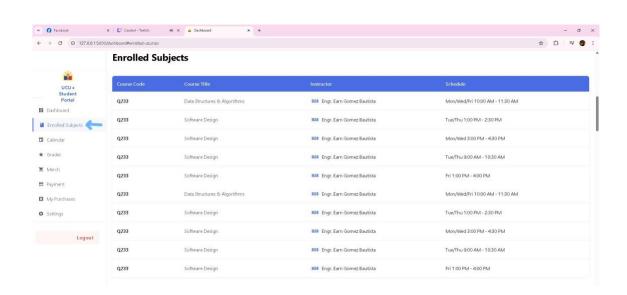
INSTRUCTIONS FOR USING KEY FEATURES

UCU+ STUDENT PORTAL DASHBOARD

Step 1: After logging in, you will be directed to the **UCU+ Student Portal Dashboard.** Click on the "**Dashboard**" tab to view your subjects and pending assignments.



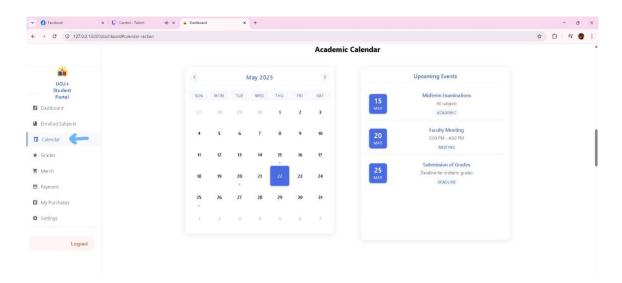
Step 2: After clicking the "**Dashboard**" tab, select "**Enrolled Subjects**" to see the list of subjects you are enrolled in.



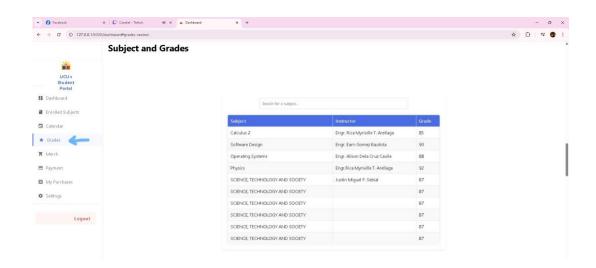




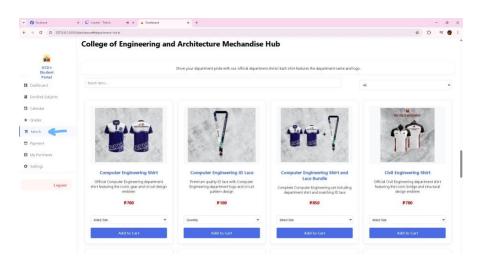
Step 3: After selecting the **"Enrolled Subjects"** tab, click on **"Calendar"** to view important dates and upcoming events.



Step 4: After clicking the "Calendar" tab, click on "Grades" to access and review your current academic performance and grade updates.



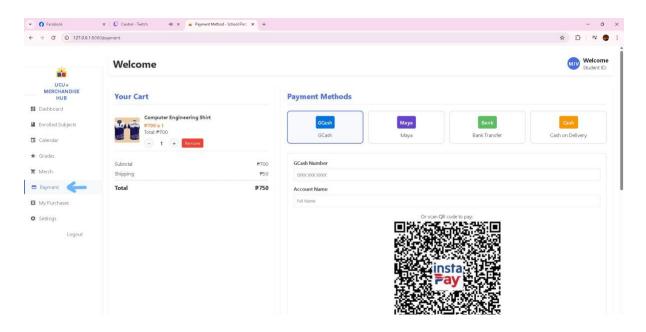
Step 5: After selecting the "**Grades**" tab, click on "**Merch**" where you can browse, select, and purchase exclusive university merchandise.



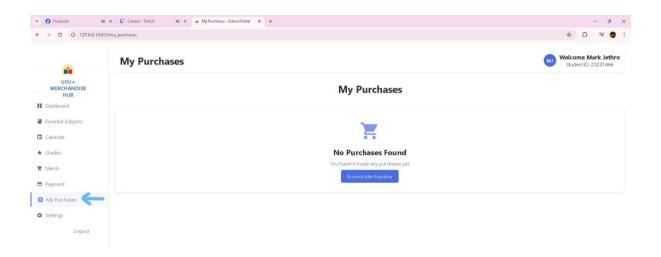




Step 6: After selecting the "Merch" tab, click on "Payment" to view and manage your payment details, including your transaction history and available payment options.



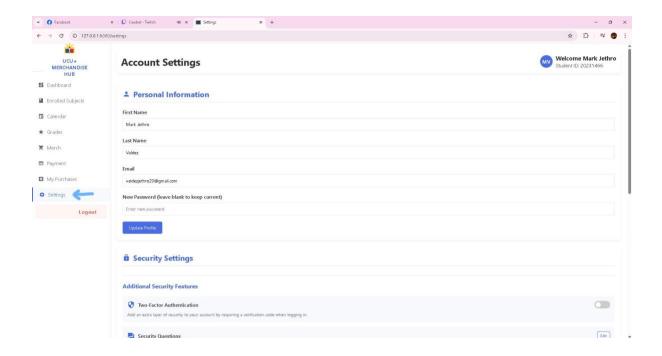
Step 7: After selecting the "**Payment"** tab, click on "**My Purchases"** to view a detailed list of your past and current merchandise transactions.



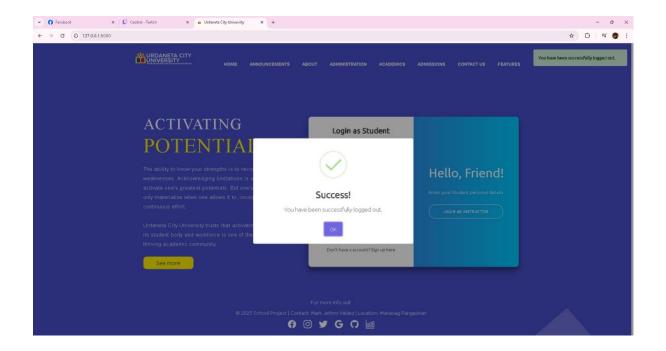




Step 8: After selecting the "My Purchases" tab, click on "Settings" to update your account information, preferences, and other personal settings.



Step 9: After selecting the "**Settings**" tab, click on "**Logout**" to securely sign out of your UCU+ Student account.



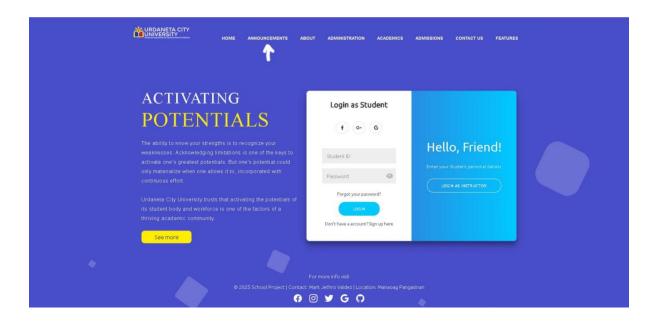




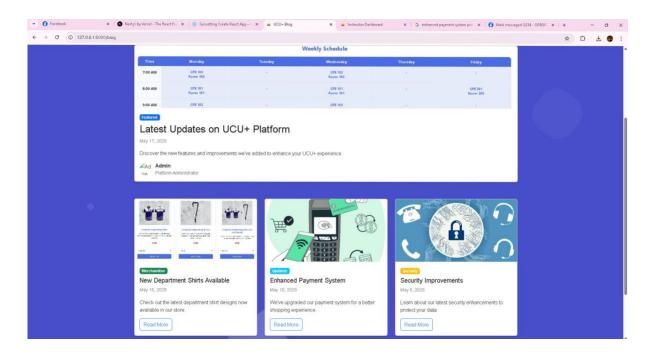
INSTRUCTIONS FOR USING OTHER KEY FEATURES

Blog Section

Step 1: Open the website, it will directly lead to the main page. Click on the "**Announcement**" button to view updates about merchandise releases, campus events, and university news for students, staff, and alumni.



Step 2: After clicking "Announcement", you will be redirected to the **Blog Section**, where all the latest updates are listed chronologically.

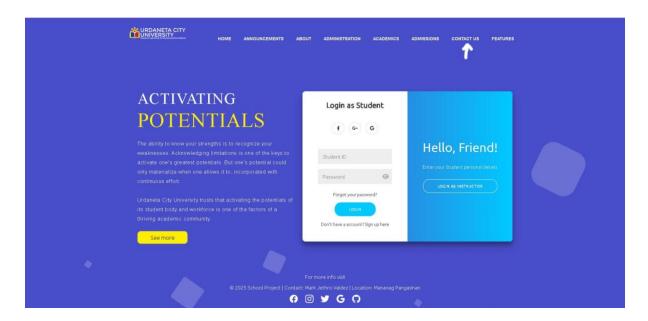




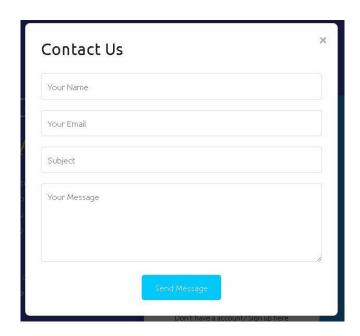


Contact Form

Step 1: Open the browser then it will directly lead to the main page. Click on the "**Contact Us**" button to send questions or feedback, ensuring better communication with the UCU+ support team.



Step 2: After clicking "**Contact Us**", a centered modal form will appear. Fill in your Name, Email, Subject, and Message, then click the "Send Message" button to submit.

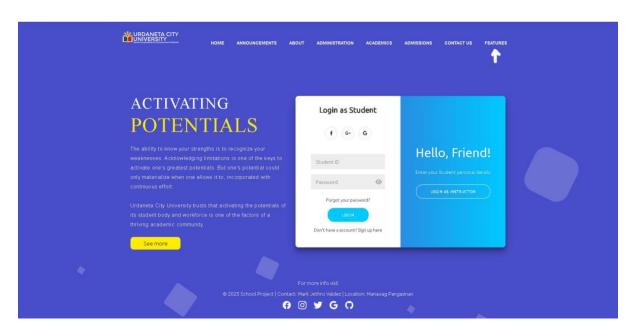




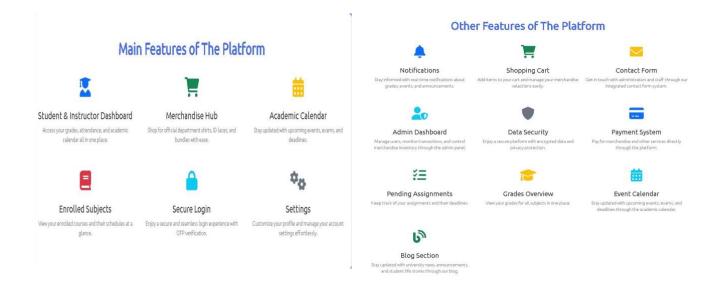


Features

Step 1: Open your browser. The platform will load the Main Page automatically. Click the **"Features"** button to explore features of the platform.



Step 2: After clicking "**Features**", a detailed overview of the main and other platform features will be displayed helping users understand its full functionality.



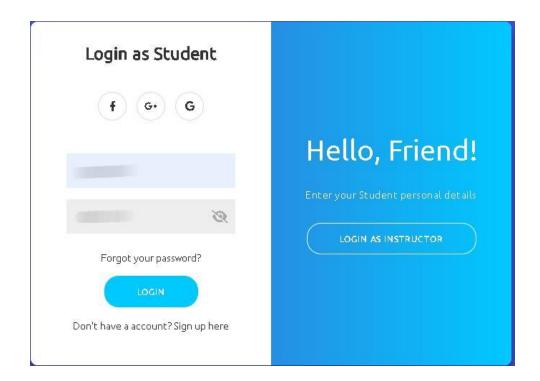




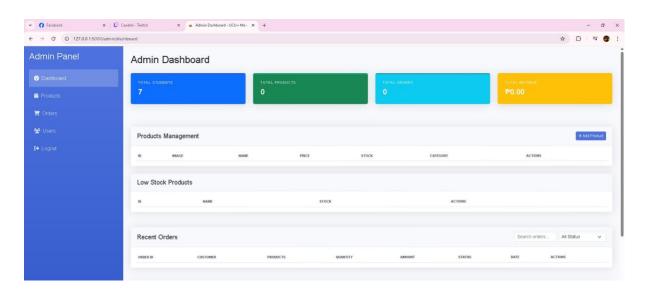
ADMIN GUIDE

HOW TO LOG IN AS ADMIN?

Step 1: The Admin should log in using their "**Admin ID**" and "**Password**" to access the platform for both instructor and student.



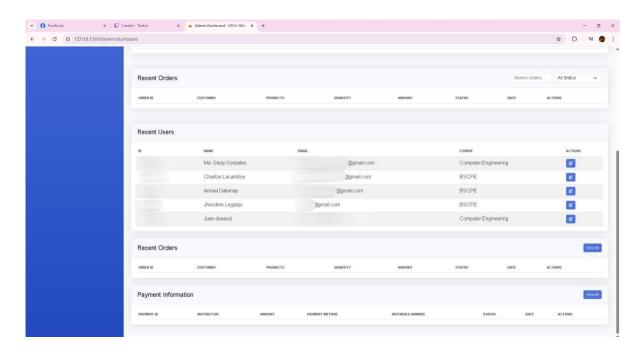
Step 2: Once the Admin log in the system will proceed directly to the platform. Click the "**Dashboard**" tab to view the total number of students, products, orders, and overall revenue.



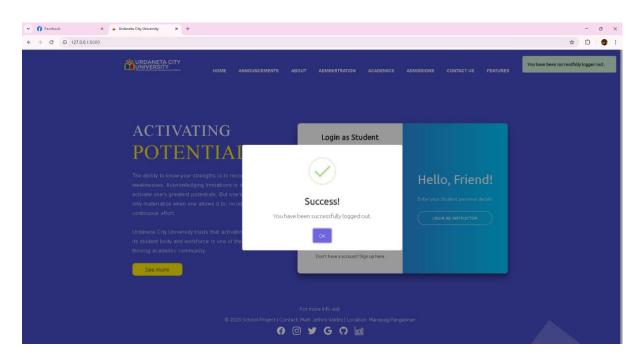




Step 3: After accessing the "**Dashboard**", Admin may auto-scroll the screen to view key sections such as Product Management, Low Stock Products, Recent Users, Recent Orders, and Payment Information.



Step 4: After completing your tasks on the platform, you may log out of your account securely to ensure your information remains protected.



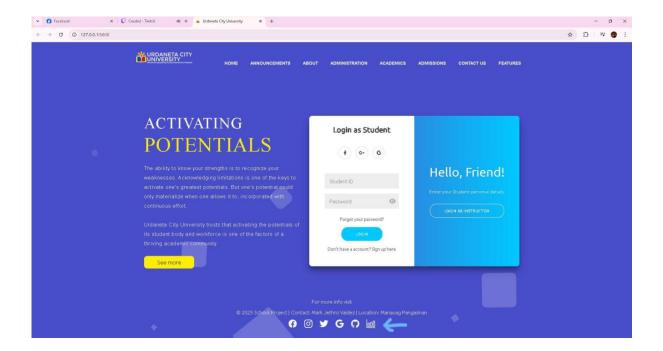
Note: Only the Admin can control and access to make changes to the UCU+ Merchandise Hub platform.

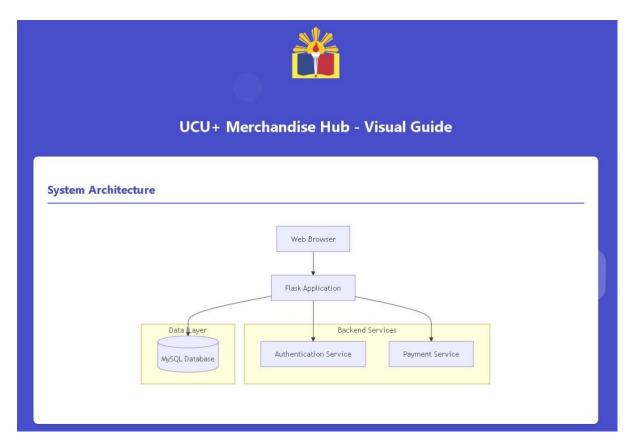




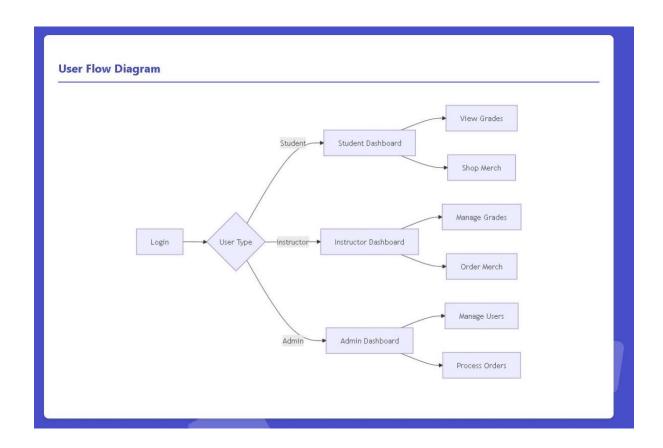
VISUAL AID

In the **UCU+ Merchandise Hub**, users can use this visual aid to guide and help them navigate the platform in a more convenient and user-friendly way.









User Roles & Features Students Instructors Administrators Manage Grades Shop Merchandise View Schedule Track Orders Order Department Merch Track Purchases System Settings

Payment Flow

Supported payment methods:

- GCash
- Maya
- Bank Transfer
- Cash on Delivery (Urdaneta City only)



Security Features

- · Secure password hashing using bcrypt
- -Turns passwords into secret codes so they can't be stolen easily.
- Session-based authentication
 - -Ensures that only authorized users can access certain parts of the system.
- · CSRF protection
- -Prevents cross-site request forgery attacks, which can compromise user data.
- Input sanitization
 - -Prevents malicious input from being processed by the system.
- Role-based access control
- Only lets users do things they're allowed to like admins vs. regular users.

SPECIAL FUNCTIONALITY & RESTRICTIONS

UCU+ Merchandise Hub – Special Functionality

Academic Integration

- Real-time grade updates
- Automated schedule sync
- Course-specific merchandise
- Department announcements

Inventory Management

- Low stock alerts
- Size availability tracking
- Automated reorder points
- Sales analytics

Data Protection

- Regular backups
- Encrypted storage



UCU+ Merchandise Hub - User Role Restrictions

Student Accounts

- Can only view their own grades and schedule
- Limited to purchasing department merchandise
- Cannot modify academic records
- Must verify student ID during registration
- Limited to one active session at a time

Instructor Accounts

- Can modify only their assigned class grades
- Access to department-specific merchandise
- Cannot modify system settings
- Must be verified by admin before activation
- Can view but not modify student schedules

Admin Accounts

- Full system access with audit logging
- Can manage all user accounts
- Merchandise inventory control
- System settings configuration
- Database management access

Payment Restrictions

- GCash/Maya Payments
- Requires proof of payment upload

Cash on Delivery

- Limited to Urdaneta City only
- Requires valid ID for student or instructor
- No partial payments allowed



CONCLUSIONS

The UCU+ Merchandise Hub project was developed to transform the way university merchandise is accessed and experienced at Urdaneta City University, specifically within the College of Engineering and Architecture (CEA). By transitioning from a manual process system to a convenient digital platform, the project addresses long-standing issues such as limited availability, long queues, and the absence of personalized shopping options. It empowers students and instructors to conveniently browse and purchase official university merchandise anytime, using either desktop or mobile devices.

Moreover, this platform is not only offers a convenient shopping experience but also integrates academic features, connecting instructors and students to campus-related tools and resources. The impact of this project is significant, as it enhances the connection between students and instructors and their university identity, fosters a stronger sense of belonging, and supports the broader academic experience ultimately empowering greater community engagement and pride.

The UCU+ Merchandise Hub is a new and exciting platform at Urdaneta City University, designed to make it easier for students and instructors especially from the College of Engineering and Architecture, to access university merchandise and academic tools in one place. Instructors and students are excited because it brings academics and shopping together in a convenient way. Instead of doing the traditional process of purchasing university merchandise, they can now buy official university merchandise online anytime, anywhere. The platform also includes helpful academic tools, making it more than just an online store. Together, it strengthens their connection to the university and makes school life easier and more enjoyable.



Furthermore, this project is valuable because it addresses real challenges faced by students and instructors when purchasing university merchandise such as limited access, long waiting times, and the inconvenience of face-to-face transactions. By going digital, the UCU+ Merchandise Hub provides a faster, easier, and more flexible way to shop while staying connected to the university. It also supports UCU's broader goal of modernization and digital transformation, which is especially meaningful for the College of Engineering and Architecture. More than just a matter of convenience, the platform fosters school pride, encourages engagement, and strengthens the sense of belonging within the UCU community.

Lastly, while the UCU+ Merchandise Hub offers numerous benefits, its continued success depends on ongoing development and innovation. Future enhancements such as expanding product offerings, introducing student discounts and incorporating interactive features will further enrich the user experience. Gathering regular feedback from instructors and students is essential to ensure the platform continues to meet their evolving needs. By remaining adaptable and responsive to user input, the UCU+ Merchandise Hub can grow into a vital part of the university experience, strengthening institutional connection while enhancing accessibility and engagement for both instructors and students.