Developing a Faculty Academic Requirements Management System at PUP-Taguig

Software Requirements

Specification

Version 1.0

Prepared by:

FARM Development Team

Fidel, Diana Rose V.

Nabayra, James V.

Mingo, Ed Judah E.

Villamarzo, Kazel S.

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Revision History

Name	Date	Reason for Changes	Version
FARM	August 9, 2024	Initial Draft	0.1
FARM	August 28, 2024	Finalization	0.2

Approved By

Approvals should be obtained for the project manager, and all developers working on the project.

Name	Signature	Department	Date
Fidel, Diana Rose v.		BSIT - Lead Tester/Developer	August 26, 2024
Nabayra, James V.		BSIT - Project Manager/Developer	August 26, 2024
Mingo, Ed Judah E.		BSIT - Team Lead/Developer	August 26, 2024
Villamarzo, Kazel S.		BSIT - Document Analyst/Developer	August 26, 2024

1. Introduction

1.1 Purpose

This document provides the Software Requirements Specification of the Faculty Academic Requirements Management System which will be used by (3) stakeholders. The stakeholders are as follows: Admin, Faculty and Director. The main objective of this document is to show and describe the functional and non-functional requirements of the system. Faculty Academic Requirements Management System is a web application system. The system features include the landing page module and Home for admin, faculty, and Director module; it includes login, dashboard, Notification, reviews, accomplishment, and maintenance. This document is intended for review and testing with the involvement of project stakeholders.

1.2 Document Conventions

Entire document should be justified.

Convention for Main Title

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Convention for Subtitle

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Convention for Body

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1.3 Intended Audience and Reading Suggestions

The intended readers of this document are the developers of the system, testers, stakeholders, and the project coordinator. This document contains the system overview, features, and functionalities. It also includes the functional, non-functional, and other

requirements expected to be on the system. For proper interpretation of the terms being used, this document provides the appendices that include the glossary for the list of specific terms and analysis models for the visual presentation of information flows expected in the system. The document will be reviewed frequently to check if the project is being completed or meets the requirements of the client. Any suggestions for changes on the requirements should be included in the last version of the document to serve as a reference to developing and validating teams.

1.4 Project Scope

The scope of the study includes designing and developing a comprehensive system to centralize and streamline the management of academic requirements for faculty members at PUP-Taguig, thereby enhancing the efficiency and effectiveness of academic requirements management.

1.5 References

PUPT-FARM

PUPT-FARM-SRS

SRS Content Guide: Software Requirement Specification (SRS) Format - GeeksforGeeks

SRS Content Guide:The Full Guide To Software Requirements Specification Documentation

2. Overall Description

2.1 Product Perspective

The Faculty Academic Requirements Management System at PUP-Taguig is a web application, designed to centralize and streamline the current manual process of managing faculty academic submissions. It integrates with the Faculty Loading System (FLS) and Human Resources Information System (HRIS) to enhance data coordination and operational efficiency. By

automating tracking, improving file security, and expanding storage capacity, the system aims to alleviate administrative burdens and foster a collaborative, data-driven academic environment. This solution ensures secure, reliable, and easily accessible management of faculty academic requirements, ultimately improving the quality of instruction and institutional efficiency.

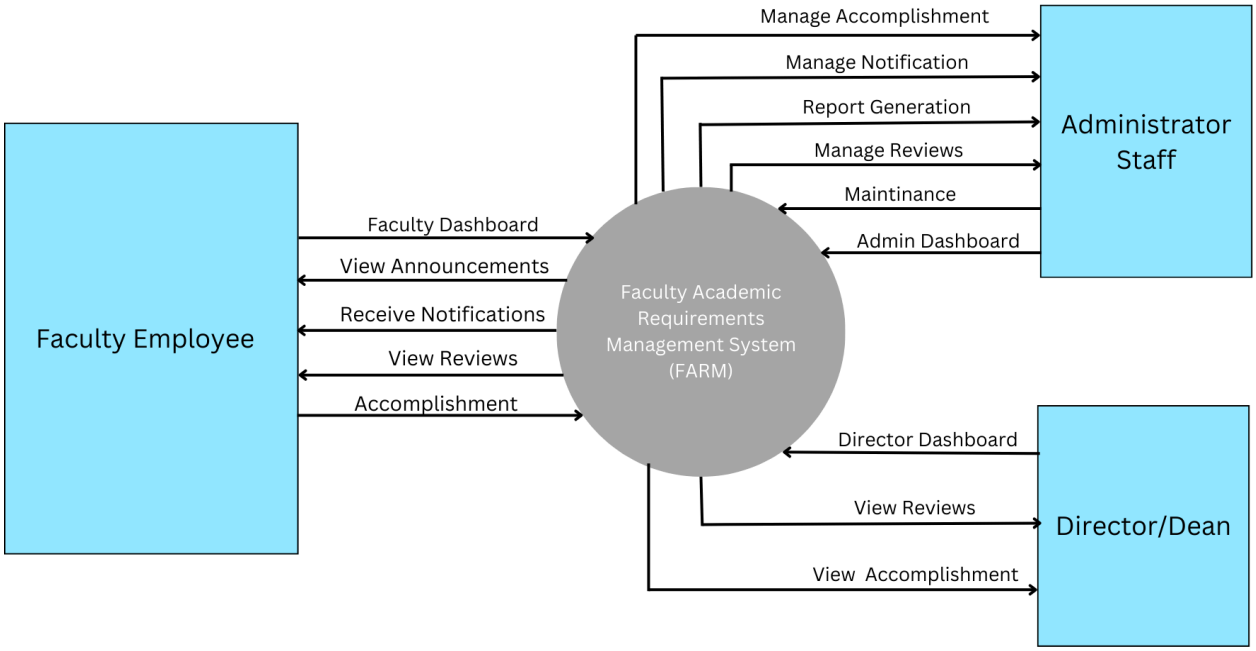

Figure 1: Context Diagram

2.2 Product Features

The updated Faculty Academic Requirements Management System features are divided into three users namely the Admin, Faculty and Director(dean). The system covers the following features and functionalities:

Login. using webmail for administrators to access the system's management feature.

Dashboard for Admin. The dashboard offers a concise overview of faculty user registrations and academic document submissions, including exams and quizzes. It also tracks the status of files pending review or approval, ensuring streamlined monitoring of academic processes.

Dashboard for Faculty. The dashboard tracks faculty compliance with submission requirements, showing the number of uploaded files and those pending review or approval. It also monitors storage space usage, alerting when capacity is nearly full.

Dashboard For Director. The dashboard tracks registered faculty users and monitors academic document submissions, including files pending review or approval. It also provides real-time data on reviewed and approved academic files, streamlining oversight, and improving process efficiency.

Notifications. The system provides real-time updates when a faculty member re-upload declined files, allowing immediate rechecking. It enables admins to quickly approve or disapprove the resubmitted files, ensuring timely feedback and efficient document management.

Report. The admin can generate the summary report regarding all the status of each faculty member.

·**Reviews.** It allows the admin to approve submitted academic requirements if all files are accurate. If any issues or missing information are found, the admin can return specific files to the faculty for revision, along with feedback that includes comments, suggestions, and required changes. This feedback helps guide faculty in revising and resubmitting their documents to ensure compliance.

Accomplishment. It requires faculty members to upload all academic requirements before the end of each semester. It tracks the completion and submission of these requirements, ensuring that all necessary documents are submitted on time.

Announcement. This announcement is sent to specific faculty members to remind them of any unsubmitted files. It provides a dedicated area for important updates, reminders, and announcements related to FARMS and submission deadlines at PUP-Taguig.

Maintenance. Handles the maintenance of general announcements, including all reminders for faculty members. It also ensures the flexibility and maintainability of the main academic requirements folder and its subfolders (such as Test Administration, Classroom Management, and Syllabus Preparation), allowing for necessary modifications.

2.3 User Classes and Characteristics

2.3.1 Administrative Staff

oversees and manages academic requirements, including accessing, reviewing, and approving submissions. It also allows administrators to download documents for record-keeping and add new requirements to adapt to evolving needs.

2.3.2 Faculty members

Users can securely manage their academic requirements through the system by logging in to upload, access, download, update, and delete syllabi and instructional materials. This ensures that all essential documents are centralized and up to date.

2.3.3 Director (Dean)

Focus on oversight and management. She will log in to access all academic requirements, review submissions, download documents for record-keeping.

2.4 Operating Environment

1. The Faculty Academic Requirements Management System operates in a web-based environment.
2. Faculty Academic Requirements Management System can be accessed using the Internet.
3. The Faculty Academic Requirements Management System was developed using Laravel Framework.

2.5 Design and Implementation Constraints

1. The Faculty Academic Requirements Management System design, code, and maintenance documentation shall be included in the Capstone Project guidelines.
2. The Faculty Academic Requirements Management System shall be built using Laravel framework.
3. The Faculty Academic Requirements Management System database engine shall be MySQL.
4. The Faculty Academic Requirements Management System EMIS shall be maintained during the implementation period and will provide appropriate training once the system is completed.

2.6 User Documentation

1. Manuals and How-to video tutorials will be provided once the project is finished.

2.7 Assumptions and Dependencies

1. The Faculty Academic Requirements Management System Shall bring easy means of tracking and managing of Academic requirements .
2. The Faculty Academic Requirements Management System uses the internet to function. A weak internet connection or loss of connection might affect its performance.

3. System Features

This section describes the functional requirements of the application and the features it provides. System features are described in detail to help with future extension and testing of the system. The system features need to be classified and organized according to the utmost priority, as stated below.

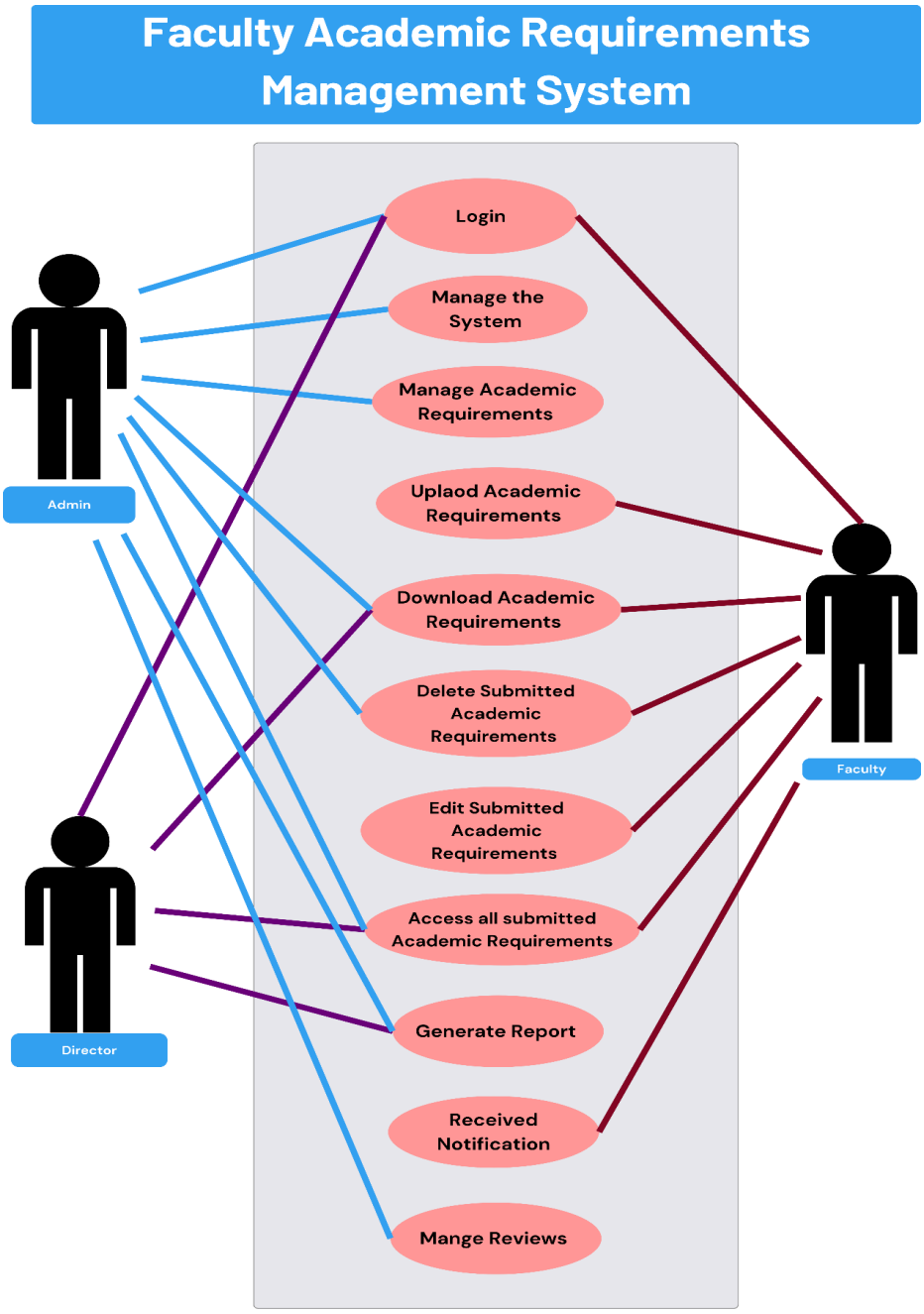

Figure 2. System Use Case Diagram

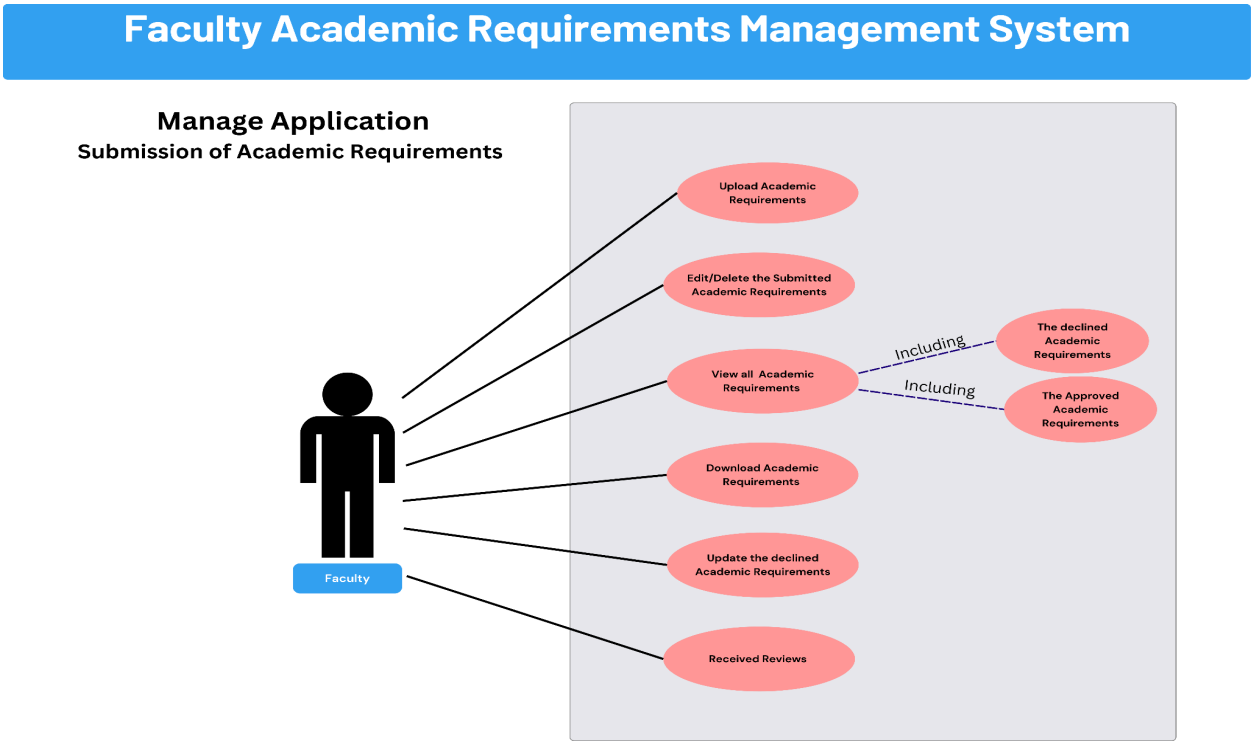

Figure 3. System Use Case Diagram – Manage Application (Compilations and Submissions)

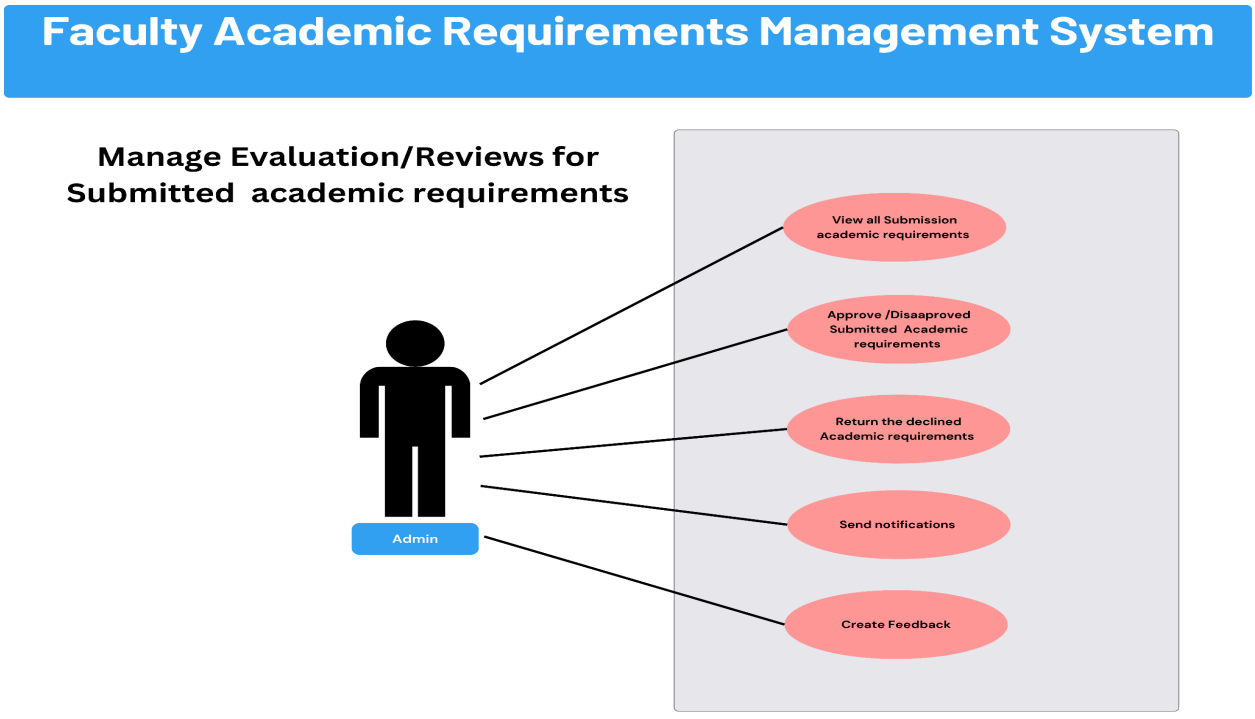

Figure 4. System Use Case Diagram – Manage Evaluation/Reviews (For Submitted Academic Requirements)

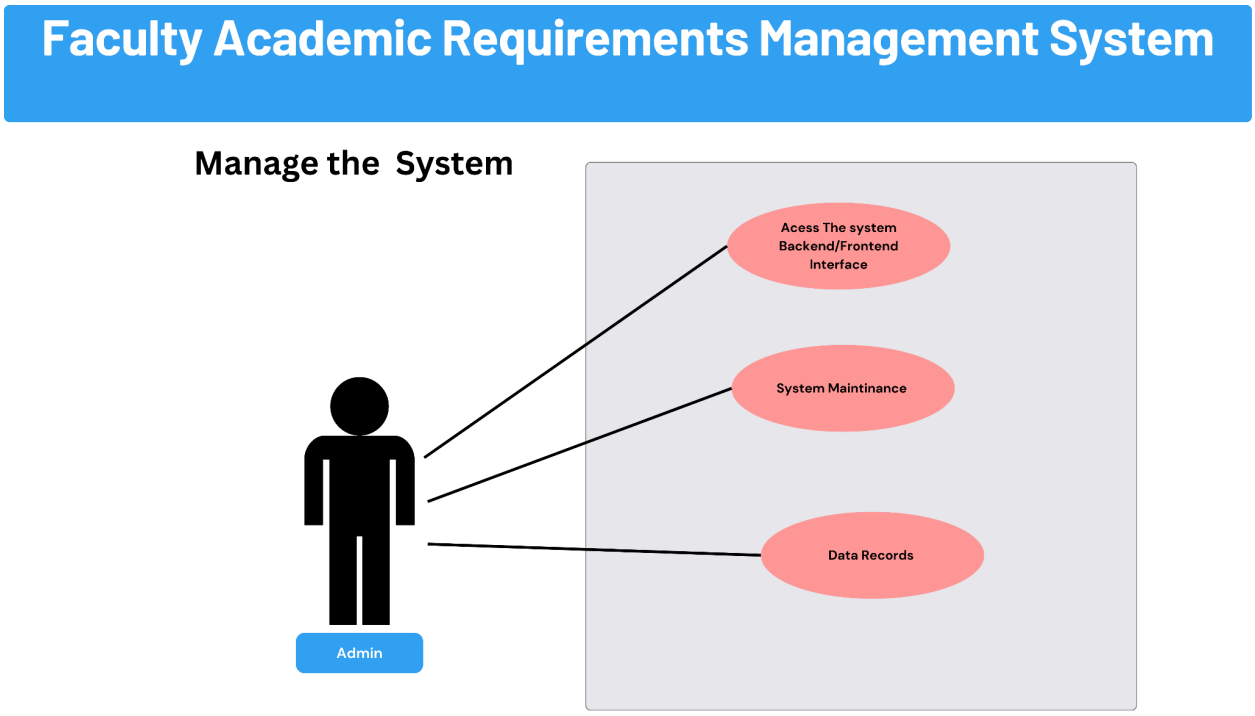

Figure 5. System Use Case Diagram – Manage System.

3.1 Faculty Dashboard

3.1.1 Description and Priority:

This feature allows faculty members to log in to the system using their HRIS account to access the dashboard and manage academic requirements.

3.1.2 Stimulus/Response Sequences:

Stimulus	Response
The Faculty Member logs into FARMS using HRIS.	The system redirects them to the main Dashboard interface.

3.1.3 Functional Requirements:

The system shall verify the faculty member's credentials through HRIS.

The system shall provide secure access to the faculty dashboard.

3.2 Admin Dashboard

3.2.1 Description and Priority:

This dashboard is used by the Head of Academic Programs to manage and review faculty submissions, monitor system activity, and generate reports.

3.2.2 Stimulus/Response Sequences:

Stimulus	Response
The Head of Academic Programs logs into FARMS using HRIS.	The system redirects them to the Admin Dashboard where they can review, approve, or reject submissions.
The Head of Academic Programs reviews faculty submissions.	The system allows the Head to provide feedback, approve, or request revisions for each submission.

3.2.3 Functional Requirements:

The system shall allow the Head of Academic Programs to view, approve, or reject faculty submissions.

The system shall display the status of all faculty submissions, including pending, approved, and rejected.

The system shall allow the Head to send feedback and request revisions from faculty members.

The Admin Dashboard shall generate summary reports for faculty submission status and performance.

3.3 Director/Dean Dashboard

3.3.1 Description and Priority:

This dashboard is used by the Head of Academic Programs to manage and review faculty submissions, monitor system activity, and generate reports.

3.3.2 Stimulus/Response Sequences:

Stimulus	Response
The Head of Academic Programs logs into FARMS using HRIS.	The system redirects them to the Director/Dean Dashboard where they can Track the number of registered faculty users using their HRIS credentials, as well as the number of exams, quizzes, and other academic documents submitted by faculty members.

3.3.3 Functional Requirements:

The system tracks the number of registered faculty users using HRIS credentials.

The system tracks the number of exams, quizzes, and other academic documents submitted by faculty members.

The system provides a summary of files that have been uploaded but are awaiting review or approval.

The system tracks the number of academic files that have been reviewed and approved.

3.4 Notification of Requirements

3.4.1 Description and Priority:

This feature notifies faculty members of the academic requirements they need to submit via the system.

3.4.2 Stimulus/Response Sequences:

Stimulus	Response
The Head of Academic Programs sends a notification to faculty members.	Faculty members receive a list of academic requirements they need to submit.

3.4.3 Functional Requirements:

The system shall allow the Head of Academic Programs to send notifications regarding submission requirements.

Faculty members shall receive real-time notifications with a clear list of what to submit.

3.5 Submission of Academic Requirements

3.5.1 Description and Priority:

Faculty members can upload academic requirements such as classroom management plans, syllabus preparation, and test administration results.

3.5.2 Stimulus/Response Sequences:

Stimulus	Response
The Faculty Member uploads academic requirements.	The system checks for completeness and saves submissions if all data is provided.
The submission is incomplete or lacks evidence.	The system notifies the faculty member and prevents incomplete submissions from being stored.

3.5.3 Functional Requirements:

The system shall allow faculty members to upload academic requirement documents.

The system shall verify if all required data and evidence are complete before saving the submission.

Incomplete submissions shall not be stored, and faculty members will be notified.

Here is the separated system feature based on the flowchart, keeping the format you provided

3.6 Faculty Login

3.6.1 Description and Priority:

This feature allows faculty members to log in to the system using their HRIS account to access the dashboard and manage academic requirements.

3.6.2 Stimulus/Response Sequences:

Stimulus	Response
The Faculty Member logs into FARMS using HRIS.	The system redirects them to the main Dashboard interface.

3.6.3 Functional Requirements:

The system shall verify the faculty member's credentials through HRIS.

The system shall provide secure access to the faculty dashboard.

3.7 Review and Approval

3.9.1 Description and Priority:

This feature allows the Head of Academic Programs to review and approve or reject submissions from faculty members.

3.9.2 Stimulus/Response Sequences:

Stimulus	Response
The Head of Academic Programs reviews the submission.	The system allows the Head to approve or reject the submission with feedback for faculty members.
The submission is rejected.	The system notifies the faculty member with feedback and requests revisions.

3.9.3 Functional Requirements:

The system shall allow the Head of Academic Programs to review faculty submissions.

Approved submissions shall be finalized and stored in the system.

Rejected submissions shall trigger feedback notifications for revisions.

3.8 Report Generation Module

3.10.1 Description and Priority:

This feature generates reports for faculty members who have completed their submissions and for the Head of Academic Programs to monitor progress.

3.10.2 Stimulus/Response Sequences:

Stimulus	Response
The submission is approved.	The system generates a report for the faculty member and Head of Academic Programs.

3.10.3 Functional Requirements:

The system shall generate a report upon successful submission approval.

The report shall provide an overview of the faculty member’s submitted requirements.

4. External Interface Requirements

4.1 User Interfaces

- The Faculty Academic Requirements Management System will be used by the Faculty Employees, Administrator Staff, Researcher Coordinators and Dean/Directors.
- Users must be able to log in and log-out out of the system.

4.2 Hardware Interfaces

Requirement	**Recommended**
Processor	Minimum of 2.5 Ghz processor or higher, or a minimum of dual-core processor or higher
Memory	Minimum of 8GB of RAM or higher to support modern network such as laravel
Hard Disk	Minimum of 500MB of free storage for files, with at least 20GB available for system operations and catching
Screen Resolution	Minimum of 1080 resolution for optimal interface and design workflow

4.3 Software Interfaces

Requirement	**Recommended**
Client on Internet	Any modern web browser (eg. Google, Chrome, Firefox, Microsoft Edge)
Client on Intranet	Any modern web browser (eg. Google, Chrome, Firefox, Microsoft Edge)
Web Server	XAMPP
Database Server	MySQL Database Server
Development End	Laravel Framework

4.4 Communications Interfaces

- The device used to access the web application must be connected to the internet.

5. Other Nonfunctional Requirements

This section describes the non-functional requirements for the software. Performance, safety, security, and usability requirements are defined as per stakeholders' needs to enhance the qualities of the system. Business rules are also indicated in this section.

5.1 Performance Requirements

- The response time, data back-up and restore may vary depending on the speed of the internet connection since the Faculty Academic Requirements Management System is a web-based application.
- The system shall be able to handle large amounts of users connecting at the same time in order to accommodate heavy traffic on certain date and time.

5.2 Safety Requirements

- It is required to have database backup in case the current database crashes to avoid loss of data.

5.3 Security Requirements

- The Faculty Academic Requirements Management System must maintain confidentiality to its data and will only be given to appropriate authority.
- The system must be secure with email and password that is limited only to its users.

5.4 Usability Requirements

- The Faculty Academic Requirements Management System shall be user-friendly and easy to navigate without

5.5 Business Rules

- The Faculty Academic Requirements Management System must have roles defined with certain permissions to authenticate access and interaction in the system.

- Additional user roles and permissions may be added within the system.

6. Other Requirements

- No other requirements have been identified.

7. Glossary

Term/Acronym	Definition
Academic Requirements	The necessary documents or tasks that faculty members need to complete, such as syllabi, classroom management plans, and test administration results.
Announcement Module	A feature that allows the system administrator to send out important updates, reminders, and announcements to faculty members.
Dashboard	The main interface for each user class (Admin, Faculty, Director), where system functionalities and data are visually represented.
Faculty Loading System (FLS)	An existing system integrated with the new system to manage faculty workload.
Human Resources Information System (HRIS)	A system used to manage user credentials and faculty data for secure login.
Laravel Framework	A PHP-based web application framework used to develop the Faculty Academic Requirements Management System.
MySQL Database	The database management system used to store system data such as academic submissions and user information.
Report Generation Module	A feature that creates summaries of faculty submissions and system activities for review by administrators and directors.
Webmail Login	A method of login using institutional email for administrators to access system management features.