



Faculty of Computing

NSBM Green University

Examination Management System

Front-end Development Report

Module: IS201.3-Business Processes and ERP

Lecture: Miss Lakni Peiris

Group 12 Members

Name	Student ID
D K K S Kulasuriya	31883
T A W Rajapaksha	31541
S W N D Suneth	31744
M M S Lakshitha	31806
K T N Katugampala	31934
H P R Wijayakoon	32567
M M Wanigarathna	31110
Y M P C Yuthara	31567
G U I S Kumarathilaka	32468
I M D P Keerthirathne	32920
M A M S Perera	32187

Contents

1. Introduction	3
2. System Overview.....	3
3. UI/UX Design Approach	5
4. Figma Design Screens.....	7
5. Design Elements	10
6. Prototype & Interactions	11
7. Conclusion.....	11
8. Appendix.....	12

1. Introduction

The Examination Management System (EMS) is designed to streamline and digitize exam-related activities within a university or academic institution.

The primary goal of this design is to create an intuitive and user-friendly interface that enables students, faculty, and administrative staff to manage examination processes efficiently.

The design was created using Figma, focusing on visual consistency, usability, and accessibility.

It includes modules for student registration, exam scheduling, fee payment, result management, and re-evaluation requests.

2. System Overview

The **Examination Management System (EMS)** is a comprehensive digital solution designed to automate and simplify all examination-related processes within a university. It integrates academic, administrative, and financial workflows, ensuring smooth coordination between students, faculty, exam office, finance department, and invigilators.

The system is built around a **role-based interface**, where each user type (Student, Faculty, Admin, Finance, Invigilator) accesses a personalized dashboard and tools relevant to their responsibilities. This multi-role design ensures data integrity, operational transparency, and efficient collaboration across departments.

Modules:

1. Login & Role Selection

- The system begins with a **secure login interface** that supports multiple roles — Student, Admin (Examination Office), Faculty, Finance, and Invigilator. Users can log in using university credentials, recover passwords, and select their role.

2. Dashboard Pages

- **Student Dashboard:** Displays upcoming exams, registration status, Exam results.
- **Exam Office Dashboard:** Statistics, Upcoming exam schedules.
- **Finance Dashboard:** Displays total fee collections, pending payment.
- **Faculty Dashboard:** Provides evaluation status and rechecking requests.

3. Student Modules

- **Exam Notifications Page** – Seat allocation released, payment successful, payment reminder, exam registration open.
- **Exam Registration Page** – Student details, Exam details, fee summary.
- **Exam Fee Payment Screen** – Payment details, payment method.
- **Exam Schedule & Seating Allocation View** – Module code, module name, exam date, time, hall, seat no.
- **Results Page** – Student details, overall performance, result, grade.
- **Re-evaluation Request Form** – Request form.

4. Examination Office / Admin Functional Modules

- **Create & Publish Exam Calendar** – Exam details, hall, exam time, seat no and calendar.
- **Exam Center & Room Allocation** – Exam all and the seat no.
- **Invigilator Assignment** – Allocate staff to exam rooms and sessions.
- **Question Paper Approval Workflow** – Securely review and approve exam papers before printing.
- **Distribution & Logistics Dashboard** – Track question paper dispatch and delivery status.
- **Attendance & Incident Logging Interface** – Record attendance and report irregularities.
- **Marks Compilation & Moderation** – Collect, validate, and moderate grades.
- **Result Publish Panel** – Release verified results to the student portal.
- **Certificate & Transcript Generation** – Produce official academic records post-exam.

5. Faculty / Evaluator Functional Modules

- **Paper Evaluation Dashboard** – Displays assigned papers and evaluation progress.

- **Marks Entry Screen** – Facilitates entry of evaluated marks into the system.
- **Moderation & Re-evaluation Panel** – Manages grade reviews, disputes, and rechecks.

6. Finance / System Functional Modules

- **Exam Fee Tracking Dashboard** – Monitors all exam-related payments.
- **Reconciliation Reports** – Ensures that all collected fees match system records.
- **Analytics & Compliance Reports** – Generates insights for regulatory, audit, and management reporting.

3. UI/UX Design Approach

The **UI/UX design** of the Examination Management System (EMS) was developed using a **user-centered design methodology**, focusing on simplicity, clarity, and accessibility for all types of users — including students, faculty, examination officers, finance staff, and invigilators. Each screen and component in the Figma design aims to support user efficiency, reduce cognitive load, and create a visually consistent digital environment across the ERP system.

1. Design Objectives

- Provide a **clean, minimal, and intuitive interface** that aligns with modern academic ERP standards.
- Ensure **role-based usability**, where each user group accesses only relevant information and actions.
- Support **task efficiency** for complex workflows like registration, approval, evaluation, and reporting.
- Maintain **visual consistency** through a unified color palette, typography, and iconography system.
- Enhance **accessibility** for diverse users with readable fonts, sufficient contrast, and clear navigation.

2. Design Methodology

The design process followed **five core phases**:

- **User Research & Role Identification** – Understanding user groups (Students, Faculty, Admins, Finance, Invigilators) and their needs within the exam lifecycle.
- **Information Architecture** – Structuring content into logical categories such as “Exam Registration,” “Results,” “Payments,” and “Admin Control.”
- **Wireframing & Layout Planning** – Low-fidelity sketches were created to visualize layouts and navigation flows before moving to prototypes.
- **High-Fidelity Figma Prototyping** – Developed interactive screens for all roles, including dashboards and process-specific interfaces.
- **Feedback & Refinement** – Iterative testing was conducted to refine user flows, improve accessibility, and enhance overall clarity.

3. Visual Identity

- **Color Palette:** Shades of blue as the primary color (trust, professionalism), supported by neutral grays and white for background balance.
 - Blue – highlights trust and institutional reliability.
 - Green – represents success, approvals, and confirmations.
 - Red – indicates alerts or errors
- **Typography:** Inter and Robert Serif used for clarity and modern academic appearance.
- **Icons & Illustrations:** Material icons from Figma’s built-in set ensure recognizability and consistency.
- **Components:** Reusable UI components such as buttons, cards, input fields, and modals improve design efficiency and coherence.

4. UX Interaction Flow

Each role-based dashboard provides direct navigation to key modules:

- **Students:** Profile, setting, notifications, exam registration, fee payment, exam schedule, results, re-evaluation form.

- **Exam Office:** Profile, exam calendar, center & room allocation, invigilator assignment, paper approval, distribution & logistics, attendance, mark completion, result publish, certificate creation, setting.
- **Faculty:** Profile, paper evaluation, marks entry, moderation panel, setting.
- **Finance:** Profile, exam fee tracking, reconciliation, analytics & compliance, setting.

Interactive prototypes were built to simulate **real-world flows** such as:

- “Student → Exam Registration → Payment → Results → Re-evaluation”
- “Admin → Exam Scheduling → Invigilator Assignment → Result Publishing”

5. Usability Testing

Preliminary user testing was conducted with sample users from each role. Feedback confirmed that:

- Navigation was **intuitive and predictable**.
- Dashboards provided **clear overviews** of user tasks.
- Button placement and icons improved **task completion speed**.

Minor refinements were made to improve button contrast, form spacing, and confirmation pop-ups based on the feedback.

4. Figma Design Screens

Below are the major screens included in the Examination Management System design. Each screen focuses on specific user needs and tasks.

Page	Description	Key UI Elements
Login & Role Selection	Secure login page allowing users to select their role (Student, Admin, Faculty, Finance, Invigilator). Includes password reset.	Username, password, role buttons, login and forgot password buttons and reset password.

Student Dashboard	Displays upcoming exams, registration status, Exam results.	Sidebar, dashboard cards, notifications, progress tracker.
Exam Office Dashboard	Shows overall statistics, pending approvals, and exam schedules for administrative staff.	Charts, tables, status indicators, approval shortcuts.
Finance Dashboard	Tracks fee collections, pending payments, and financial summaries.	Graphs, transaction tables, report buttons.
Faculty Dashboard	Displays evaluation progress, assigned courses, and rechecking requests.	Progress bars, lists, notifications.
Exam Notifications Page	Displays official notifications, announcements, and exam-related updates.	Notification cards, search filters.
Exam Registration Page	Allows students to register for exams and verify eligibility.	Form inputs, submit button, status alert.
Exam Fee Payment Screen	Handles online or manual payments with receipt download after success.	Payment summary, success modal, download receipt button.
Exam Schedule & Seating Allocation View	Displays exam timetable, location, and seat assignments.	Calendar view, tables, seating layout visualization.
Results Page	Displays published exam results, GPA, and subject-wise marks.	Result table, filters, download PDF button.
Re-evaluation Request Form	Allows students to request and track re-evaluation of marks.	Form fields, submit button.

Create & Publish Exam Calendar	Enables admins to create and publish the academic exam schedule.	Date pickers, publish button.
Exam Center & Room Allocation	Assigns exam centers and generates room allocation charts.	Tables, create button, manage button.
Invigilator Assignment	Assigns invigilators to exam rooms and sessions.	Staff list, assignment form, confirmation alert, save button.
Question Paper Approval Workflow	Facilitates question paper submission, approval, and printing authorization.	Upload section, approval workflow tracker.
Distribution & Logistics Status Dashboard	Tracks question paper distribution, materials dispatch, and logistics.	Status cards, timelines, analytics view.
Attendance & Incident Logging Interface	Records attendance and any irregularities during the examination.	Input fields, attendance checklist, incident form.
Marks Compilation & Moderation	Allows exam office to validate, compile, and moderate marks.	Tables, marks input, moderation controls.
Result Publish Panel	Publishes approved results for student viewing.	Publish button, confirmation modal, filter by batch.
Certificate & Transcript Generation	Generates academic certificates and transcripts post results.	Export buttons, preview modal, verification seal.
Paper Evaluation Dashboard	Displays assigned papers for marking and progress tracking.	Progress bars, filter options, card layout.
Marks Entry	Allows faculty to enter and submit student marks.	Input fields, table view, save/submit button.
Moderation & Re-evaluation Panel	Handles grade moderation and rechecking requests.	Review buttons, status updates, comment sections.

Exam Fee Tracking Dashboard	Tracks all fee payments and pending balances for students.	Graphs, tables, export reports button.
Reconciliation Reports	Matches payment data with bank or system records for accuracy.	Reports table, filter by date, download option.
Analytics & Compliance Reports	Generates analytics for management and compliance reporting.	Charts, PDF export button.

5. Design Elements

The visual identity of the Examination Management System is defined by a consistent color palette, readable typography, and intuitive icons.

Color Palette:

- Primary: Navy Blue #1E3A8A
- Secondary: Gray #6B7280
- Accent: Sky Blue #3B82F6
- Background: Light Gray #F3F4F6
- Success: Green #10B981
- Error: Red #EF4444

Typography:

- Inter and Robot Serif

Icons:

- Icons8, Vector Icons & Stickers

Components:

- Buttons, cards, input fields, modals, and navigation bars

6. Prototype & Interactions

The interactive prototype of the Examination Management System was constructed in Figma. The pages are all interconnected in such a way that individuals can view the entire journey of each position- students, faculty, finance officers and exam administrators.

All the actions were created to be similar to the way the actual system will operate, allowing users to view the flow as the final application. We have also included links between dashboards, forms and confirmation screens to ensure that it is easy to move between one task to another. To make the prototype look like the real one, we included interactive features such as hover highlights, smooth clicks, and animated pop-ups.

Hovering demonstrates the buttons or menus that can be clicked, and pop-ups provide feedback on such things as paid bills, submitted forms, and confirmation messages. The animations are small and allow users to know what is going on such as a light animation when switching between dashboards or a highlight when an action is completed. Such information makes navigation a natural process, as in the end ERP system.

We also tried the prototype by previewing it in the presentation mode of Figma so that the stakeholders and users could walk through the workflows such as:

- Student registration → fee payment → admit card download → result.
- Admin exam setup → invigilator assignment → result publishing.

Overall, the Figma prototype serves as a **functional visualization of the entire examination lifecycle**, demonstrating how users interact with the system in a realistic, intuitive, and efficient manner.

7. Conclusion

The Examination Management System design successfully visualizes a complete digital solution for managing university examinations.

The Figma prototype demonstrates how digital design can simplify complex workflows, enhance transparency, and improve user satisfaction.

Future improvements may include mobile responsiveness and accessibility enhancements.

8.Appendix

- Figma Prototype Link:

<https://www.figma.com/design/GTviLTqmfOq1ZOHvImKHLn/ERP-System?t=BrJkbVwA2WeSnogu-1>

