

User Requirement Document

UNIVERSITY DEPARTMENT INFORMATION SYSTEM

Team: **NEXUS BYTES**

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UNIVERSITY DEPARTMENT INFORMATION SYSTEM

Version 1.1

Requirement Document

Version History

<i>Version no</i>	<i>Date</i>	<i>Changed by</i>	<i>Changes made</i>
<i>V1.0</i>			<i>Draft Report</i>
<i>V1.1</i>			<i>Added use cases, use case specifications</i>
<i>V1.1</i>			<i>Updated use case specifications</i>

TABLE OF CONTENTS

Team :	NEXUSBYTES.....	1
UDIS		2
VERSION 1.1		2
REQUIREMENT DOCUMENT.....		2
VERSION HISTORY		2
TABLE OF CONTENTS		3
INTRODUCTION:		5
PURPOSE:		5
INTENDED AUDIENCE:		5
STAKEHOLDERS.....		5
PRODUCT VISION		5
VISIONSTATEMENT.....		5
TECHNOLOGIES:		6
SYSTEM IN CONTEXT:		6
USER CHARACTERISTICS:		8
CONSTRAINTS:		8
SYSTEM-WIDE REQUIREMENTS (RECEIVED):		8
ACTORS.....		8
EVENTS.....		8
FUNCTIONAL REQUIREMENTS:		12

<i>USE CASE OVERVIEW</i>	12
USE CASE DIAGRAM: -	14
USE CASE SPECIFICATIONS:	16
NON-FUNCTIONAL REQUIREMENTS:	37

Introduction:

This document has the requirements of University Department Information System. The UDIS is used by universities .By using the UDIS in the university manages the departmental information with in a University.

Purpose:

The purpose of this document is to gather the requirements that are needed for implementing the University Department information system. It also focus on key concepts

The purpose of UDIS project is to develop comprehensive software solution that streamlines and optimise the management of departmental information.

Intended Audience:

The intended audience will be the faculty,admin,student,who want information from department.

Stakeholders:

Client:

Users: individuals who use the UDIS

Product Vision

Vision Statement:

The product vision is to develop a UDIS which is user friendly and easily accessible,confidential. This UDIS helps to Improve communication and coordination among various users within a department.

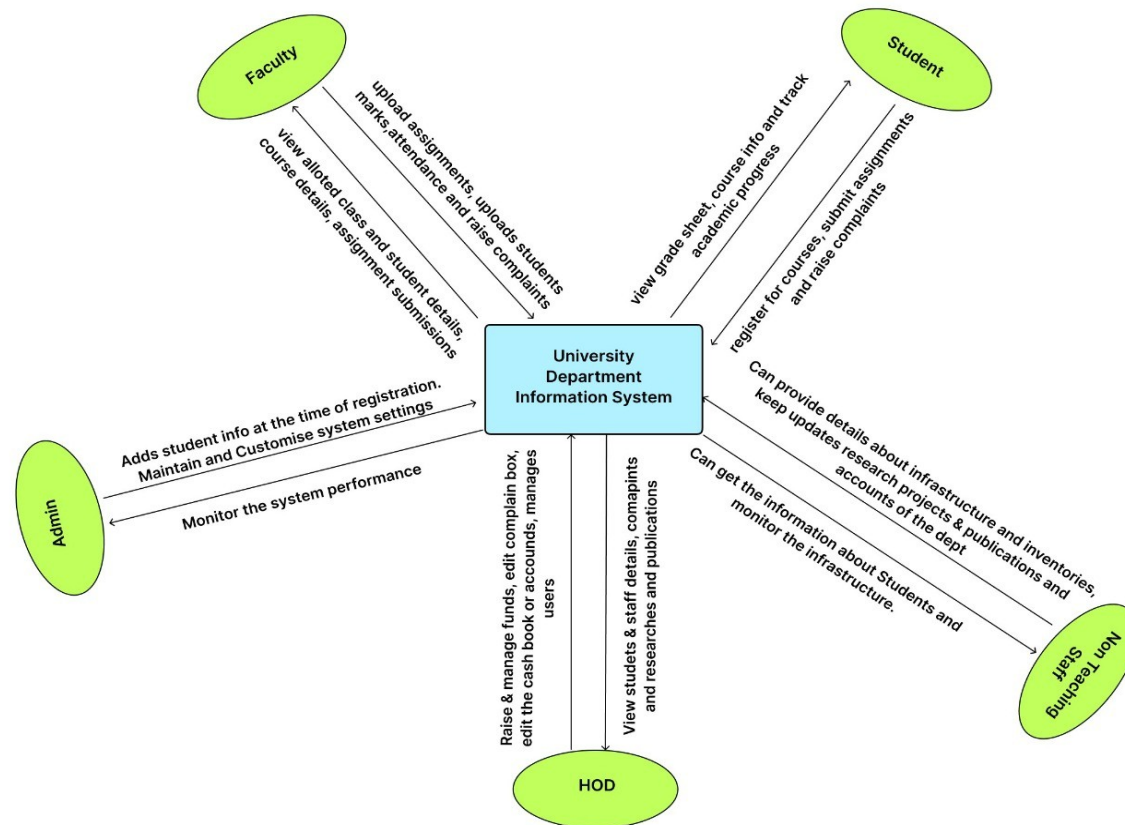
Technologies:

*HTML, CSS, JavaScript, Bootstrap,
Advanced Java, Servlets, Java Server Pages (JSP), MySQL Database,
Java Database Connectivity (JDBC), Apache Tomcat, GIT*

System in Context:

The UDI System provides digital solution to the problems faced in the departmental accomplishment of different departmental activities. It provides a personalized interface for each user ranging from student to the HOD and the admin.

CONTEXT DIAGRAM



User Characteristics:

The Users are typical computer users.

The users are familiar with using internet

Constraints:

N/A

System-Wide Requirements (Received):**Actors:**

The system interacts with four kinds of users. Each user has own functions to access with system

Events:

UDIS is a multi-user system which provides the required information to users.

Student:**Course Registration Event:**

Student submits a course registration request.

View Marks Event:

Student requests to view marks.

Event Registration Event:

Student registers for an event.

Ask Queries Event:

Student submits a query.

View Publication Event:

Student requests to view a publication.

Student:

Faculty:

Upload Attendance Event:

User Requirement Document

Faculty uploads attendance for a course.

Event Organisation Event:

Faculty organizes a new event.

Upload Marks Event:

Faculty uploads marks for a course.

View Course Details Event:

Faculty requests course details.

Post Publications Event:

Faculty posts a new publication.

Registrations Event:

Faculty checks the list of students registered for a course.

Admin:

Course Scheduling Event:

Admin schedules a new course.

Add Course Event:

Admin adds a new course to the system.

Add Event:

Admin adds a new event to the system.

Resolve Queries Event:

Admin resolves a student's or faculty's query.

Finance Officer:

Verify Transaction Event:

Finance officer verifies a financial transaction.

Confirm Transaction Event:

Finance officer confirms a successful transaction.

Budget Planning Event:

Finance officer initiates budget planning.

The below table provides a set of user visible events that define the functionalities that are in UDISTool.

Actor	Action	Object	Frequeny	Arrival Pattern	Response
Student	Course registration	Courses	Semesterly	Manual initiation	Course registered
Student	View marks	Marks	After exams	Periodic access	Marks displayed
Student	Event registration	Events	As needed	Event-Driven	Event registered
Student	Ask queries	Query system	Sporadic	On-demand	Query submitted
Student	View Publication	Publication	Continuous	Random access	Publications viewed
Faculty	Upload Attendance	Attendance records	Daily or weekly	Scheduled entry	Attendance uploaded
Faculty	Event organisation	Events	Occasional	Planning phase	Event organized
Faculty	Upload marks	Marks	Post-exams	Exam cycle	Marks uploaded

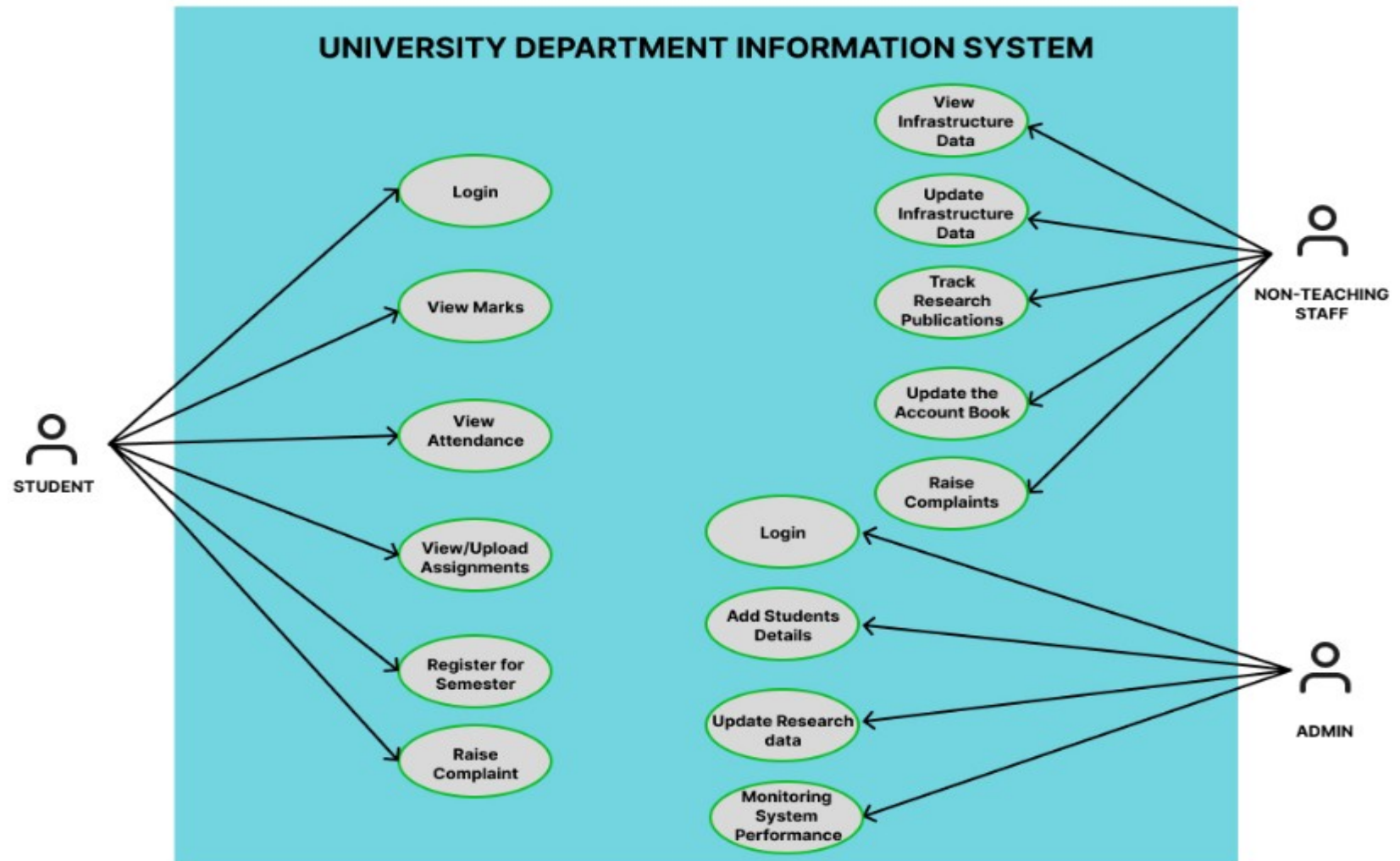
Actor	Action	Object	Frequeny	Arrival Pattern	Response
Faculty	View Course details	Course details	Start of semester	Beginning of term	Course detailsviewed
Faculty	Post Publications	Publications	Irregular	Upon completion	Publications posted
Faculty	View Course registration	Course registration	Start of semester	Enrollment period	Registrati ons
Admin	Course scheduling	Course schedule	Pre-semester	Academic calendar	Schedule updated
Admin	Add course	Course	New course offering	As required	Course added
Admin	Add event	Events	Event-driven	Special occasions	Event added
Admin	Resolve queries	Query system	Continuous	Upon query submission	Query resolved
Finance officer	Receives payment ID	Payment information	Transactio nal	Payment occurrence	Payment ID received
Finance officer	Verifies transaction	Transact ions	Transact ional	Upon receipt	Transaction verified
Finance officer	Budget planning	Budget	Annual	Fiscal year	Budget planned

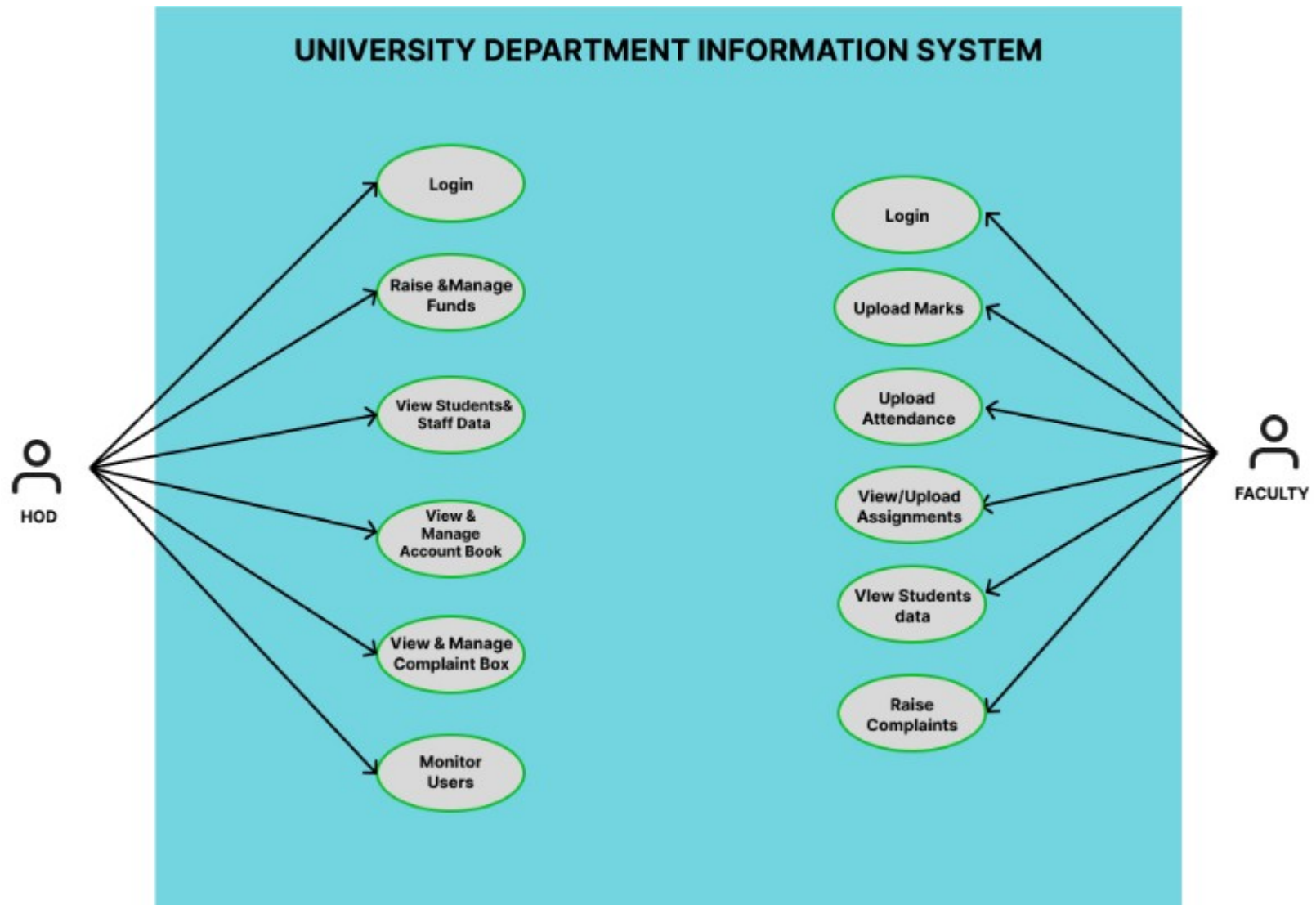
Functional Requirements:

Use case overview:

	Use-Case ID:	Use-Case Name:	Priority	Stability	Verifiability
1.	UC-UDIS-L	Login	High	Stable	Verifiable
2.	UC-UDIS-VM	View Marks	High	Stable	Verifiable
3.	UC-UDIS-VA	View Attendance	High	Stable	Verifiable
4.	UC-UDIS-VUA	View/Upload Assignments	High	Stable	Verifiable
5.	UC-UDIS-RS	Register for Semester	High	stable	Verifiable
6.	UC-UDIS-RC	Raise complaint	High	Stable	Verifiable
7.	UC-UDIS-VID	View Infrastructure Data	High	Stable	Verifiable
8.	UC-UDIS-UID	Update Infrastructure Data	High	Stable	Verifiable
9.	UC-UDIS-TRP	Track Research Publications	high	stable	verifiable
10.	UC-UDIS-UAB	Update Account Book	high	stable	Verifiable
11.	UC-UDIS-ASD	Add Students Details	high	stable	verifiable
12.	UC-UDIS-URD	Update Research Data	high	stable	verifiable

13.	UC-UDIS-MSP	Monitoring System Performance	High	Stable	Verifiable
14.	UC-UDIS-RMF	Raise & Manage Funds	High	Stable	Verifiable
15.	UC-UDIS-VSSD	View Students & Staff data	high	stable	verifiabe
16.	UC-UDIS-VMAB	View & Manage Accounts Book	high	stable	verifiabe
17.	UC-UDIS-VMCB	View & Manage Complaint Box	high	stable	verifiabe
18.	UC-UDIS-MU	Monitors Users	high	stable	verifiabe
19	UC-UDIS-UA	Upload Attendance	high	stable	verifiabe
20	UC-UDIS-VSD	View Students data	high	stable	verifiabe

Use Case Diagram: -



Use-Case ID: UC-UDIS-L:	Login
Description:	<i>This use case describes the process for users (students, faculty, staff, admins, HOD) to log in to the University Department Information System (UDIS).</i>
Pre-conditions:	<ul style="list-style-type: none">- The user is registered in the system.- The user has a valid username and password.- The system is operational and accessible.
Success guarantee :	<ul style="list-style-type: none">- The user is authenticated and directed to their personalized dashboard based on their role.- Access rights are enforced per user role.
Frequency of use:	<i>Multiple times daily, as users may need to log in regularly to access information.</i>
Main success scenario :	<ol style="list-style-type: none">1. The user opens the login page.2. The user enters their username and password.3. The system validates the credentials.4. If valid, the user is redirected to their dashboard.5. The user can access information based on their role.
Extensions (or alternate flows):	<ul style="list-style-type: none">- Invalid Credentials: If the user enters incorrect credentials, an error message is displayed, and the user is prompted to re-enter them.- Forgot Password: If the user has forgotten their password, they can select a "Forgot Password" link to reset it.- Account Lock: If the user fails to enter correct credentials after multiple attempts, the account is temporarily locked, and a message is displayed, advising the user to contact support.
Frequency of Occurrence:	<i>Frequent; multiple times per day.</i>

Use-Case ID: UC-UDIS-VM	Use-case Name: View Marks
Description:	<i>This usecase allows a student to view their grades for completed course. The system displays the marks along with their academic details.</i>
Pre-conditions	<ol style="list-style-type: none"> 1. Student is logged into the university management system. Grades for the courses must have been submitted by the faculty.
Success guarantee	<ul style="list-style-type: none"> - The student's grades are accurately displayed for the selected courses. - The system ensures that all information is up-to-date and complete.
Frequency of use:	<ul style="list-style-type: none"> - Used frequently after the completion of exams or the end of semester. - Students may check their marks multiple times.
Main success scenario	<ol style="list-style-type: none"> 1. Student logs in. 2. Navigates to the "View Marks" section. 3. Selects the relevant semester or course. 4. System retrieves and displays the grades. 5. Student reviews the marks.
	<p><i>Alternate Flow 1: No grades available for the selected course.</i></p> <p><i>Alternate Flow 2: System error in retrieving grades.</i></p> <p><i>Alternate Flow 3: Student requests a re-evaluation.</i></p>
Frequency of occurrence	<i>Occurs after the completion of exams, typically at the end of each semester.</i>

2.UC-UDIS-VA:View Attendance

Use-Case ID: UC-UDIS-VA	Use-case Name: View Attendance
Description:	<i>This usecase allows a student to view their attendance for Completed course.The system displays the attendance..</i>
Pre-conditions	<i>1.Student is logged into the university management system. Attendance for the courses must have been submitted by the faculty.</i>
Success guarantee	<i>- The student's attendance are accurately displayed for the selected courses. - The system ensures that all information is up-to-date and complete.</i>
Frequency of use:	<i>- Used frequently after the completion of exams or the end of semester. - Students may check their attendance multiple times.</i>
Main success scenario	<i>1. Student logs in. 2. Navigates to the "View Attendance" section. 3. Selects the relevant semester or course. 4. System retrieves and displays the attendance. 5. Student reviews the attendance.</i>
Extensions (or alternate flows)	<i>Alternate Flow 1: No attendance available for the selected course. Alternate Flow 2: System error in retrieving attendance.</i>
Frequency of occurrence	<i>Occurs after the completion of exams, typically at the end of each semester.</i>

3.UC-UDIS-VUA:View/Upload Assignments

Use-Case ID: UC-UDIS-VUA	Use-case Name: View/Upload Assignments
Description:	<i>This usecase allows a student to view and upload their assignments. The system displays the assignments.</i>
Pre-conditions	<i>Student is logged into the university management system. Assignments for the courses must have been submitted by the student.</i>
Success guarantee	<ul style="list-style-type: none">- The student's assignments are displayed which they were uploaded for the selected course.- The system ensures that all assignments is up-to-date and complete.
Frequency of use:	<ul style="list-style-type: none">- Used frequently when the assignments were assigned by the faculty.- Students may check /upload their assignments multiple times.
Main success scenario	<ol style="list-style-type: none">1. Student logs in.2. Navigates to the "View/Upload Assignments" section.3. Selects the relevant semester or course.4. System retrieves and displays the assignments.5. Student reviews and uploads the assignments.
Extensions (or alternate flows)	<i>Alternate Flow 1: No assignments were assigned by the faculty. Alternate Flow 2: System error in uploading the assignments.</i>
Frequency of occurrence	<i>Occurs after the assignments were assigned by the faculty.</i>

4.UC-UDIS-SR:Semester Registration

Use-Case ID: UC-UDIS-SR	Use-case Name: Semester Registration
Description:	<i>This usecase allows a student to register for the upcoming semester. The system updates the students academic record.</i>
Pre-conditions	<ul style="list-style-type: none"> - Student is logged in.No holds or restrictions. - Registration period is open. - Access to semester catalog and academic plan.
Success guarantee	<ul style="list-style-type: none"> - Semester is added to students schedule. - Academic record is updated. - Registration confirmation and receipt are generated.
Frequency of use:	<ul style="list-style-type: none"> - Occurs at begining of each semester. - Typically used once per term.
Main success scenario	<ol style="list-style-type: none"> 1. Student logs in. 2. Navigates to the "Semester Registration" section. 3. Selects semester.Confirms registration. 4. Schedule and record is updated. 5. Confirmation displayed and receipt generated.
Extensions (or alternate flows)	<p><i>Alternate Flow 1: Prerequisites not met.</i></p> <p><i>Alternate Flow 2: Holds or restrictions detected.</i></p>
Frequency of occurence	<i>Regular occurence at the begining of each academic term.</i>

5.UC-UDIS-RC:Raise Complaints

Use-Case ID: UC-UDIS-RC	Use-case Name: Raise Complaints
Description:	<i>This usecase allows a student to raise compaints on academic or Administrative matters through the university management system.</i>
Pre-conditions	<i>Student is logged into the university management system. The student must have access to raise complaints interface.</i>
Success guarantee	<ul style="list-style-type: none">- The complaint is successfully submitted and logged in the system.- The relevant faculty or administrative staff receives and acknowledges the Complaints.
Frequency of use:	<i>Students may use this feature as needed,typically when they encounter any complaints regarding semester or university services.</i>
Main success scenario	<ol style="list-style-type: none">1. Student logs in.2. Navigates to the "Raise Complaints" section.3. Selects the category of complaint.Enter complaint details.4. Submit the complaint.5.Confirmation of submission is displayed to the student.
Extensions (or alternate flows)	<i>Alternate Flow 1: System error during submission. Alternate Flow 2: Complaint submitted after office hours,delaying response.</i>
Frequency of occurence	<i>Occurs on as-needed basis depending on the students issues regarding the university.</i>

Use-Case ID: UC-UDIS-VID	Use-case Name: View Infrastructure Data
Description:	<i>This usecase allows the Non Teaching Staff to view the Infrastructure Data.</i>
Pre-conditions	<ul style="list-style-type: none"> - Non Teaching Staff is logged into the University Department Management system. -Non Teaching Staff must have access to view the Data.
Success guarantee	<ul style="list-style-type: none"> - The Infrastructure Data is accurately displayed. -The system ensures that all information is up-to-date and complete.
Frequency of use:	<i>-Non Teaching Staff can log in into website and can view the Data at Any time.</i>
Main success scenario	<ol style="list-style-type: none"> 1. Non Teaching Staff logs in. 2. Navigates to the "View Infrastructure Data" section. 3. Selects Infrastructure Data 4. Non Teaching Staff views the data and analyses it.
Extensions (or alternate flows)	<p><i>Alternate Flow 1: Prerequisites not met.</i></p> <p><i>Alternate Flow 2: Holds or restrictions detected.</i></p>
Frequency of occurrence	<i>Regular occurrence at any time of academic term.</i>

7.UC-UDIS-UID:Update Infrastructure Data

Use-Case ID: UC-UDIS-UID	Use-case Name: Update Infrastructure Data
Description:	<i>This usecase allows a non teaching staff to update the infrastructure data</i>
Pre-conditions	<i>Non teaching staff is logged into the university management system. The non teaching staff must have access to update the data.</i>
Success guarantee	<i>- The updated data is successfully submitted and logged in the system.</i>
Frequency of use:	<i>Non teaching staff may use this feature as needed, typically when they need to update the data related to the infrastructure.</i>
Main success scenario	<i>1. Non teaching staff logs in. 2. Navigates to the "Update Infrastructure Data" section. 3. Selects the category of Update Infrastructure Data. 4. Enter the data need to be updated.Submit the data. 5.Confirmation of submission is displayed to the non teaching staff.</i>
Extensions (or alternate flows)	<i>Alternate Flow 1: System error during submission.</i>
Frequency of occurrence	<i>Occurs on as-needed basis depending on the data to be updated regarding the university.</i>

5.UC-UDIS-TRP:TRACK RESEARCH PUBLICATIONS

Use-Case ID: UC-UDIS-TRP	Use-case Name: Track Research Publications
Description:	<i>This usecase allows the non-teaching staff to keep an eye on research Publications.</i>
Pre-conditions	<i>The users are logged into the university management system. The users must have access to view research publications.</i>
Success guarantee	<ul style="list-style-type: none">- The new research publications are added to the earliest ones.- The research publications are displayed under the respective faculty.
Frequency of use:	<i>Users may use this feature as needed, typically when they Require any data related to researches they can access.</i>
Main success scenario	<ol style="list-style-type: none">1. User logs in.2. Navigates to the "Research Publications" section.3. The Research Publications are displayed.
Extensions (or alternate flows)	<i>Alternate Flow 1: System error during login.</i>
Frequency of occurrence	<i>Occurs according to the requirement of data of research publications.</i>

Use-Case ID: UC-UDIS-UAB	Use-case Name: Update the Account Book
Description:	<i>This usecase allows the Non Teaching Staff to Update the Data in Account Book.</i>
Pre-conditions	<ul style="list-style-type: none"> - Non Teaching Staff is logged into the University Department Management system. -Non Teaching Staff must have access to update the Account Book.
Success guarantee	<ul style="list-style-type: none"> - The Data iin the Account Book is accurately displayed. -The system ensures that all information is up-to-date and complete.
Frequency of use:	<i>-Non Teaching Staff can log in into website and can Update the Data at Any time.</i>
Main success scenario	<ol style="list-style-type: none"> 1. Non Teaching Staff logs in. 2. Navigates to the "Update Account Book" section. 3. Selects the Account Book. 4. Non Teaching Staff updates the data in Account BOOK and analyses it.
Extensions (or alternate flows)	<p><i>Alternate Flow 1: Prerequisites not met.</i></p> <p><i>Alternate Flow 2: Holds or restrictions detected.</i></p>
Frequency of occurence	<i>Regular occurence at any time of academic term.</i>

UC-UDIS-ASD:Add Student Details

Use-Case ID: UC-UDIS-ASD	Use-case Name: Add Student Details.
Description:	<i>This usecase allows admin to add the student details. The system displays the student details.</i>
Pre-conditions	<i>Admin is logged into the university management system. Admin must have access to add the student details.</i>
Success guarantee	<ul style="list-style-type: none"> - The student's details are displayed which they were uploaded for the selected course. - The system ensures that all the details are up-to-date and complete.
Frequency of use:	<ul style="list-style-type: none"> - Used frequently when students are registered for semester. - Admin may check /upload their details multiple times.
Main success scenario	<ol style="list-style-type: none"> 1. Admin logs in. 2. Navigates to the "Add Student Details" section. 3. Selects the relevant semester or course. 4. System retrieves and displays the student details.
Extensions (or alternate flows)	<p><i>Alternate Flow 1: If required fields are missing, the system prompts the user to complete the data.</i></p> <p><i>Alternate Flow 2: If a duplicate student ID is detected, the system notifies the user.</i></p>
Frequency of occurrence	<i>Occurs after the students were registered into the semester.</i>

Use-Case ID: UC-UDIS-URD	Use-case Name: Update Research Data
Description:	<i>This usecase allows the Admin to Update the Research Data.</i>
Pre-conditions	<ul style="list-style-type: none"> - Admin is logged into the University Department Management system. -Admin must have access to update the Research Data.
Success guarantee	<ul style="list-style-type: none"> - The Research Data in the Research section is accurately displayed. -The system ensures that all researched information is up-to-date and complete.
Frequency of use:	<i>-Admin can log in into website and can Update the Research Data at Any time.</i>
Main success scenario	<ol style="list-style-type: none"> 1. Admin logs in. 2. Navigates to the "Research" section. 3. Selects the Research Book. 4. Admin updates the Research Data in Research Section and analyses it.
Extensions (or alternate flows)	<p><i>Alternate Flow 1: Prerequisites not met.</i></p> <p><i>Alternate Flow 2: Holds or restrictions detected.</i></p>
Frequency of occurrence	<i>Regular occurrence at any time of academic term.</i>

Use-Case ID: UC-UDIS-MSP:	Use-case-Name:Monitoring System Performance
Description:	<i>Enables administrators to monitor the system's performance metrics, such as response time, server load, and error rates, to ensure optimal functionality and troubleshoot issues.</i>
Pre-conditions:	<ul style="list-style-type: none">- The system must be operational.- Administrator has logged in with necessary privileges.- System performance metrics are being recorded in real-time.
Success guarantee :	<i>System performance monitoring data is accessed without errors, and issues are logged for resolution without impacting end-users</i>
Frequency of use:	<i>Typically daily; increased frequency during high usage periods (e.g., start of semesters, exams) or when performance issues are suspected.</i>
Main success scenario :	<ol style="list-style-type: none">1. The administrator logs into the system.2. The administrator navigates to the Performance Monitoring module.3. The system displays real-time performance metrics (e.g., CPU usage, memory, response times).4. The administrator reviews data for anomalies or deviations from expected ranges.5. The administrator identifies any issues and logs them for resolution.6. The administrator configures alerts for any metric thresholds (e.g., 80% server load) that require notifications.
Extensions (or alternate flows):	<p><i>If the system metrics are not available, the system prompts the administrator to try again or troubleshoot the data collection module.</i></p> <p><i>4a. If an anomaly is detected, an alert is sent to the administrator, and steps are initiated to mitigate the issue.</i></p>
Frequency of Occurrence:	<ul style="list-style-type: none">- System performance issues are infrequent but may increase with high usage or new updates.- Routine monitoring occurs daily, with occasional issues detected monthly.

Use-Case ID: UC-UDIS-RMF	Use-case Name: Raise and Manage Funds.
Description:	<i>This usecase allows the HOD to Raise and Manage Funds.</i>
Pre-conditions	<ul style="list-style-type: none"> - HOD is logged into the University Department Management system. -HOD must have access to Raise and Manage Funds.
Success guarantee	<ul style="list-style-type: none"> - The data about funds is accurately displayed. -The system ensures that all data about funds is up-to-date and complete.
Frequency of use:	<i>-HOD can log in into website and can manage the information about The funds.</i>
Main success scenario	<ol style="list-style-type: none"> 1. HOD logs in. 2. Navigates to the "Funds" section. 3. Selects the Raise and Manage Funds. 4. HOD updates the data about raising funds and managing funds.
Extensions (or alternate flows)	<p><i>Alternate Flow 1: Prerequisites not met.</i></p> <p><i>Alternate Flow 2: Holds or restrictions detected.</i></p>
Frequency of occurrence	<i>Regular occurrence at any time of academic term.</i>

3.UC-UDIS-VSSD:View Students & Staff Data

Use-Case ID: UC-UDIS-VSSD	Use-case Name: View Students & Staff Data
Description:	<i>Allows HOD to view information about students and staff, including names, roles, courses, and other detail</i>
Pre-conditions	<ul style="list-style-type: none"> - The HOD is logged in with appropriate access rights. - The system database is available and accessible.
Success guarantee	<i>-The user can view updated and accurate data of students and staff relevant to their access rights and department affiliation.</i>
Frequency of use:	<ul style="list-style-type: none"> - Frequently used daily by department HOD. - Admin may check the details multiple times.
Main success scenario	<ol style="list-style-type: none"> 1. User logs in. 2. User navigates to the "View Students & Staff Data" section. 3. User selects the category (students or staff). 4. System displays the requested data.
Extensions (or alternate flows)	<p><i>Alternate Flow 1: If the user is not authorized, they are denied access.</i></p> <p><i>Alternate Flow 2: If no relevant data is available, the system displays a message.</i></p>
Frequency of occurrence	<i>Regular occurrence at the beginning of each academic term.</i>

Use-Case ID: UC-UDIS-VMAB	Use-case Name: View and Manage Account Book
Description:	<i>Allows authorised users to view and manage the departments account book, including recording transactions, viewing balances</i>
Pre-conditions	<ul style="list-style-type: none"> - User is logged in with financial related access rights. - The account book and financial records are accessible and up-to-date in the system.
Success guarantee	<i>- User can view accurate financial data, add or edit transactions, and Generate up-to-date reports without data inconsistencies.</i>
Frequency of use:	<i>- Moderate, typically used monthly or as needed for financial transactions and report generations.</i>
Main success scenario	<ol style="list-style-type: none"> 1. HOD logs in with finance access.. 2. Navigates to the "Account Book" section. 3. HOD views the account book details 4. HOD adds a transaction or generates a report. 5. System confirms the action and updates the account book.
Extensions (or alternate flows)	<i>1 If the user lacks required permissions, access is denied with a Notification.</i>
Frequency of occurrence	<i>Moderate.</i>

Use-Case ID: UC-UDIS-VMCB:	Use-case-Name:View & Managae Complaint Box
Description:	<i>This use case allows designated users (such as students, faculty, and non-teaching staff) to submit complaints related to department issues and concerns. Authorized personnel (such as admin or HOD) can view, manage, respond to, and archive these complaints.</i>
Pre-conditions:	<ol style="list-style-type: none"> 1. User is logged into the system. 2. User has access to the complaint box functionality based on role (students, faculty, and non-teaching staff can submit complaints; admin and HOD can view and manage complaints). 3. The system is connected to the complaint database.
Success guarantee :	<i>Complaints are successfully submitted, displayed, managed, and archived with appropriate notifications sent to the involved parties.</i>
Frequency of use:	<i>Daily.</i>
Main success scenario :	<ol style="list-style-type: none"> 1. User navigates to the "Complaint Box" section in the UDIS. 2. The system displays the option to view or submit a complaint (based on user role). 3. User submits a complaint with details (title, description, optional attachment). 4. Authorized personnel (admin or HOD) view complaints and update status as needed. 5. Admin/HOD responds to complaints with actions or comments. 6. System sends notifications to the user about updates in complaint status. 7. Admin/HOD archives complaints once resolved.
Extensions (or alternate flows):	<ol style="list-style-type: none"> 3a. If the complaint submission fails, the user is prompted to retry or check connectivity. 4a. If no complaints are available, the system displays a "No Complaints" message. 5a. If a response needs further action, system escalates the complaint to the HOD.
Frequency of Occurrence:	<i>-50+ times per week (approximately) for a medium-sized department; expected to vary based on department size and academic year cycle.</i>

Use-Case ID: UC-UDIS-MU:	MONITOR USERS
Description:	<i>This use case allows authorized users, such as administrators or department heads (HOD), to monitor information related to students, faculty, and staff activities and data in the system.</i>
Pre-conditions:	<i>1. The user is authenticated and has admin or HOD privileges. 2. The user has logged into the UDIS system. 3. The department user data is updated and available in the system.</i>
Success guarantee :	<i>Authorized users can view accurate and updated information about students, faculty, and staff within the department, ensuring effective monitoring of departmental users.</i>
Frequency of use:	<i>Regular, as required by department administrators or HOD to monitor user activity and information.</i>
Main success scenario :	<i>1. User logs into the system with admin or HOD credentials. 2. The system verifies and grants access. 3. User navigates to the "Monitor Users" section. 4. User selects the category of users to monitor (students, faculty, staff). 5. System displays relevant user data and activity logs. 6. User views, filters, or downloads the required information. 7. User completes monitoring and logs out</i>
Extensions (or alternate flows):	<i>Alternate Flow 1: - If the user lacks appropriate permissions, the system denies access and displays an error message. Alternate Flow 2: - If there are connectivity issues, system displays an error and suggests retrying later.</i>
Frequency of Occurrence:	<i>Varies based on department monitoring requirements but typically occurs weekly, monthly, or during specific departmental reviews or assessments.</i>

UC-UDIS-UYM:Upload marks

Use-Case ID: UC-UDIS-UM	Use-case Name: Upload Marks
Description:	<i>Allows faculty members to upload students' marks for various assessments, ensuring marks are recorded accurately and available for students.</i>
Pre-conditions	<i>- User is logged in with access to upload marks.The list of students and corresponding assessment details are available in the system.</i>
Success guarantee	<i>Marks are successfully uploaded, saved without errors, and accessible to relevant users.</i>
Frequency of use:	<i>-Frequent; used at the end of assessment periods, such as after exams or quizzes.</i>
Main success scenario	<ol style="list-style-type: none"> <i>1. User logs in with appropriate access.</i> <i>2. User navigates to the "Upload Marks" section.</i> <i>3. User selects the course and assessment type.</i> <i>4. User uploads the marks.System validates and saves the data.</i> <i>5. User receives confirmation of successful upload.</i>
Extensions (or alternate flows)	<i>Alternate Flow 1:If the uploaded file or entered data format is incorrect, the system prompts for correction.</i> <i>Alternate Flow 2:f a student's record is missing, the system notifies the user to review or update.</i>
Frequency of occurrence	<i>Occurs after the assessment tests or semester.</i>

Use-Case ID: UC-UDIS-MSP:	Upload Attendance
Description:	<i>This use case allows faculty to upload attendance records for their classes. The attendance data can be uploaded for specific dates, and the system updates student attendance records accordingly.</i>
Pre-conditions:	<ul style="list-style-type: none"> - Faculty member must be logged in and authenticated. - Faculty must have access to their assigned course(s). - Attendance file should be formatted correctly (e.g., CSV, Excel) or entered manually.
Success guarantee :	<i>The system accurately updates student attendance records and generates any necessary notifications (e.g., student or admin notifications for low attendance, absences).</i>
Frequency of use:	<i>Daily, depending on the number of classes held and the institution's attendance policy.</i>
Main success scenario :	<ol style="list-style-type: none"> 1. Faculty selects the "Upload Attendance" option for their course. 2. System prompts faculty to upload an attendance file or manually enter attendance. 3. Faculty uploads the attendance file or enters data manually. 4. System validates the attendance data (e.g., format, completeness). 5. System updates student attendance records. 6. System confirms successful upload to faculty and generates any relevant notifications. 7. Attendance data is stored and accessible for reporting.
Extensions (or alternate flows):	<ul style="list-style-type: none"> - 5a: If the attendance data is incorrectly formatted, the system displays an error and prompts the faculty to correct it. - 5b: If there is missing information (e.g., student ID), the system highlights incomplete entries for faculty to amend. - 5c: If attendance fails to upload due to network issues, system retries up to three times and then displays a "Network Error" message. - 6a: If student attendance falls below a defined threshold, system generates alert(s) for the student and/or administration.
Frequency of Occurrence:	<i>Variable, based on class schedules and institutional requirements (e.g., once per class meeting, weekly).</i>

UC-UDIS-VSD:View Students Data

Use-Case ID: UC-UDIS-VSD	Use-case Name: View Students Data
Description:	<i>Allows faculty to view detailed student information, including personal details, enrollment status, and academic records.</i>
Pre-conditions	<ul style="list-style-type: none"> - The user is logged in with permission to view student data. - The student data is updated and available in the system database.
Success guarantee	<i>The user can access accurate and up-to-date information for all relevant students.</i>
Frequency of use:	<i>-High; typically used daily by faculty and department admins for student records management.</i>
Main success scenario	<ol style="list-style-type: none"> 1. User logs in with the appropriate access rights. 2. User navigates to the "View Students Data" section. 3. User selects the student record to view. 4. System displays the student's details.
Extensions (or alternate flows)	<i>Alternate Flow 1:If the user lacks permission, access is denied.</i> <i>Alternate Flow 2:If a specific student's data is unavailable, the system notifies the user.</i>
Frequency of occurrence	<i>Reguar occurence to view the data by the faculty.</i>

Non-Functional Requirements:

Reliability:

The system should be trustworthy, secured and should be well developed for all the functionalities such that no error can occur during the deployment.

Usability:

The system should have a user-friendly interface and should be easy to handle without any prior technical knowledge.

Availability:

The website should be accessible for the end user at any given time round the clock with 24x7 efficient work time.

Accessibility:

This product should be able to support multi-user accessing such that each user can access their respective functionalities based on the user's role.

Performance:

The website should be personalised and responsive to each user's role and should be efficient in its operation without any errors or delays.

Security:

This product should be highly secured and it should inculcate high level authentication.

Platform Compatibility:

This product is expected to support on all the most widely used browsers.