**A PROJECT REPORT**

ON

**University Management Portal**

SUBMITTED IN THE PARTIAL FULFILLMENT FOR THE AWARD OF

DEGREE OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE /

SOFTWARE ENGINEERING

SUBMITTED TO

**DEPARTMENT OF COMPUTER SCIENCE / SOFTWARE ENGINEERING**

**ILMA UNIVERSITY**

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SPRING 2024

# 

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# STATEMENT OF PROJECT APPROVAL

The thesis of **University Management Portal** has been approved by the following supervisory committee members:

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# DECLARATION OF ORIGINALITY

We **Aliza Imran**, **Ayesha Rahim**, **Shanzay shoukat**, **Laraib khan**, **Adnan Kaim Khani**, **Zahid Ali**, here by declare that the content writer in the project represents original work conducted by us and we certify that,

1. We have not manipulated any of the data or results,
2. We have not committed any plagiarism of intellectual property,
3. We have indicated and referenced the contributions of others,
4. We have explicitly acknowledged all collaborative research and discussions,
5. We understand that any false claim will result in severe disciplinary action,
6. We have understood that the work may be screened for any form of academic misconduct.

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# SUPERVISOR ALLOCATION CERTIFICATE (SAC)

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**Description:** The *University Examination Portal* is a comprehensive web-based application designed to streamline administrative tasks and enhance communication within educational institutions. It provides a centralized platform for managing various aspects of university operations, including student enrollment, course management, faculty administration, and more.

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[1.6. 1Improved Efficiency 15](#_Toc183156732)

[Automates and centralizes the examination process, reducing manual work and ensuring smooth management of student profiles, course schedules, and exam materials. 15](#_Toc183156733)

[1.6.2 INCREASED OPERATIONAL EFFICIENCY 15](#_Toc183156734)

[An optimized portal design with managed workflows and seamless integration of key features such as exam scheduling, result publishing, and study material sharing can significantly enhance the operational efficiency of university examination processes. The system reduces the time required for manual tasks, improves communication between stakeholders, and ensures better handling of peak times such as exam seasons. 15](#_Toc183156735)

[1.6.3 Enhancement of Security Features 15](#_Toc183156736)

[Addressing the security challenges in examination portals, such as unauthorized access and data integrity issues, is crucial. By incorporating robust authentication mechanisms, encryption, and role-based access control, the portal minimizes errors, enhances transparency, and ensures a smooth and efficient examination process. 15](#_Toc183156737)

[1.6.4 COST SAVING 15](#_Toc183156738)

[The centralized examination portal can optimize resource utilization by reducing paper-based processes and minimizing manual interventions. This not only saves costs for universities but also streamlines administrative workflows, making it a cost-effective solution for examination 15](#_Toc183156739)

[1.6.5 BROADER INDUSTRY IMPACT 15](#_Toc183156740)

[The introduction of this portal can have a transformative impact on the academic sector. Features like automated grading, real-time notifications, and role-based accessibility enhance the user experience for students, faculty, and administrators alike. Furthermore, it enables smaller institutions to adopt a high-quality system at a lower cost, improving overall academic operations. 15](#_Toc183156741)

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[This chapter outlines the methodology adopted for the development and implementation of the university examination portal. It provides a detailed explanation of the system overview, requirement analysis, and architecture, along with the design and testing approaches. The goal is to ensure the system meets functional and non-functional requirements while being scalable, secure, and user-friendly. 20](#_Toc183156758)

[3.2 SYSTEM OVERVIEW 20](#_Toc183156759)

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[ User registration and authentication for students, faculty, and administrators. 20](#_Toc183156765)

[ Online exam scheduling and room allocation. 20](#_Toc183156766)

[ Question paper generation and secure upload by faculty. 20](#_Toc183156767)

[ Secure and real-time proctoring during examinations. 20](#_Toc183156768)

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[3.4.3 APPLICATION LOGIC LAYER 21](#_Toc183156776)

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