



## Project Systems Management Regulations for the Hail University

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# **Project Systems Management Regulations for the Hail University Phase 1**

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## **Project Description**

# Main goals

Building an application for electronic services for the University of Hail to provide a coherent system that unifies and collects information, data and its work procedures to provide electronic information services linked to the Vice Deanship of Graduate studies and Scientific Research system, the University Vice Presidency of Business Development system, and the University Vice presidency for Academic Affairs system.

- Enable effective communication of the University Council system with the vice Deanship of Postgraduate Studies and Scientific Research System, the University Vice presidency for Business Development System as well as the University Vice Presidency for Academic Affairs System for the management of scientific, administrative, financial affairs, and the general policy of the University.
- The Agency for Graduate studies and Scientific Research System will be beneficial to all faculty members, students and employees to ensure a smooth and flexible functioning of the Agency’s department.
- Enable the University Vice Presidency for Business Development System Contribute to raising the level of performance within the university to the highest levels of quality and proficiency in addition to being able to achieve all requirements and quality standards.
- The University Vice Presidency for Academic Affairs system supports the creation of an effective and supportive academic environment to provide distinguished academic and training programs that meet the requirements of quality and academic accreditation through continuous evaluation of the educational process, improvements in educational programs, raising performance efficiency, and the markets.

Note: The mechanism for linking these systems to the general scope of the project is shown in Figure 1

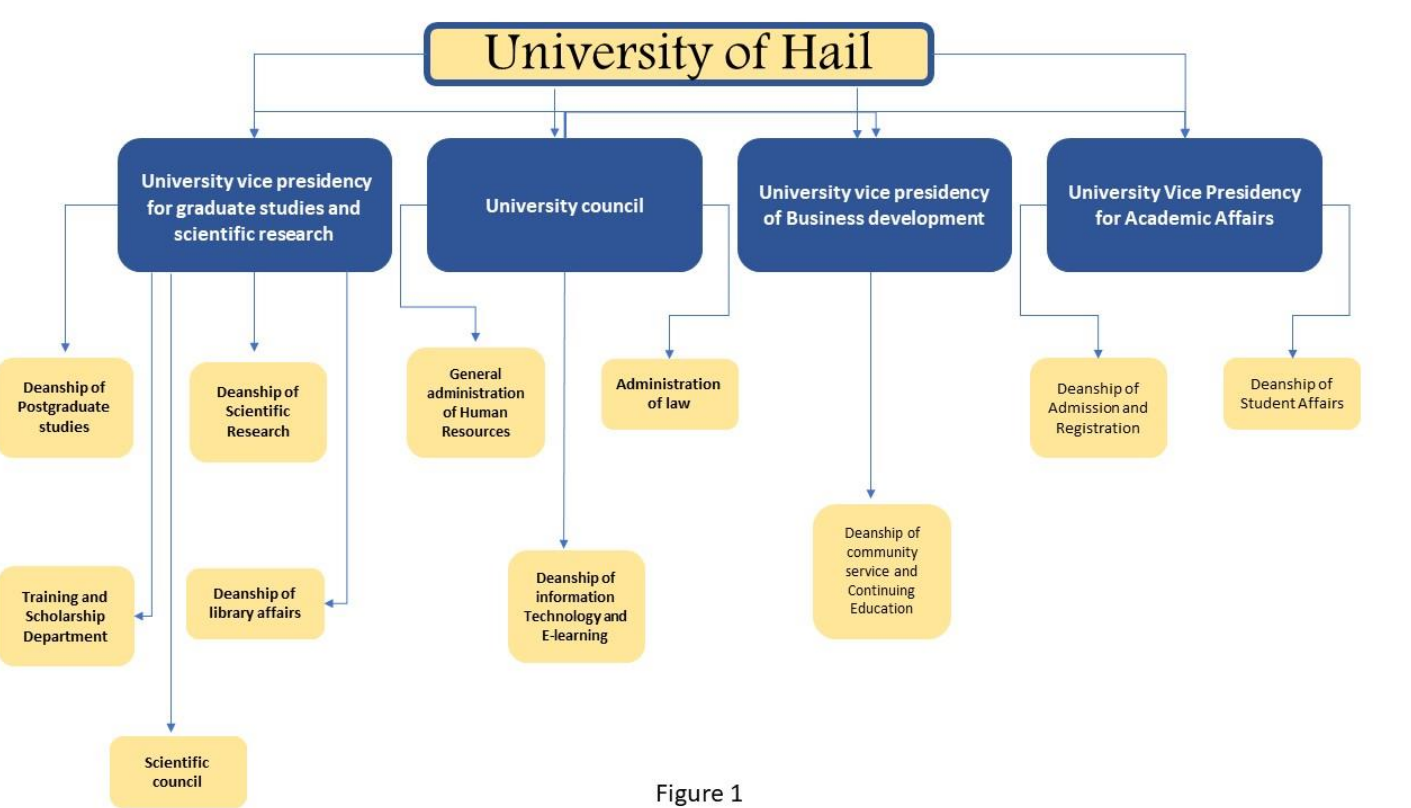


Figure 1

# Main functionality and characteristics

## 1- University vice presidency for graduate studies and scientific research

### Characteristic:

- Follow up on everything related to work Scientific research.
- Follow up on everything related to work graduate studies.
- Library affairs.
- Scholarship.
- Training.

### Functionality:

- The ability to Scholarship request.
- The ability to request to extend a mission.
- The ability to request a scientific trip.
- The ability to request to transfer from a country in scholarship.
- The ability to request to end the scholarship.
- The ability to request to postpone the scholarship.
- The ability to request to postpone the scholarship.
- The ability to request to change the language institute.
- The ability to request for scientific publication.
- The ability to academic sabbatical request.
- The ability to request a topic and assign a moderator.
- The ability to request

## 2- University council

### Characteristic:

- Issuing decisions
- Achieving university goals
- Periodic meetings to sponsor the university

### Functionality:

- Follow-up on the progress of the General Administration of Human Resources in terms of (appointment requests, employment requests and follow-up of leave balance, salaries .....etc.)
- Follow-up of the work of the Deanship of Admission and Registration in terms of (schedules, averages, study plans, change of specialization, change of university ..... etc.)
- Follow up the work progress of the University Business Development Agency in terms of (attendance to provide training courses, attendance of seminars and conferences, .....etc.)

### 3- University vice presidency of Business development

Characteristic:

- Follow up on everything related to work deanship of admission and registration.

Functionality:

- The ability to request training courses.
- The ability to request to participate in an external training course.
- The ability to request to participate in a conference or seminar.
- The ability to request to attend a seminar or symposium.

### 4- University Vice Presidency for Academic Affairs

Characteristic:

- providing a leading academic and educational environment.
- Has a Deanship of student affairs is an entity that deals with students outside the classroom and responsible for their activities that fall outside the curriculum.
- The Deanship of Admissions and Registration it follows up students academically until graduation, providing all information about the university, its faculties and specializations

Functionality:

- Monitoring the admission criteria implemented by the Deanship of Admission and Registration
- Supervising colleges and department in developing their academic plans and programs
- Monitoring student activities and the student fund supervised by the Deanship of Student Affairs
- Assisting colleges and department in designing programs that are consistent with development processes, selecting the appropriate means for their implementation, and proposing new measures to develop academic plans and programs
- Supervising the process of developing academic plans and programs
- Preparing the necessary guides, plans, and forms to achieve optimal performance in preparing academic plans
- Keeping up with updates in the field of academic plans and programs on a local and international scale
- Coordinating with relevant bodies to organize workshop and training programs in the field of academic plans and programs



# Stakeholders Of The Project

## ✓ **Product Owner**

After delivering the project the product owner will benefit the following:

- Development of a university mobile application for electronic services
- increase the quality level of the Hail university
- Providing effective and seamless communication between the University Council and its systems and between its systems and administrations

## ✓ **Faculty Member**

After delivering the project the faculty member will benefit the following:

- The faculty member can manage her/his to assets (profile , schedule, salary).
- The faculty member can perform many operations electronically on the system without the need to attend the Hail university.
- Better communication with Hail university .

## ✓ **Employee**

After delivering the project the employee will benefit the following :

- The employee can manage her/his to assets (profile , vacations balance ,salary).
- The employee can perform many operations electronically on the system without the need to attend the Hail university.
- Better communication with Hail university .

## ✓ **Student**

After delivering the project the Student will benefit the following :

- The student can manage her/his to assets (profile , schedule , grades).
- The student can perform many operations electronically on the system without the need to attend the Hail university.
- Better communication with Hail university .

## ✓ **Visitor**

After delivering the project the visitors will benefit the following :

- The visitors can perform many operations electronically on the system without the need to attend the Hail university.
- Better communication with Hail university .

## ✓ **IT Supports**

After delivering the project the IT supports employee will benefit the following :

- Provide APIs that facilitates the development of the systems.

# Intended Technology

## Languages Used

- The language of swift is a powerful and intuitive programming language for iOS. writing a Swift code is interactive and fun. It also includes modern features developers love such as inferred types that makes code cleaner and less prone to mistakes, furthermore named parameters are expressed in a clean syntax that makes API's in Swift even easier to read and maintain. It's also safe by design, yet also produces software that runs extremely fast. Swift is the result of the latest research on programming languages.
- IOS Graphical User Interface is used for design, coordinate, organize and changes color, size or visibility when the user interacts with them. It displays objects that convey information and represents actions that can be taken by the user. GUI is used in Swift in order for the user to communicate with the computer.
- Databases SQL are used for storing, maintaining and accessing any sort of data. They collect information on people, places or things. That information is gathered in one place so that it can be observed and analyzed. Databases can be thought of as an organized collection of information. database support electronic storage and manipulation of data. Databases make data management easy.

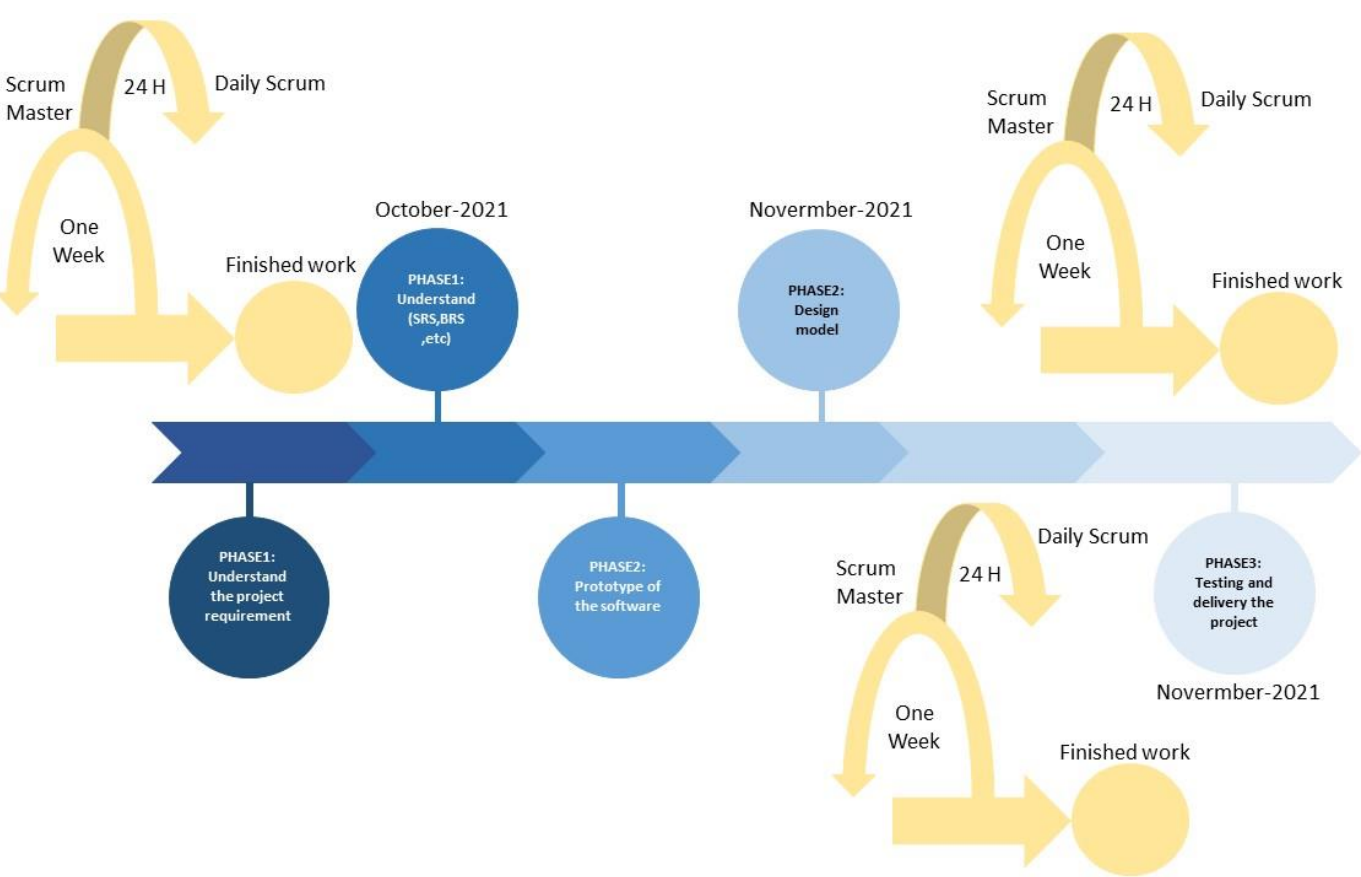
## Challenges

1. The lack of scrum team members is among the challenges that we will face in working jobs that are not within our capabilities , such as testing, QA.
2. Identify the language of programming used for application and lack of knowledge about this area.
3. Team members are product owner , faculty member , employee students , visitor and IT supports.

# Team members background

- ✓ **Aljowhaeah turki Aldawood**
  - Excellent knowledge of java
  - I am the designer on the team
- ✓ **Lubna mohammed Alrabiah**
  - Experience in programming with Java language.
  - I will be a programmer for this project in scrum team.
- ✓ **Teef mohammed Alosan**
  - Experience with java language
  - Stakeholder analysis
  - Oral and written communication skills
  - Interpersonal skills
  - I am the Business Analysis on the scrum team

# Project expected timeline



# **Software Development Lifecycle SDLC**

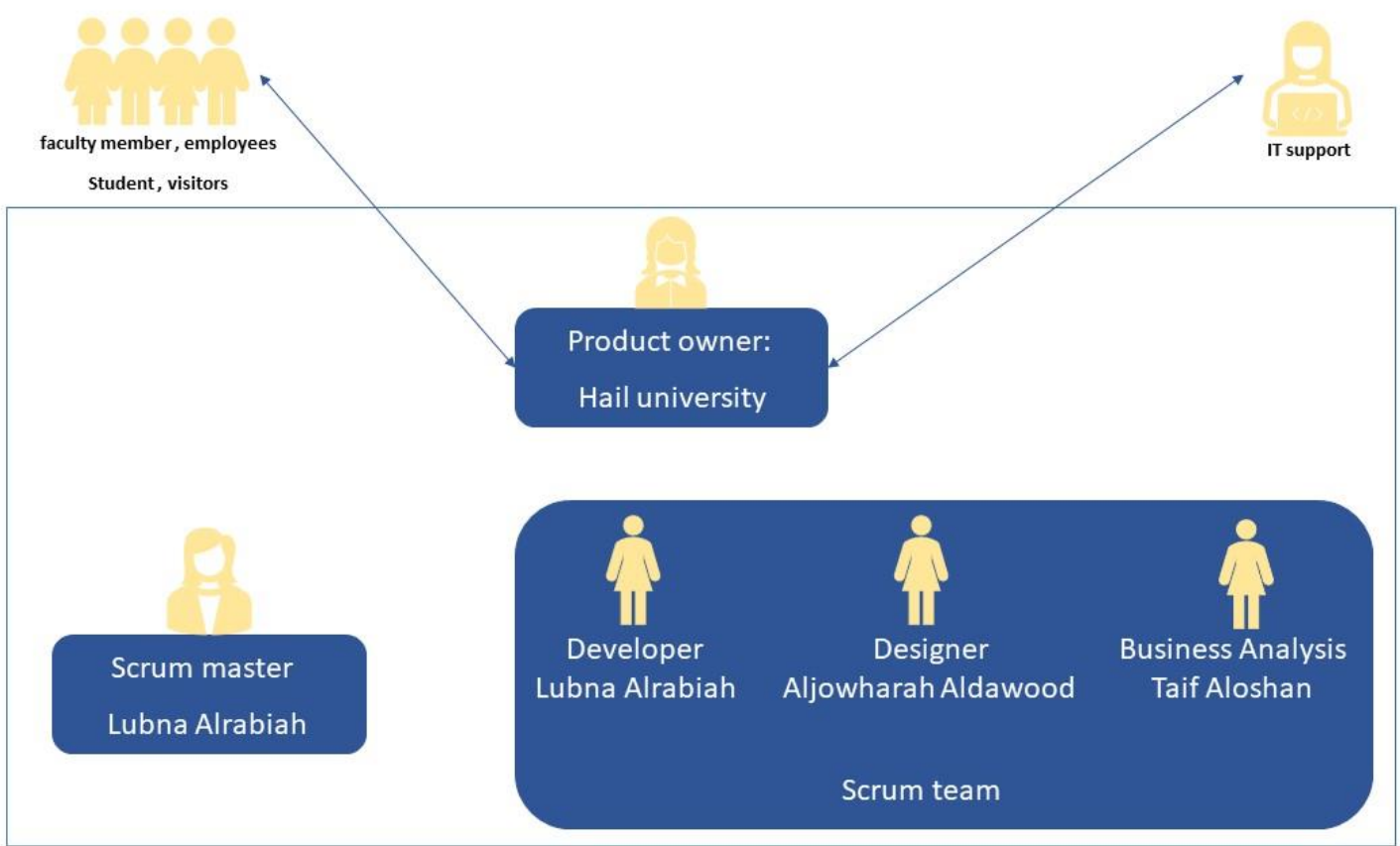
# 2.1 Reasons for choosing the SDLC

## Why we chose scrum?

We have favored the scrum methodology for the reasons that its roles are less hierarchy also we all have similar capabilities as team members. The scrum framework itself is simple, also easy to understand. It's also semi-prescriptive approach actually helps remove the ambiguities in the development process. Due to lack of time it keeps the development progress continuous. The stages of work are divided into a planning schedule which all team works know of it. Also because of our low experience scrum is most helpful for the reasons that its adjustable and flexible during development, as well delivering a shippable product in every sprint allows us to assess our quality in every sprint and a more accurate product of what was described by the stakeholder. It guarantees us daily activity and communication between our team workers as if there is any miss understanding or problems that are delaying the work development.

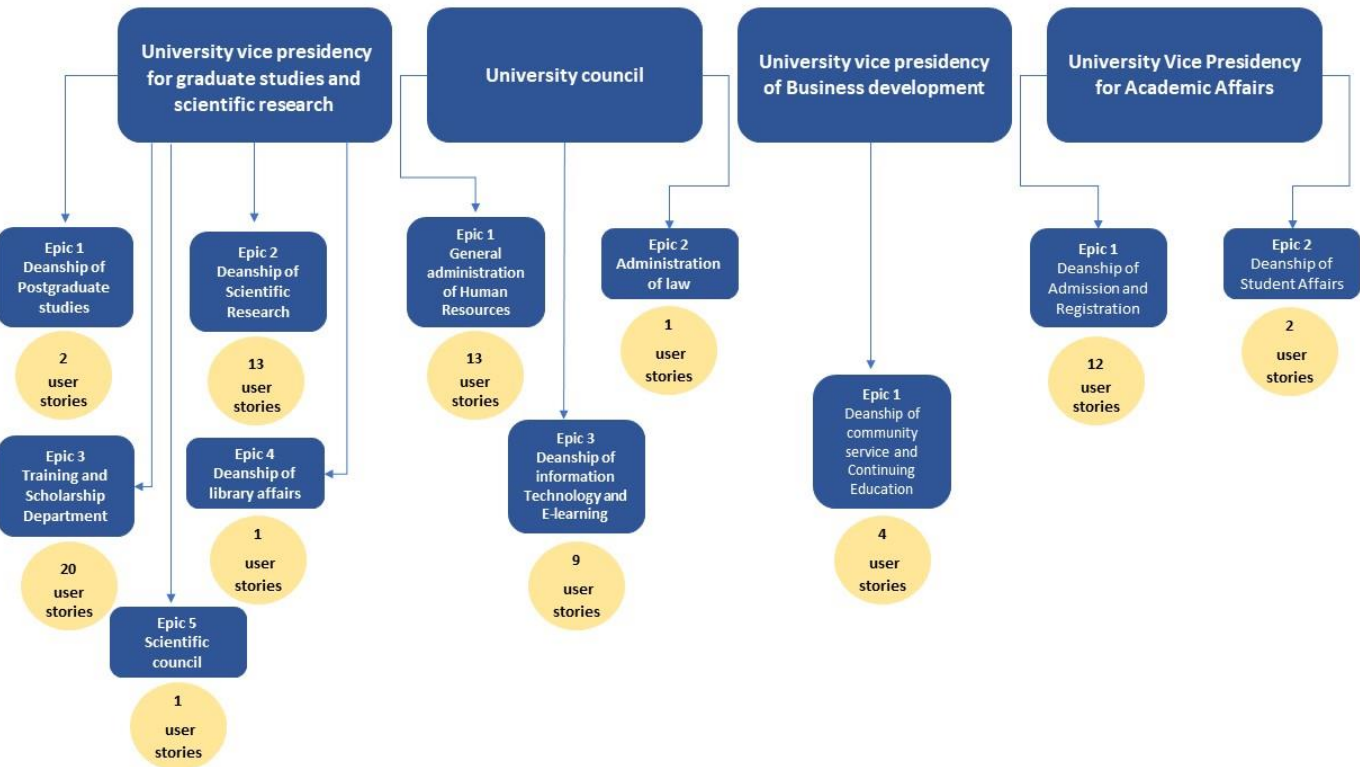
## 2.2 Detailed Plan

### 2.2.1 Scrum Role



## 2.2.2 Scrum Artifacts

### 2.2.2.1 Product backlog



Initiative	Epics	S.No	User Stories
University vice presidency for graduate studies and scientific research	Deanship of Postgraduate studies	1	As a user, I want to access memorandum for submission for senior graduates students in masters or PHD to attach the required files that include full name and university number, college, department, specialization, major, educational level, GPA and suggested supervisor specialization
		2	As a user, i want to request to form a discussion committee for students in masters or PHD that needs to attach required files that includes personal information, the field of discussion, and required documents
	Deanship of Scientific Research	1	As a user, I want to access the form for faculty member and students to request the approval of the committee also attach personal information and research documents
		2	As a user, I want to access and request only one research group for faculty member and students by attaching personal information, title of the research, and other required documents
		3	As a user, I want the entrance of submission on initiator for faculty member and students to display application conditions and attach the required documents as well with exchange bonus

		4	As a user, I want to access scientific research forms for faculty member and students to verify citation ration of the attached research
		5	As a user, I want to access and request funding for faculty member and students from outside the university, submit research, innovative proposals and required information
		6	As a user, I want to obtain a request on a approval for research title proposal for faculty member and students to attach the research title with the reasons of choosing as well attach the required documents and obtain the terms of application conditions
		7	As a user, I want to enter to request on an approval for faculty member and students on ending a research project through a form, attach information about the supervisor and title of the research project as well information about members of the research group
		8	As a user, I want to enter to request on an approval for faculty member and students on extended the research project through a form, attach information about the supervisor, title of the research project as well information about members of the research group and medical or social reasons that led to the change
		9	As a user, I want to enter to request on an approval for faculty member and students on transferring a research project through a form, attach information about the supervisor and title of the research project as well information about members of the research group and the reasons that led to the change
		10	As a user, I want to enter to request on an approval for faculty member and students on canceling a research project through a form, attach information about the supervisor and title of the research project as well information about members of the research group and the reasons that led to the change

		11	As a user, I want the availability to submit a reward request for faculty members, with all evidence and personal information that indicates the excellence of scientific publication.
		12	As a user, I would like the ability to request the performance of a scientific assignment outside the university premises for a limited period for a faculty member, with all documents and personal information attached with the application being accepted.
		13	As a user, I want an availability of a request to submit a report on the details of the academic mission completed by a faculty member, including the information of the performer, the date of performing the task, the type of task, evaluation results, recommendations, and other documents.
	<b>Training and Scholarship Department</b>	1	As a user, I want to access scholarship application forms for faculty members and employees to attach a file that includes personal information, contact information, academic and employment information, scholarship knowledge requested and other required attachments.
		2	As a user, I want to access the scholarship extension application forms for faculty members and employees to attach a file that includes personal information, contact information, scholarship information, reasons for extending the scholarship, and other required attachments.
		3	As a user, I want to access science trip request forms for faculty members and employees to attach a file with personal information, contact information, mission information, and other required attachments.
		4	As a user, I want to access the faculty members and employees Transfer Request Forms to attach a file that includes personal information, contact information, assignment information and other required attachments such as acceptance letter from the university to be transferred to.
		5	As a user, I want to access the scholarship termination request forms for faculty members and employees to attach a file that includes personal information, contact information, scholarship information, reasons for ending the scholarship, and other required attachments.



		6	As a user, I want to access faculty members and employees Deferment Application Forms to attach a file with personal information, contact information, scholarship information, reasons for scholarship deferment, and other required attachments.
		7	As a user, I want to access the language institute change request forms for faculty members and employees to attach a file that includes basic data, study data, reasons for requesting a change, and attach the required documents
		8	As a product owner, I want to allow the scholarship faculty members and employees to change university and major, so that he can attach the required documents, personal information, specify the university and specialization, and attach a confirmation of acceptance from them.
		9	As a user, I want to allow the extension of the scholarship period for faculty members and employees by attaching the medical or social reasons and excuses and a letter approved by the academic supervisor to confirm the years of study and the validity of the reasons.
		10	As a user, I want to allow an extension Language study for faculty members and employees by linking A letter from the institute showing the classes he studied, the number of hours and test results, and attaching a certificate to the latest TOEFL test result or its equivalent.
		11	As a user, I would like to submit an application to study some course materials online for faculty members and employees during the scholarship period and attach the reasons for wanting to do so with proof of current university approval.
		12	As a user, I would like to submit a request to continue studying the stage after the completed stage (from language study to master or from master to doctorate etc.) for faculty members and employees and attach personal documents and approval from the university to complete the study.

		13	As a user, I want to be allowed to request not to continue deferring the task to faculty members and employees
		14	As a product owner , I want to provide a scholarship request for an employee who is not a faculty member, by verifying the personal information entered, as well fulfilling the required conditions, and stating this by approving or rejecting the request.
		15	As a product owner, I want to enable a request for a deportation allowance for the internally scholarship student (only once during the total scholarship period), ensuring that the eligibility conditions are met(age and degree,etc) and providing access to the faculty members and employees information from the bank account, and other required information if the request is accepted.
		16	As a product owner, I want to enable a request for a One-way ticket exchange for the scholarship student and his eligible companions, to ensure that the conditions are met(age,degree,escorts,etc) and to provide access to the faculty members and employees information, such as the bank account and other required information if the request is accepted.
		17	As a product owner, I want to enable a request for return tickets exchange for the scholarship student and his eligible companions, to ensure that the conditions are met(age,degree,escorts,etc) and to provide access to the faculty members and employees information, such as the bank account and other required information if the request is accepted.
		18	As a product owner, I want to enable a request for return ticket exchange for the scholarship student and his eligible companions, to ensure that the conditions are met(age,degree,escorts,etc) and to provide access to the faculty members and employees information, such as the bank account and other required information if the request is accepted.

		19	As a product owner, I want to enable a request for print exchange for the scholarship student Once throughout the scholarship period, as for a master’s degree (3000 riyals) and a PHD degree (4,000 riyals) by checking the eligibility conditions and providing access to the faculty members and employees information such as the bank account and other required information if the request is accepted.
		20	As a product owner, I want to enable a request for books and references exchange each year equivalent to one month's salary, provided that its disbursement is limited to the basic scholarship period. In the event that the conditions are met, access to the faculty members and employees information, such as the bank account, will be available if the request is accepted.
	<b>Deanship of library affairs</b>	1	As a user, i want to access the procedure for scientific publishing for faculty members and employees to display the general rules such as attaching three electronic copies with the authors acknowledgment of ownership of the content and the right to publish also with the required documents
	<b>Scientific council</b>	1	As a user, I want to access the applications for sabbatical request forms for faculty members and employees to attach the required files that includes personal information, current job, means of communication such as phone number and email also the sabbatical period
<b>University council</b>	<b>General administration of Human Resources</b>	1	As a user, I want to access the Associate Professor Promotion Application Forms for faculty members to attach the necessary requirements
		2	As a user, I want to access the application forms for promotion to the rank of professor for faculty members to attach the necessary requirements
		3	As a user I want to access the application forms to appoint an assistant teacher with the rank of lecturer after an approval for faculty members to attach the necessary requirements for appointing
		4	As a user, I want to access the application forms for appointing a lecturer with the rank of assistant professor after an approval to faculty members within the university to attach a file containing the terms of appointing

		5	As a user, I want to access the application forms for appointing a lecturer with the rank of assistant professor after an approval for faculty members outside the university to attach a file containing the terms of appointing
		6	As a user, I want to access direct work applications for faculty members and employees to request direct work after completion of the university scholarship to attach personal information and required documents
		7	As a product owner, i want to enable availability for to be filled out with personal information and the student finished with the scholarship to check the required conditions as well required documents
		8	As a product owner, I want to enable access to a form for those who want to apply for jobs and enter the jobs competition by attaching personal information and other required documents
		9	As a user, i want to access to the assistant-associate professor jobs application and enter the job competition for faculty member to display applications conditions and attach required documents such as personal information and level of education
		10	As a user, I want to access faculty member and employees personal profile to display
		11	As a user, I want to access faculty member and employees salary history that presents current and previous salaries
		12	As a user, I want to access faculty member and employees slot salary that confirms it
		13	As a user, I want to access employees vacation balance that presents how many remaining days of vacation
	<b>Administration of law</b>	1	As a product owner, I want to enable the access to legal management system to communicate with the members of legal management for acknowledging legal duties and right as well necessary procedures

	<b>Deanship of information Technology and E-learning</b>	1	As a user, I want to access to the university council system to communicate with a group of faculty members
		2	As a product owner, i want to access administrative communications transactions with deanships are available to communicate with all university employees, students, and visitors
		3	As a product owner, i want to enable the access for employees, faculty members, students, and visitors to display general information about the university such as there visions, message, and goals
		4	As a product owner, i want to enable the access for employees, faculty members, students, and visitors to display the latest updates and news such as inspection tours and visits
		5	As a product owner, i want to enable the access for employees, faculty members, students and visitors to display the events of global celebrations
		6	As a product owner, i want to enable access for employees, faculty members, students and visitors to display important alerts such as reference numbers and registration dates
		7	As a product owner, i want to enable access for employees, faculty members, students and visitors to display competitions available at the university level
		8	As a product owner, i want to enable access for employees, faculty members, students and visitors to display twitter social media account
		9	As a product owner, i want to enable access for employees, faculty members, students and visitors to display the university administration contact information
<b>University vice presidency of Business development</b>	Deanship of community service and Continuing Education	1	As a user, I want to access conference or seminar request forms for faculty members and employees to attach a file with your personal information and required attachments
		2	As a user, I want to access the conditions of the application to participate in an external course for university faculty members and employees to ensure that I can participate
		3	As a user, I want to access training courses request forms for faculty members and employees to attach a file that includes basic data about the course(start and end date - topic - speaker) and attach the required documents

		4	As a user, I want to access tables that allow access to seminars or conferences available for the semester and determine the appropriate to join it while fulfilling the conditions and attaching the necessary information
University Vice Presidency for Academic Affairs	Deanship of Admission and Registration	1	As a user, I want to access University Change Request Forms for Students to attach a file with personal information, contact information, and other required attachments.
		2	As a user, I want to access Student Change of Major Request forms to attach a file with personal information, contact information, and other required attachments.
		3	As a product owner , I want to enable the access to masters and diploma programs to display application dates, general conditions for admission and attach required documents
		4	As a product owner, I want to allow the student to receive a letter containing his personal information and a confirmation from the university that the information is correct.
		5	As a user, I want to access student personal profile to display
		6	As a user, I want to access student grades to display
		7	As a user, I want to access student and access faculty member schedule to display
		8	As a user, I want to access student and academic registration to display , so that a statement that shows the student's academic progress, and includes the courses he studied in each semester with their symbols and numbers, the grades he obtained, the symbols and values of those grades
		9	As a user, I want to access student and academic registration study plan to display
		10	As a user, I want to access students academic GPA to display
		11	As a user, I want to access student attendance record to display

		12	As a user, I want to access faculty member attendance record to display the percentage of absence and presence throughout the semester
	Deanship of Student Affairs	1	As a product owner, I want to allow access to a form for students in order to fill out an application that does not fall under any of the available applications attached with a supporting documents for the request
		2	As a user, I want to allow the cancellation for students of any request that is selected should be deleted from the requests that are under processing

## 2.2.2.2 Sprint backlog

Sprint	Start	End	Status
Sprint1	3/oct / 21	23/ Oct / 21	Started
User Story 1 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Postgraduate studies)	6/oct/21	7/oct / 21	Started
User Story 2 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Postgraduate studies)	6/oct/21	7/oct / 21	Started
User Story 1 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	6/oct/21	7/oct / 21	Started
User Story 2 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	6/oct/21	7/oct / 21	Started
User Story 3 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	7/oct/21	8/oct/21	Started
User Story 4 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	7/oct/21	8/oct/21	Started
User Story 5 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	7/oct/21	8/oct/21	Started
User Story 6 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	7/oct/21	8/oct/21	Started
User Story 7 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	8/oct/21	9/oct / 21	Started
User Story 8 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	8/oct/21	9/oct / 21	Started
User Story 9 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	8/oct/21	9/oct / 21	Started



User Story 10 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	8/oct/21	9/oct / 21	Started
User Story 11 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	8/oct/21	9/oct / 21	Started
User Story 12 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	8/oct/21	9/oct / 21	Started
User Story 13 (Initiative: University vice presidency for graduate studies and scientific research, epics: Deanship of Scientific Research)	8/oct/21	9/oct / 21	Started
User Story 1 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	8/oct/21	9/oct / 21	Started
User Story 2 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	8/oct/21	9/oct / 21	Started
User Story 3 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	8/oct/21	9/oct / 21	Started
User Story 4 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 5 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 6 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 7 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
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User Story 9 (Initiative: University vice presidency for graduate studies and scientific research, epics: Training and Scholarship Department)	10/oct/21	11/oct/21	Started

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User Story 11 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 12 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 13 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 14 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 15 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 16 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	10/oct/21	11/oct/21	Started
User Story 17 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	11/oct/21	12/oct/21	Started
User Story 18 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	11/oct/21	12/oct/21	Started
User Story 19 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	11/oct/21	12/oct/21	Started
User Story 20 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Training and Scholarship Department )	11/oct/21	12/oct/21	Started
User Story 1 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Deanship of library affairs)	11/oct/21	12/oct/21	Started
User Story 1 (Initiative: University vice presidency for graduate studies and scientific research ,epics: Scientific council)	11/oct/21	12/oct/21	Started

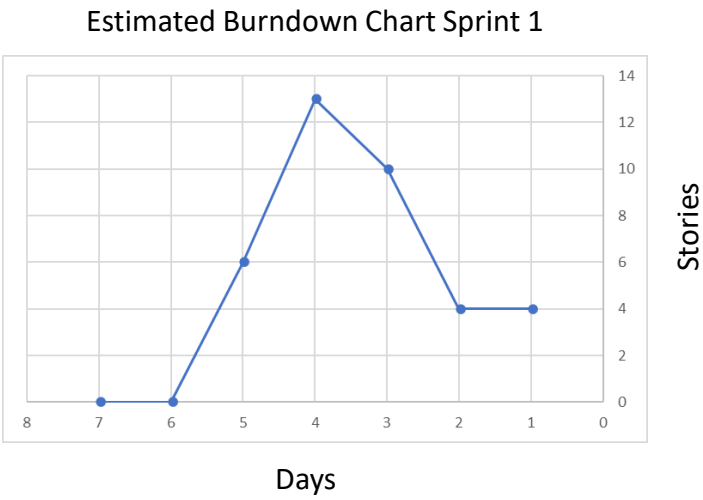
Sprint 2	13/oct / 21	24/Oct / 21	Starred
User Story 1 (Initiative: University council, epic: General administration of Human Resources)	13/oct/21	14/oct/21	Started
User Story 2 (Initiative: University council, epic: General administration of Human Resources)	13/oct/21	14/oct/21	Started
User Story 3 (Initiative: University council, epic: General administration of Human Resources)	13/oct/21	14/oct/21	Started
User Story 4 (Initiative: University council, epic: General administration of Human Resources)	13/oct/21	14/oct/21	Started
User Story 5 (Initiative: University council, epic: General administration of Human Resources)	13/oct/21	14/oct/21	Started
User Story 6 (Initiative: University council, epic: General administration of Human Resources)	14/oct/21	15/oct/21	Started
User Story 7 (Initiative: University council, epic: General administration of Human Resources)	14/oct/21	15/oct/21	Started
User Story 8 (Initiative: University council, epic: General administration of Human Resources)	14/oct/21	15/oct/21	Started
User Story 9 (Initiative: University council, epic: General administration of Human Resources)	14/oct/21	15/oct/21	Started
User Story 10 (Initiative: University council, epic: General administration of Human Resources)	15/oct/21	16/oct/21	Started
User Story 11 (Initiative: University council, epic: General administration of Human Resources)	15/oct/21	16/oct/21	Started

User Story 12(Initiative: University council, epic: General administration of Human Resources.	15/oct/21	16/oct/21	Started
User Story 13 (Initiative: University council, epic: General administration of Human Resources)	15/oct/21	16/oct/21	Started
User Story 1 (Initiative: University council, epic: Deanship of information Technology and E-learning)	16/oct/21	17/oct/21	Started
User Story 2 (Initiative: University council, epic: Deanship of information Technology and E-learning)	16/oct/21	17/oct/21	Started
User Story 3 (Initiative: University council, epic: Deanship of information Technology and E-learning)	16/oct/21	17/oct/21	Started
User Story 4 (Initiative: University council, epic: Deanship of information Technology and E-learning)	17/oct/21	18/oct/21	Started
User Story 5 (Initiative: University council, epic: Deanship of information Technology and E-learning)	17/oct/21	18/oct/21	Started
User Story 6 (Initiative: University council, epic: Deanship of information Technology and E-learning)	17/oct/21	18/oct/21	Started
User Story 7 (Initiative: University council, epic: Deanship of information Technology and E-learning)	17/oct/21	18/oct/21	Started
User Story 8 (Initiative: University council, epic: Deanship of information Technology and E-learning)	18/oct/21	19/oct/21	Started
User Story 9 (Initiative: University council, epic: Deanship of information Technology and E-learning)	18/oct/21	19/oct/21	Started
User Story 1 (Initiative: University council, epic: Administration of law)	18/oct/21	19/oct/21	Started

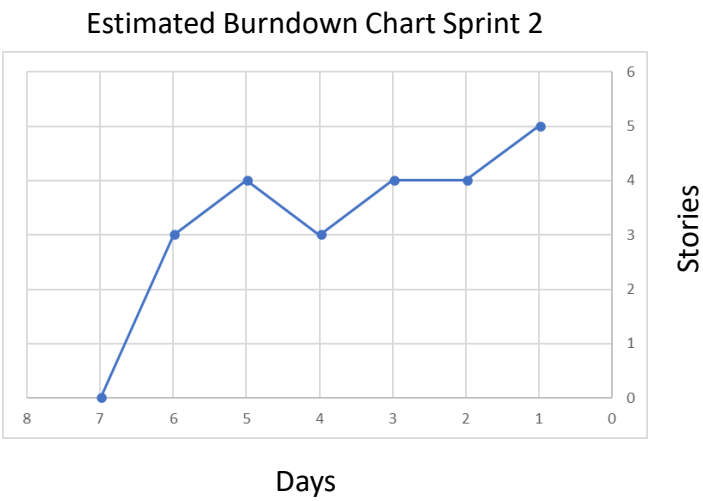
Sprint 3	25/oct/21	6/nov/21	Started
User Story 1 (Initiative: University vice presidency of Business development, epic: Deanship of community service and Continuing Education)	25/oct/21	26/oct/21	Started
User Story 2 (Initiative: University vice presidency of Business development, epic: Deanship of community service and Continuing Education)	26/oct/21	27/oct/21	Started
User Story 3 (Initiative: University vice presidency of Business development, epic: Deanship of community service and Continuing Education)	27/oct/21	28/oct/21	Started
User Story 4 (Initiative: University vice presidency of Business development, epic: Deanship of community service and Continuing Education)	29/oct/21	30/oct/21	Started
Sprint 4	26/oct/21	13/nov/21	Started
User Story 1 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	26/oct/21	27/oct/21	Started
User Story 2 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	26/oct/21	27/oct/21	Started
User Story 3 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	26/oct/21	27/oct/21	Started
User Story 4 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	26/oct/21	27/oct/21	Started
User Story 5 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	27/oct/21	28/oct/21	Started
User Story 6 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	27/oct/21	28/oct/21	Started
User Story 7 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	27/oct/21	28/oct/21	Started
User Story 8 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	28/oct/21	29/oct/21	Started
User Story 9 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	29/oct/21	30/oct/21	Started
User Story 10 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	29/oct/21	30/oct/21	Started
User Story 11 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	30/oct/21	31/oct/21	Started
User Story 12 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Admission and Registration)	1/nov/21	2/nov/21	Started
User Story 1 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Student Affairs )	1/nov/21	2/nov/21	Started
User Story 2 (Initiative: University Vice Presidency for Academic Affairs, epic: Deanship of Student Affairs )	1/nov/21	2/nov/21	Started

# 2.2.2.3 Burndown Chart

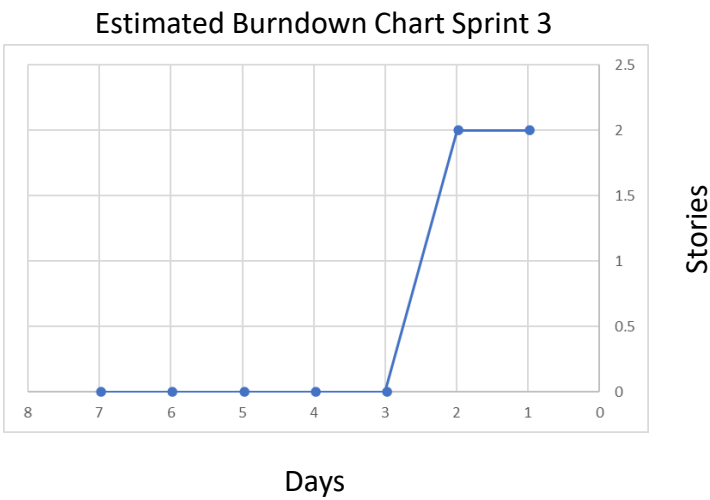
Work being not performed.  
And then too fast



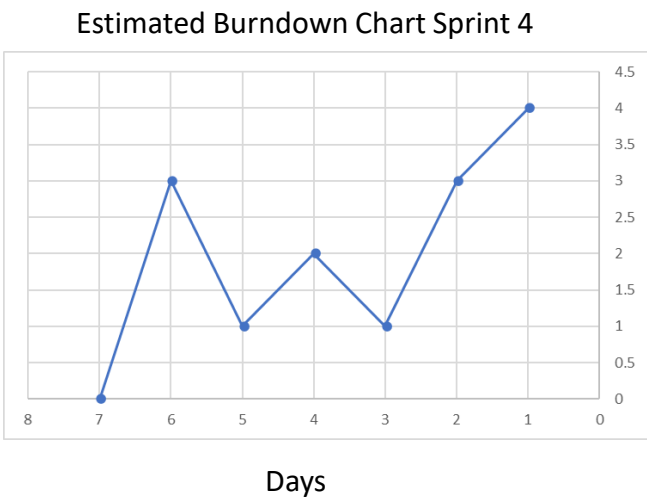
Work being performed but not fast enough



Work being not performed but fast enough in the end



Work being performed but not fast enough



## 2.2.3 Ceremonies

### 2.2.3.1 Sprint Planning

Input	Sprint Planning Meeting	Output
<p>Product backlog</p> <p>78 user stories( 37 for University Vice Presidency for Graduate Studies and Scientific Research, 23 for University Council, 4 for University Vice Presidency of Business Development, 14 for University Vice Presidency for Academic Affairs .</p>	<p>-Analyze product backlog to be categorized into sprints, each sprint continue user stories of the same initiative.</p> <p>-Estimate sprint backlog in days.</p> <p>-Each sprint will be consist of one-to three week.</p>	<p>Sprint backlog</p> <ul style="list-style-type: none"><li>- Sprint 1 (University Vice Presidency for Graduate Studies and Scientific Research 37 user stories).</li><li>- Sprint 2 (University Council 23 user stories).</li><li>- Sprint 3 (University Vice Presidency of Business Development 4 user stories).</li><li>- Sprint 4 (University Vice Presidency for Academic Affairs 14 user stories).</li></ul>

2.2.3.2 Daily Scrum Meeting

Date	Attendees	Work plane	Description	Duration
27/9/2021	Lubna-Teef-Aljowharah	Understand what product owner is looking for and right down requirements.	-Offered and discussed the method that suits with the nature of the project.  -Collected requirements for the University Vice Presidency for Graduate Studies and Scientific Research	2 hours
28/9/2021	Lubna-Teef-Aljowharah	Understand what product owner is looking for and right down requirements.	-Collected requirements for University Council.	1 hour
28/9/2021	Lubna-Teef-Aljowharah	Understand what product owner is looking for and right down requirements.	-Collected requirements for University Vice Presidency of Business Development and University Vice Presidency for Academic Affair.	3 hours
29/9/2021	Lubna-Teef-Aljowharah	Understand the details of how some requirements work .	Get a clear product backlog and prepare to write a clear user stories.	2 hours
30/9/2021	Lubna-Teef-Aljowharah	Understand the details of how some requirements work .	Get a clear product backlog and prepare to write a clear user stories.	2 hours
1/10/2021	Lubna-Teef-Aljowharah	Ensure the progress of the project	It was verified through the product owner and scrum team on that the project is progressing as expected.	3 hours
2/10/2021	Lubna-Teef-Aljowharah	View what has been done.	Phase1 has ended.	3 hours
5/10/2021	Lubna-Teef-Aljowharah	System modeling	- Clarify system requirements in diagrams for product owner/scrum master/developer.	2 hours
6/10/2021	Lubna-Teef-Aljowharah	System modeling	- Clarify system requirements in diagrams for product owner/scrum master/developer.	1 hour
9/10/2021	Lubna-Teef-Aljowharah	System modeling	- Clarify system requirements in diagrams for product owner/scrum master/developer.	2 hours
12/10/2021	Lubna-Teef-Aljowharah	Architectural design	- Clarify system requirements in diagrams for product owner/scrum master/developer.	1 hour



Date	Attendees	Work plane	Description	Duration
14/10/2021	Lubna-Teef-Aljowharah	Design prototype	- To ensure the requirements are meets.	2 hours
18/10/2021	Lubna-Teef-Aljowharah	Design prototype	- To ensure the requirements are meets.	1 hour
19/10/2021	Lubna-Teef-Aljowharah	Design prototype	- To ensure the requirements are meets. Phase2 has ended.	1 hour
13/11/2021	Lubna-Teef-Aljowharah	Implementation	-System execution.	1 hour
14/11/2021	Lubna-Teef-Aljowharah	Implementation	-System execution.	1 hour
15/11/2021	Lubna-Teef-Aljowharah	Implementation	-System execution.	1 hour
18/11/2021	Lubna-Teef-Aljowharah	Testing	-To make sure the system is working as expected.	2 hours
19/11/2021	Lubna-Teef-Aljowharah	Testing	-To make sure the system is working as expected.	1 hour
25/11/2021	Lubna-Teef-Aljowharah	Testing	-To make sure the system is working as expected.	1 hour
3/12/2021	Lubna-Teef-Aljowharah	Testing	-Phase3 has ended.	1 hour

### 2.2.3.3 Sprint Review

Sprint review one	
Discerption	The sprint review is one of the pivotal scrum ceremonies. It is held at the end of scrum sprint one. During the sprint review, the scrum development team, product owner, and key stakeholders invited by the Product Owner gather together to discuss the sprint results. Since we using one-week sprints, the meeting was no longer than one hour.We review four equally important parts:
1: Demonstration	During the demonstration part, the development team presents what was done during the sprint one .
2: discussion with University vice presidency for graduate studies and scientific research Stakeholders	After the development team presents the results of the sprint, University vice presidency for graduate studies and scientific research stakeholders give their feedback in simple term they would to change the time of delivery to and ask questions about the finished product or increment to the scrum team.
3: product backlog update	During or after the sprint review discussion the product owner may update the product backlog, updating their descriptions, adding new user stories, or removing them from the product backlog altogether.
We achieves this goals:	<ul style="list-style-type: none"> <li>- The scrum team helps stakeholders to understand what was done during this sprint.</li> <li>- The current market landscape and customer insights to hint at what might be the next development goals.</li> <li>- Scrum team after feedback showing that their work has impact and meaning.</li> </ul>

Sprint review two	
Discription	The sprint review is one of the pivotal scrum ceremonies. It is held at the end of scrum sprint one. During the sprint review, the scrum development team, product owner, and key stakeholders invited by the Product Owner gather together to discuss the sprint results. Since we using one-week sprints, the meeting was no longer than one hour.
1: Demonstration	During the demonstration part, the development team presents what was done during the sprint two.
2: discussion with University council. Stakeholders	After the development team presents the results of the sprint, University council stakeholders give their feedback in simple term they would to change the time of delivery to and ask questions about the finished product or increment to the scrum team.
3: product backlog update	During or after the sprint review discussion the product owner may update the product backlog, updating their descriptions, adding new user stories, or removing them from the product backlog altogether.
We achieves this goals:	<ul style="list-style-type: none"> <li>- The scrum team helps stakeholders to understand what was done during this sprint.</li> <li>- The current market landscape and customer insights to hint at what might be the next development goals.</li> <li>- Scrum team after feedback showing that their work has impact and meaning.</li> </ul>

Sprint review three	
Discription	The sprint review is one of the pivotal scrum ceremonies. It is held at the end of scrum sprint one. During the sprint review, the scrum development team, product owner, and key stakeholders invited by the Product Owner gather together to discuss the sprint results. Since we using one-week sprints, the meeting was no longer than one hour.
1: Demonstration	During the demonstration part, the development team presents what was done during the sprint three.
2: discussion with University vice presidency of Business development. Stakeholders	After the development team presents the results of the sprint, University vice presidency of Business development stakeholders give their feedback in simple term they would to change the time of delivery to and ask questions about the finished product or increment to the scrum team.
3: product backlog update	During or after the sprint review discussion the product owner may update the product backlog, updating their descriptions, adding new user stories, or removing them from the product backlog altogether.
We achieves this goals:	<ul style="list-style-type: none"> <li>- The scrum team helps stakeholders to understand what was done during this sprint.</li> <li>- The current market landscape and customer insights to hint at what might be the next development goals.</li> <li>- Scrum team after feedback showing that their work has impact and meaning.</li> </ul>

Sprint review four	
Discerption	The sprint review is one of the pivotal scrum ceremonies. It is held at the end of scrum sprint one. During the sprint review, the scrum development team, product owner, and key stakeholders invited by the Product Owner gather together to discuss the sprint results. Since we using one-week sprints, the meeting was no longer than one hour.
1: Demonstration	During the demonstration part, the development team presents what was done during the sprint four.
2: discussion with University Vice Presidency for Academic Affairs. Stakeholders	After the development team presents the results of the sprint, University Vice Presidency for Academic Affairs stakeholders give their feedback in simple term they happy for finish the system development and ask for ability to continues the rest sprint
3: product backlog update	During or after the sprint review discussion the product owner may update the product backlog, updating their descriptions, adding new user stories, or removing them from the product backlog altogether.
We achieves this goals:	<ul style="list-style-type: none"> <li>- The scrum team helps stakeholders to understand what was done during this sprint.</li> <li>- Scrum team after feedback showing that their work has impact and meaning.</li> </ul>

### 2.2.3.4 Sprint retrospective

Sprint retrospective one				
Discerption	The sprint retrospective is also one of the core scrum ceremonies, and just like the sprint review it's conducted after the sprint one is finished, and this means 'really finished', so after the sprint one review too. The structure of sprint retrospective is to have every team member answer questions:			
Question:	What went well ?	What didn't go so well ?	What have you learned ?	What still puzzles you ?
Lubna	Full service inquiry.	Turns out this week's product backlog.	Classifications is very important.	Our process clearly needs more work.
Teef	We went below our budget for the project.	Turns out this week's product backlog.	Classifications is very important.	Our process clearly needs more work.
Aljowharah	Full service inquiry.	Turns out this week's product backlog.	Consultation is important.	Our process clearly needs more work.

Sprint retrospective two				
Discerption	The sprint retrospective is also one of the core scrum ceremonies, and just like the sprint review it's conducted after the sprint one is finished, and this means 'really finished', so after the sprint one review too. The structure of sprint retrospective is to have every team member answer questions:			
Question:	What went well ?	What didn't go so well ?	What have you learned ?	What still puzzles you ?
Lubna	Technical team were on point and managed to sort out the issues immediately.	Post event evaluation and follow up	Provide greater clarity for university council.	Our process clearly needs more work.
Teef	Greet team vibes this week.	Post event evaluation and follow up	Provide greater clarity for university council.	Our process clearly needs more work.
Aljowharah	Greet team vibes this week.	Post event evaluation and follow up	Understood the neutral work of university council.	Our process clearly needs more work.

Sprint retrospective three				
Discerption	The sprint retrospective is also one of the core scrum ceremonies, and just like the sprint review it's conducted after the sprint one is finished, and this means 'really finished', so after the sprint one review too. The structure of sprint retrospective is to have every team member answer questions:			
Question:	What went well ?	What didn't go so well ?	What have you learned ?	What still puzzles you ?
Lubna	Full service inquiry.	Turns out this week's product backlog.	Classifications is very important.	Our process clearly needs more work.
Teef	We went below our budget for the project.	Turns out this week's product backlog.	Classifications is very important.	Our process clearly needs more work.
Aljowharah	Full service inquiry.	Turns out this week's product backlog.	Consultation is important.	Our process clearly needs more work.

Sprint retrospective four				
Discerption	The sprint retrospective is also one of the core scrum ceremonies, and just like the sprint review it's conducted after the sprint one is finished, and this means 'really finished', so after the sprint one review too. The structure of sprint retrospective is to have every team member answer questions:			
Question:	What went well ?	What didn't go so well ?	What have you learned ?	What still puzzles you ?
Lubna	Full service inquiry.	Turns out this week's product backlog.	Consultation is important	Our process clearly needs more work.
Tiaf	Full service inquiry.	Turns out this week's product backlog.	Classifications is very important.	Our process clearly needs more work.
Aljowharah	Technical team were on point and managed to sort out the issues immediately.	Turns out this week's product backlog.	Consultation is important.	Our process clearly needs more work.

# **Business Requirements Document:**

# Business Requirements Document:

<b>Project Sponsor:</b>	University of Hail
<b>Project Manager:</b>	Lubna Alrabiah
<b>Business Analyst:</b>	Teef Alosan

<b>Document Author:</b>	Aljowharah Aldawood
<b>Version Number:</b>	1.0
<b>Last Updated:</b>	16/10/2021
<b>Status:</b>	Draft

## 1-Introduction:

Building an application for electronic services for the University of Hail to provide a coherent system that unifies and collects information, data and its work procedures to provide electronic information services linked to the Vice Deanship of Graduate studies and Scientific Research system, the University Vice Presidency of Business Development system, and the University Vice presidency for Academic Affairs system. As well enable effective communication of the University Council system with the vice Deanship of Postgraduate Studies and Scientific Research System. the University Vice presidency for Business Development System as well as the University Vice Presidency for Academic Affairs System for the management of scientific, administrative, financial affairs, and the general policy of the University. In addition to the Agency for Graduate studies and Scientific Research System will be beneficial to all faculty members, students and employees to ensure a smooth and flexible functioning of the Agency’s department. Also, enable the University Vice Presidency for Business Development System Contribute to raising the highest level of performance, quality and proficiency within the university as well to be able to achieve all requirements and quality standards. The University Vice Presidency for Academic Affairs system supports the creation of an effective and academic environment to provide distinguished academic and training programs that meet the requirements of quality and academic accreditation through continuous evaluation of the educational process, improvements in educational programs, raising performance efficiency, and the markets.

**1.1System users:**

- 1) System Administrator has complete control of the system
- 2) Registered users who can use the four systems (university council, University Vice presidency for academic affairs, University Vice presidency for Business Development, and Vice Deanship for Graduate Studies and Scientific Research).
- 3) System visitors who interact and browse the service.

**1.2System components:**

- 1) System administrator control panel.
- 2) An application for end users.

**2-Scope**

**2.1Scope: in scope:**

- The scope of the project is divided into four main systems (University Council, University Vice presidency for academic affairs, University Vice presidency for Business Development, and Vice Deanship for Graduate Studies and Scientific Research).
- The chart below shows the mechanism of interconnection between these administrations and the overall of the project.

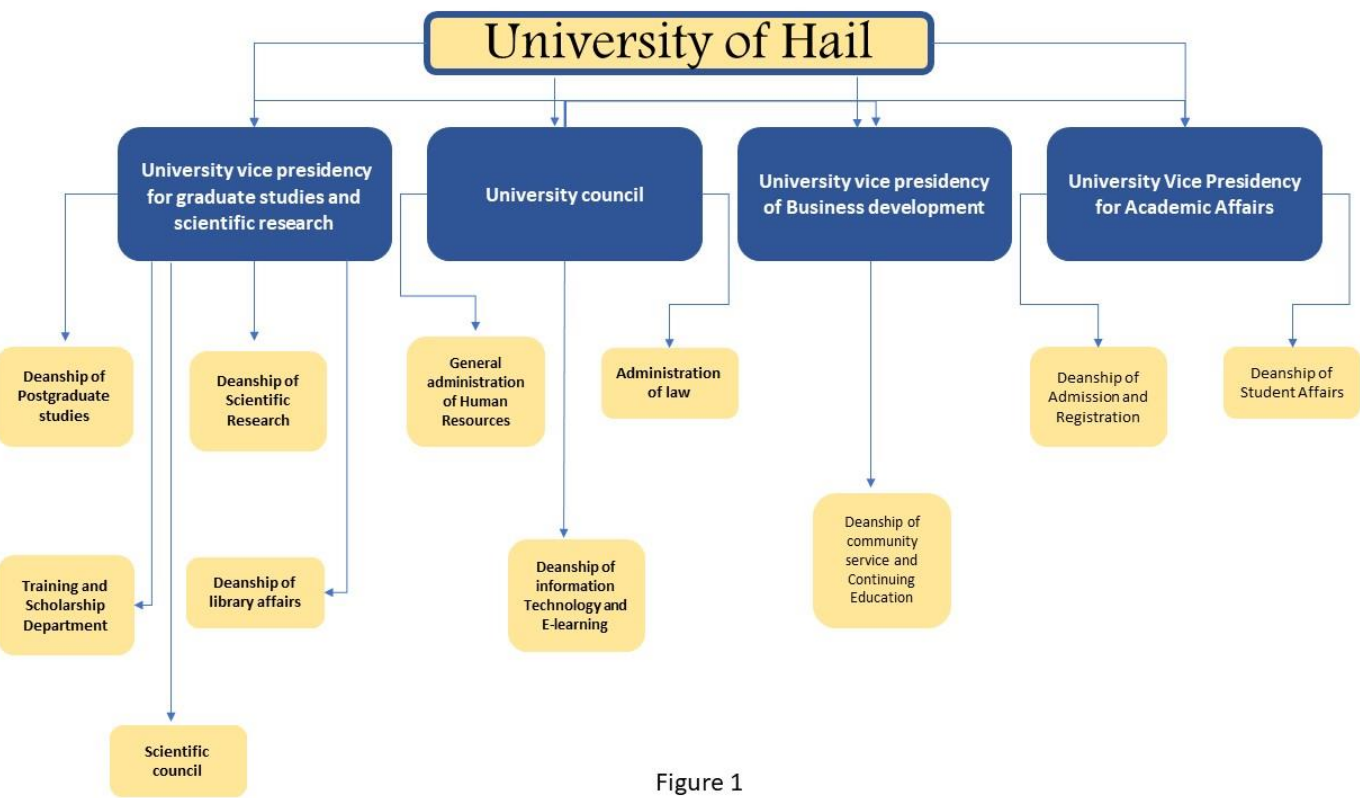


Figure 1

- Each administration will be detailed in the functional requirements of the systems.

**2.2Scope: out scope:**

- The application supports notification service
- The application has an open source license
- the application must be connected with the active directory for purpose of logging in

### 3-Definitions, Acronyms and Abbreviations

Administrator	It is a person responsible for maintaining the system
Application	Is a computer program or software application designed to run on a mobile device, tablets or watches
End user	It is a person who uses or ultimately intends to use the application
Database	Is a collection of information that is organized so that it can be easily accessed, managed and updated
API	Application Programming Interface
Active Directory	Stores information about objects on the network that makes this information easy for administrators and users to find and use

## User requirements

### 4- Function Requirements:

#### 1. Vice Deanship of Graduate Studies and Scientific Research

##### a- Training and Scholarships Department

- The system must enable Scholarship request for faculty members and employees.
- The system must enable request to extend scholarship for faculty member and employees.
- The system must enable request a science trip for faculty member.
- The system must enable request to transfer a country in a scholarship for faculty member and employees.
- The system must enable request to end the scholarship for faculty member and employees.
- The system must enable request to postpone the scholarship for faculty member and employees.
- The system must enable request to change the language institute for faculty member and employees.
- The system must enable request to change major and university for faculty member and employees.
- The system must enable request to modify the end of the scholarship for faculty member and employees.
- The system must enable request continuing to study the language for faculty member and employees.
- The system must enable request to online course study for faculty member and employees.
- The system must enable request to scholarship promotion for faculty member and employees.
- The system must enable request to appeal the scholarship for faculty member and employees.
- The system must enable request to scholarship for employees.
- The system must enable request to deportation allowance for faculty member and employees.
- The system must enable request to One-way ticket exchange for faculty member and employees.
- The system must enable request to Return tickets exchange for faculty member and employees.
- The system must enable request to Return ticket exchange for faculty member and employees.
- The system must enable request to end the scholarship for faculty member and employees.



- The system must enable request to print exchange for faculty member and employees.
- The system must enable request to Books and references exchange for faculty member and employees.

**b-Deanship of Scientific Research**

- The system must enable a form for obtaining the approval of the standing committee of scientific research for faculty member and student.
- The system must enable a Research groups for faculty member and student.
- The system must enable a submission on initiator for faculty member and student.
- The system must enable a check citation percentage for faculty member and student.
- The system must enable an institutional finance initiative for faculty member and student.
- The system must enable a request to research project extension for faculty member and student.
- The system must enable a request to cancel a research project for faculty member and student.
- The system must enable for faculty member and student.

**c- Deanship of postgraduate studies**

- The system must enable a request a topic and assign a moderator for faculty member and student.
- The system must enable a formation for a discussion committee for faculty member and student.

**d- Scientific council**

- The system must enable a request to academic sabbatical for faculty member and student.

**e- Deanship of library affairs**

- The system must enable a request to a scientific publication for faculty member and student.

**2. University Council**

**a-Public administration human resources**

- The system must enable a promotion request to associate professor for faculty member.
- The system must enable a promotion request to a professor for faculty member.
- The system must enable a request to appoint a teaching assistant to a lecturer for faculty member.
- The system must enable a request to appoint a lecturer at the rank of assistant professor for faculty member within the university.
- The system must enable a request to appoint a lecturer at the rank of assistant professor for faculty member outside of the university.
- The system must enable a request for direct work for faculty member and employees.
- The system must enable a polarization system for students finished with the scholarship.
- The system must enable teaching assistant and lecturer jobs.
- The system must enable an assistant professor-associate- professor jobs application for faculty member.

**b-The legal administration:**

- The system must enable a legal management system for everyone to know their legal duties and rights.

**c-Deanship of information technology and E-Learning:**

- The system must enable a university council system for faculty member.

### 3.University Vice Presidency for Business Development:

**a-Deanship of Community Service and Continuing Education:**

- The system must enable a request to participate in a conference or seminar for faculty member and employee.
- The system must enable a request to participate in an external training course for faculty member and employee.
- The system must enable a request training courses for faculty members and employees.
- The system must enable a request to attend a seminar or symposium for semester.

### 4.University Vice Presidency for Academic Affairs


**a-Admission and Registration**

- The system must enable a request to change university for students.
- The system must enable a request to change majors for students.
- The system must enable masters and diploma programs for students.
- The system must enable a request of a statement about a student.

**b-Deanship of student Affairs**

- The system must enable to request a public request for students.
- The system must enable a request to cancel an order for students.

**5- Documents approval:**

Administrator	Data approved	Signature
Lubna Alrabiah	16 / 10 / 2021	

م	البند	الكمية	السعر الافراضي	السعر الاجمالي	ضريبة القيمة المضافة 15%	السعر الاجمالي شامل الضريبة
1	تحليل متطلبات تطبيق البوابة الجامعية و الخدمات الاستعلامية	1	20,000	20,000	3000	23,000
2	الربط و التكامل لتطبيق البوابة الجامعية و الخدمات الاستعلامية	1	25,000	25,000	3,750	28,750
3	تصميم تطبيق البوابة الجامعية و الخدمات الاستعلامية	1	30,000	30,000	4,500	34,500
4	تطوير تطبيق البوابة الجامعية و الخدمات الاستعلامية	1	35,000	35,000	5,250	40,250
5	اختبار ونشر تطبيق البوابة الجامعية و الخدمات الاستعلامية	1	40,000	40,000	6,000	46,000
6	تحليل متطلبات تطبيق الخدمات الالكترونية لوكالة الجامعة للدراسات العليا	1	50,000	50,000	7,500	57,500
7	الربط و التكامل لتطبيق الخدمات الالكترونية لوكالة الجامعة للدراسات العليا	1	55,000	55,000	8,250	63,250
8	تصميم تطبيق الخدمات الالكترونية لوكالة الجامعة للدراسات العليا	1	60,000	60,000	9,000	69,000
9	تطوير تطبيق الخدمات الالكترونية لوكالة الجامعة للدراسات العليا	1	70,000	70,000	10,500	80,500
10	اختبار و نشر الخدمات الالكترونية لوكالة الجامعة للدراسات العليا	1	80,000	80,000	12,000	92,000

السعر الاجمالي لكافة البنود	رقما	534,750
	كتابة	خمسمائة وأربعة وثلاثون ألفاً وسبعمائة وخمسون
ضريبة القيمة المضافة 15% لكافة البنود	رقما	69,750
	كتابة	تسعة وستون ألفاً وسبعمائة وخمسون
السعر الاجمالي لكافة البنود شامل الضريبة	رقما	650,000
	كتابة	ستمائة وخمسون ألفاً

# Software Requirements Specification

Version 1.0 approved  
16/10/2021

**Revision History:**

Name	Date	Reasons for changes	Versions
Aljowharah Aldawood	16/10/2021	Review the content and modify the correctness	1.0
Lubna Alrabiah	15/10/2021	For quick delivery as product owner required	2.0

**1-Introduction:**

In this section we will provide overview requirement for Hail university. We will cover all requirements for all systems whether functional requirements or non-functional requirements also we will mention the goals of these systems and the people who get benefit from systems and what their role is to interact with systems.

**1.1Purpose:**

The purpose of this document is to build a university mobile application for electronic services. Through build and develop four systems which are University Council, University Vice presidency for academic affairs, University Vice Presidency for Business Development, and Vice Deanship for Graduate Studies and Scientific Research. This document contains details of systems requirements.

**1.2Product scope:**

The Hail university mobile application consists of four systems. First, University Council is concerned and control the works of employee affairs, university rights and Responsible for information technology and E-Learning. Second, University vice presidency for graduate studies and scientific research consists of postgraduate studies, scientific research, training and scholarship departments, library affairs and scientific council. Third university vice presidency of business development includes deanship of community service and continuing education. Fourth university vice presidency for academic affairs consists of admission and registration and student affairs.

**1.3 Actors included in the Hail university mobile application**

Employees	Someone that doesn't teach courses in the university.
Student	Who studies in the university.
Faculty members	Someone that teaches courses in the university.
Visitor	Recipient does not belong to the university.
IT support employee	Someone who will receive the project and complete manage and develop the systems.

# 2-Overall Description:

## 2.1Product perspective:

The scope of work for the project, as previously explained, is divided into four main systems which are University Council, University Vice presidency for academic affairs, University Vice Presidency for Business Development, and Vice Deanship for Graduate Studies and Scientific Research.

To build a university mobile application for electronic services must also build the four systems (University Council, University Vice presidency for academic affairs, University Vice Presidency for Business Development, and Vice Deanship for Graduate Studies and Scientific Research).

The relation between them shown in figure 1:

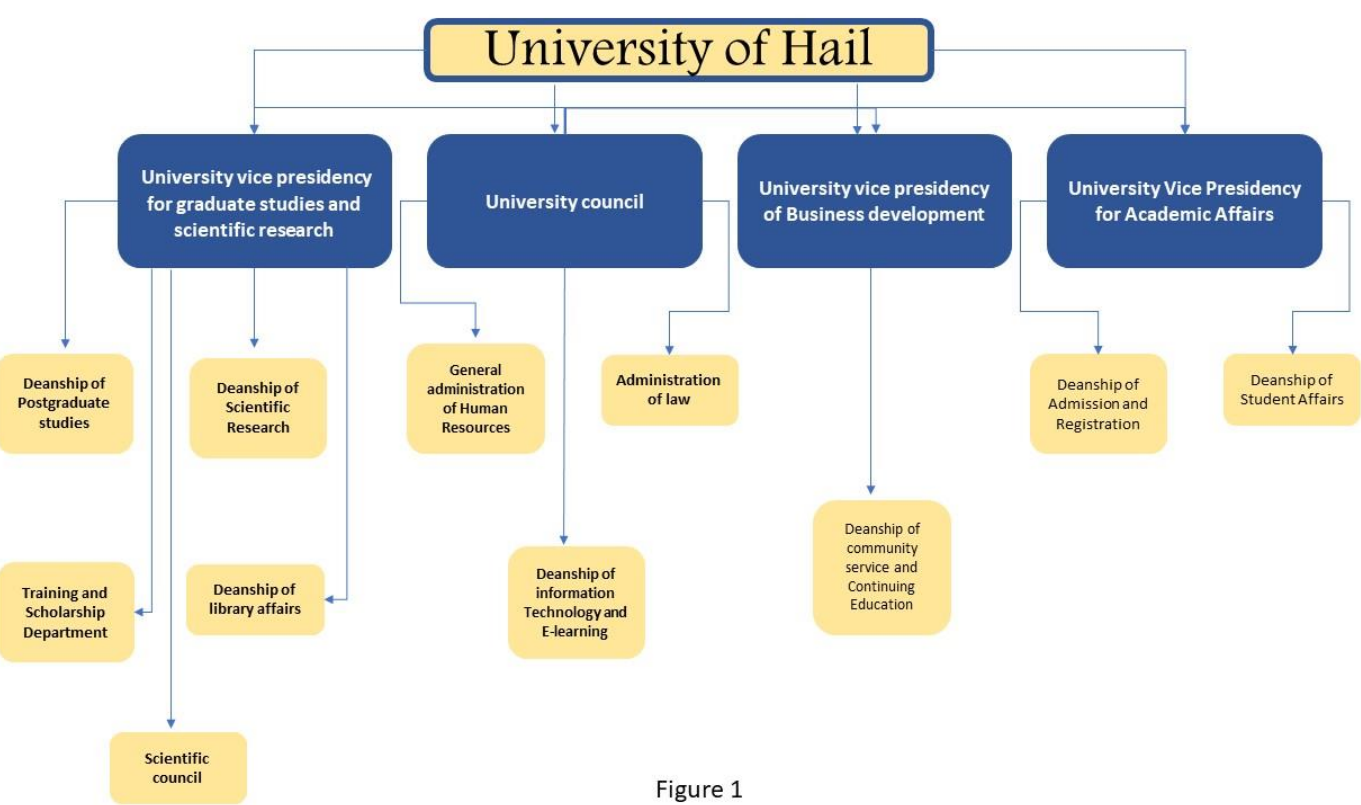
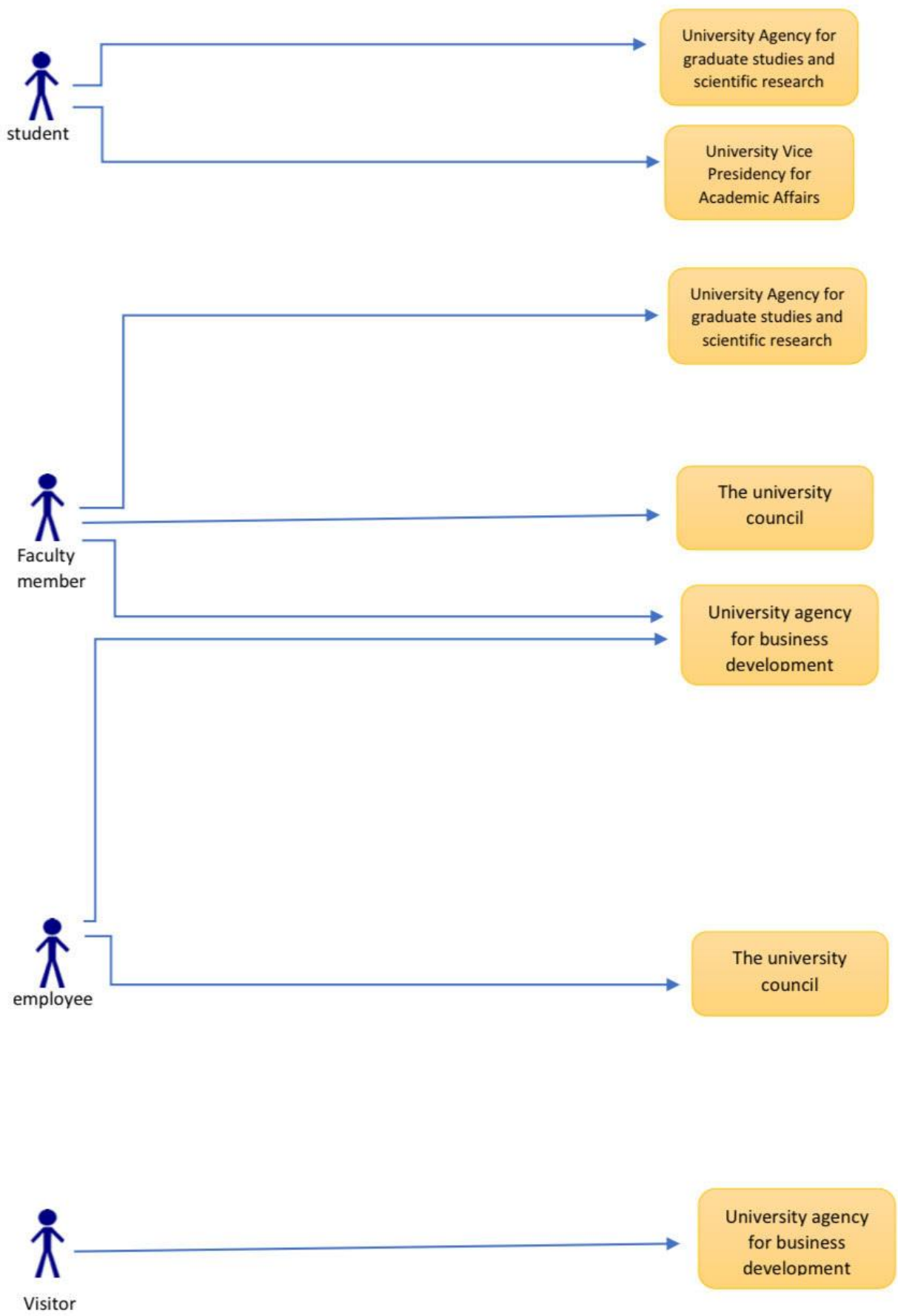


Figure 1

use cases:



2.2 System Function Requirements:

Function: Design of the Application in terms of appearance and user interface.	
Definition:	The identity of the university is taken into account when designing the application in terms of appearance and user interface.
Description of inputs	User interaction with the application
Description of outputs	An application that follows the identity of the university.
Requirement	Knowing the identity of the university.
Description of the action	-if the user uses the application, they will acknowledge the university identity through the colors and appearance.
Pre and post conditions	Pre-conditions: None Pos-conditions: None
The side effects	None
Function: Application supports both languages Arabic and English	
Definition:	This function enables for the user to choose and convert to the language they desire and understand from the unwanted language.
Description of inputs	Clicks on the required language.
Description of outputs	Displays the conversion to the required language.
Requirement	The required language from the user.
Description of the action	If The user clicks on the box to change to the required language, so the user chooses Arabic language it will convert the application to Arabic. Else, convert the application to English.
Pre and post conditions	Pre-conditions: none Post-conditions: none
The side effects	none
Function: Mobile application version (Native) in IOS	
Definition:	Enable the application to adapted to the characteristics of the device used by the user.
Description of inputs	Downloading the application in IOS devices.
Description of outputs	The application is active in IOS devices.
Requirement	Know the used device and gives the right features that suits it.
Description of the action	-if the user downloaded the app from the apple store it will be active on the device features that is used by the user.
Pre and post conditions	Pre-conditions: The use of swift language for the application. Post-conditions: None.
The side effects	None.



Function: Notification service	
Definition:	Sends alerts to users about the latest things.
Description of inputs	The user allows what they want to appear as an alert.
Description of outputs	Appears as a notification in and outside the application.
Requirement	The content of notifications.
Description of the action	If the user allows the notification to appear, they will be notified through the alerts, else disable notification alerts.
Pre and post conditions	Pre-conditions: Enable the notification features from the settings. Post-conditions: None.
The side effects	None.
Function: The application is integrated with the user system followed in the university.	
Definition:	An application by fulfilling all the needs of the beneficiaries, when any beneficiary wants any service that is complementary and clear in the system.
Description of inputs	The user finds the service that is provided by the university.
Description of outputs	The service is performed.
Requirement	Recognizes the user and offers the services that suit the user.
Description of the action	If it knows the user, it displays the service that belongs to the user that is provided by the university. The user chooses the services for it to perform.
Pre and post conditions	Pre-conditions: must log in. Post-conditions: the services are integrated depending on what the user fits in.
The side effects	Get to know the user by the active directly.
Function: The application has an open source license.	
Definition:	Allow a group of users to modify and develop in one environment.
Description of inputs	Writing code collaboratively by the users.
Description of outputs	running code.
Requirement	A work environment that is suitable for sharing the code.
Description of the action	If a work environment is suitable for developing, so more than one user can edit.
Pre and post conditions	Pre-condition: Be among the users allow them to edit. Post-condition: the completed code is delivered to the university.
The side effects	None.

Function: Connecting with university systems through APIs	
Definition:	Is a set of defined rules that explain computers or applications communicate with one another.
Description of inputs	List of data required in the analysis document with a property of set and get data.
Description of outputs	Linked with the university systems.
Requirement	Know the type of APIs that is available from the university.
Description of the action	If it acknowledges the type of APIs that is used the connections are made in order of this type of APIs.
Pre and post conditions	Pre-conditions: the task of using APIs in the application and linking with it is the responsibility of the contractor. Post-conditions: None.
The side effects	None.
Function: the approved method of logging in to the application is a guide and effective.	
Definition:	It is a database that contains the names of the users and computers in the university.
Description of inputs	User logs in.
Description of outputs	Determining the type of the user and the access permissions available for this user type.
Requirement	User name and password.
Description of the action	If the user logs in it will display the appropriate validity for it.
Pre and post conditions	Pre-conditions: existence of user name and computer that were used to long in is found in the database. Post-conditions: None.
The side effects	After knowing the user, the full services provided by the university are displayed.

## 2.3 System Non-function Requirements:

Non-Function: Response Time.	
Definition:	The delay between the occurrence of the event on the process and the occurrence of the reaction event.
Description of inputs	A problem within the application.
Description of outputs	The problem fixed.
Requirement	The type of problem.
Description of the action	If there is critical problem due to the discontinuation of the application or part of it that does not allow users to complete its work and actions on the application. So, the response time and fixing the problem could not be more than 24 hours. Or if There is a medium-critical problem that affects the workflow of work in the application but does not stop or prevent the completion of work and does not affect the validity or accuracy of data. Or if There is a low-critical problem that does not affect the workflow of work in the application, does not stop or wish to complete the work and does not affect the validity and accuracy of the data. So, the response time and fixing the problem could not be more than 48 hours.
Pre and post conditions	Pre-conditions: providing technical support for 12 months over the contract period for the entire scope of work. Post-conditions: The problem is fixed in timely manner, based on its severity.
The side effects	If there is a security problem then there is an application problem.
Non-Function: performance	
Definition:	Is an indicator of how well a software system or components meets its requirements for timeliness.
Description of inputs	A set of values selected based on certain criteria.
Description of outputs	High performance of the application or low performance
Requirement	the capacity of the application.
Description of the action	If The application is tested, the result of the application performance would either be high or low.
Pre and post conditions	Pre-condition: None. Post-condition: None.
The side effects	None.

Non-Function: User Acceptance Testing	
Definition:	Actual users test the software to see if it is able to carry out the required tasks.
Description of inputs	A set of values selected based on certain criteria.
Description of outputs	Application is valid or not valid.
Requirement	The criteria on which the value entered is based.
Description of the action	If they enter a set of values on the specified criteria. It will perform the result either the application is valid or not valid.
Pre and post conditions	Pre-condition: None. Post-condition: None.
The side effects	Performance.
Non-Function: Security	
Definition:	Its an implementation to protect of information and application against viruses and other hacker risks.
Description of inputs	A set of values selected based on certain criteria.
Description of outputs	Securing the application would be secured or not secured.
Requirement	Scope of the application.
Description of the action	If The application is tested, the result of the application security would be secured or not secured.
Pre and post conditions	Pre-condition: None. Post-condition: None.
The side effects	None.

2.4 Operating Environment:

- The system should be completely application based for the end user and support IOS devices.
- we will use the database SQL language to manage and organize data in all sorts of systems in which various data relationships exist.
- The application should be integrated and includes all services provided by the university.
- The language of swift is a powerful and intuitive programming language for iOS. Swift is a general-purpose programming language built using modern approach to safety, performance, and software design patterns.

2.5 User documentation:

Hail University mobile application including full documentation of software functions (Code Source) and so They assets of all developed or modified programs shall be delivered specially the data.

- Operation manual.
- User's Manual (Video)
- System analysis and design document.
- System preparation and installation document.
- The test document for the system.
- Systems Technical Details Document (Technical Manual)
- User manuals for the systems in Arabic
- A document explaining the source codes.

Glossary

Terms	definition
Interface	a device or program enabling a user to communicate with a computer.
Validity	the quality of being correct or true
timeliness	the time expectation for accessibility and availability of information.

# **Project Systems Management Regulations for the Hail University Phase 2**

Date
11 / 11 / 2021

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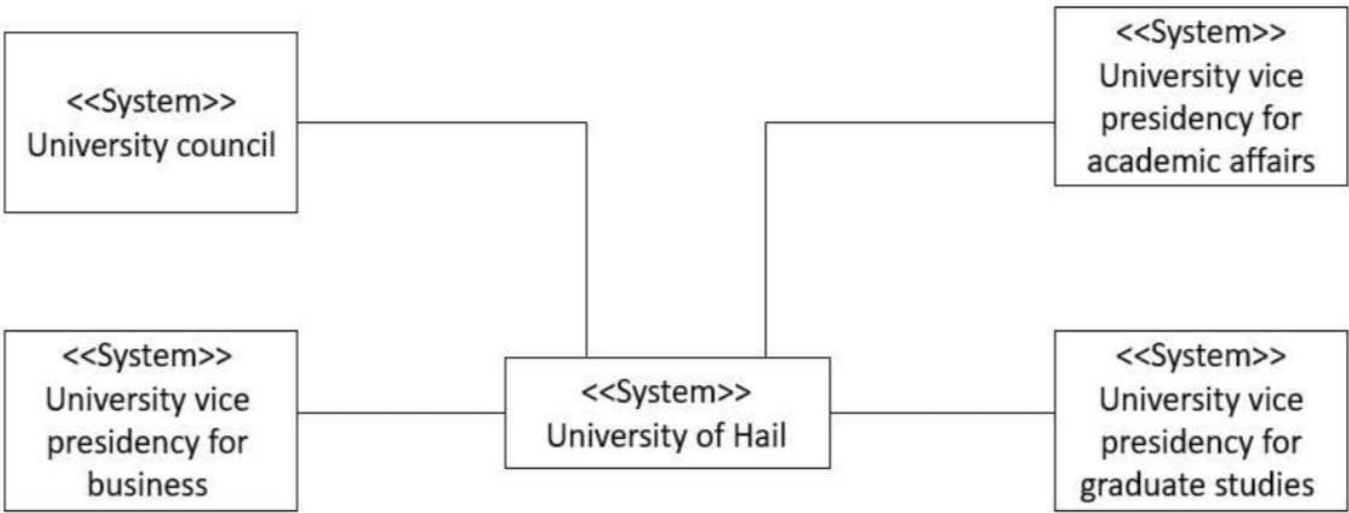
## 2- Introduction

Building an application for electronic services for the University of Hail to provide a coherent system that unifies and collects information, data and its work procedures to provide electronic information services linked to the Vice Deanship of Graduate studies and Scientific Research system, the University Vice Presidency of Business Development system, and the University Vice presidency for Academic Affairs system. As well enable effective communication of the University Council system. in This document we will provide a high-level overview and explains the architecture of the system, the interfaces of the System, what the system will do and the constraints under which it must operate, how the system will react to external stimuli. The document defines goals of the architecture, the use cases supported by the system, architectural styles and components that have been selected. The document provides a rationale for the architecture and design decisions made from the conceptual idea to its implementation.

## 2- Design model

### 2.1 Context diagram

we use this context diagram to show the scrum master other systems related to the environment of our system.



Context diagram(Figure 1)

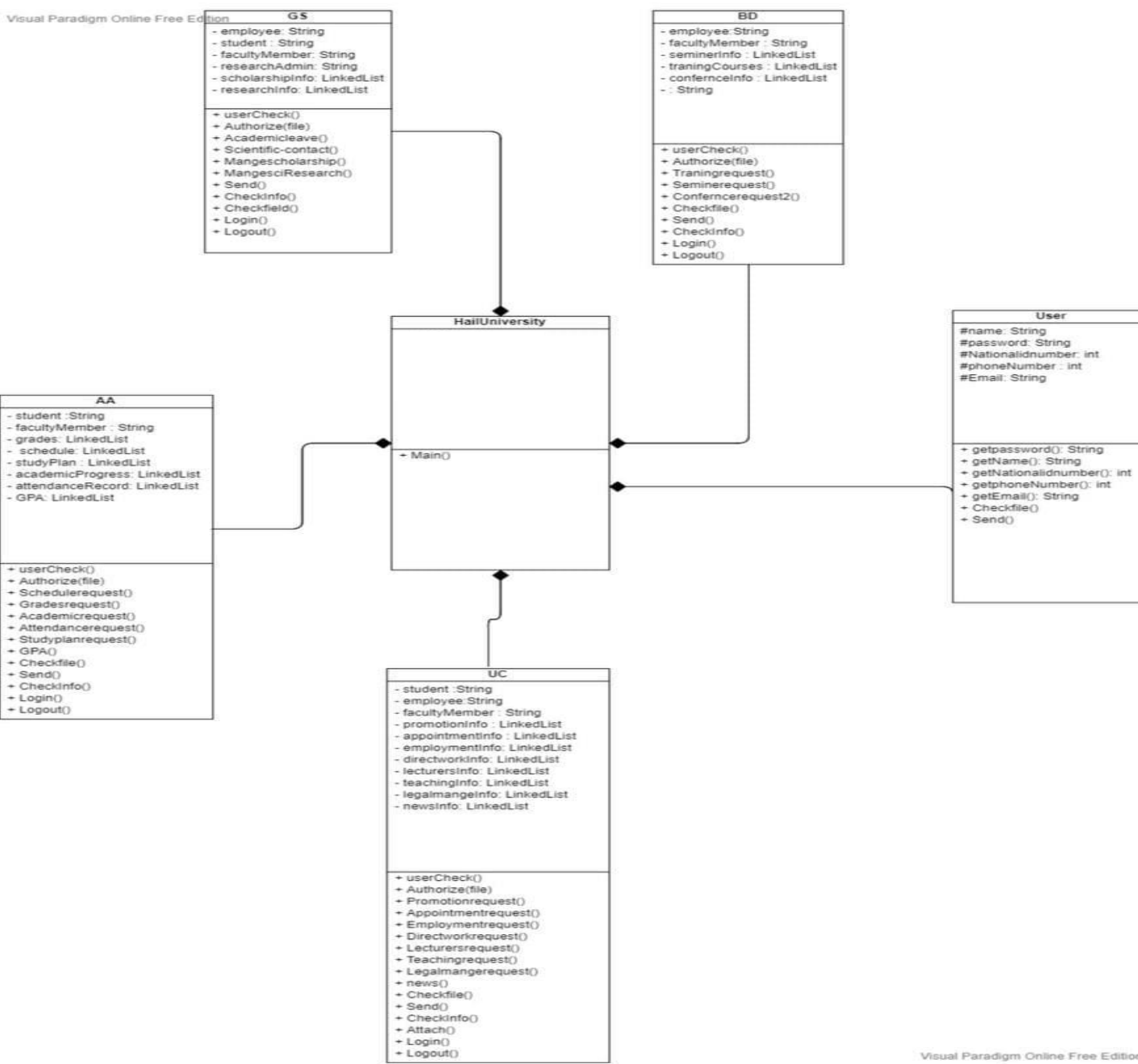


## 2.1 Class diagram

we used this class diagram to show the classes in this system and the association between these classes for the developer in the scrum team.

Note :

- this diagram is general without including the details.
- GS class (University vice presidency for graduate studies and scientific research)
- BD class (University vice presidency of Business development)
- UC class (University council )
- AA class (University Vice Presidency for Academic Affairs)

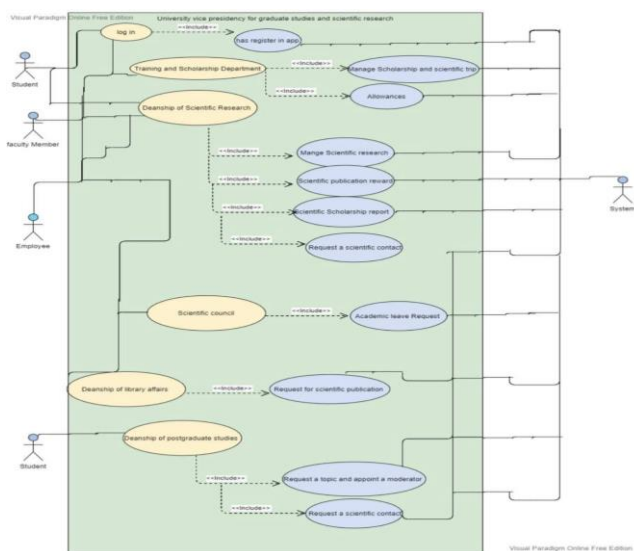


Class diagram(Figure 2)

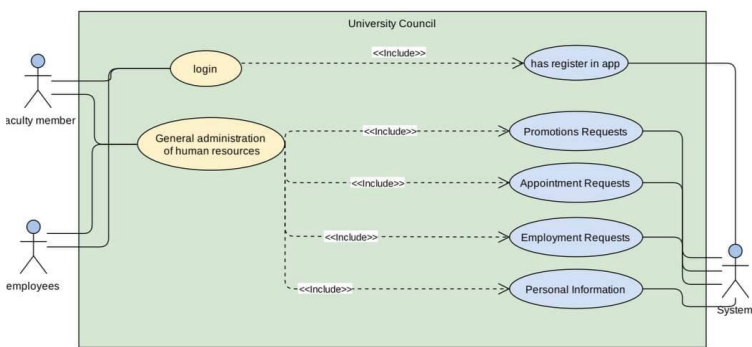
## 2.3 Use case diagram

we used this use case diagram to show the product owner the interactions between the system and its external actors (users or other systems).

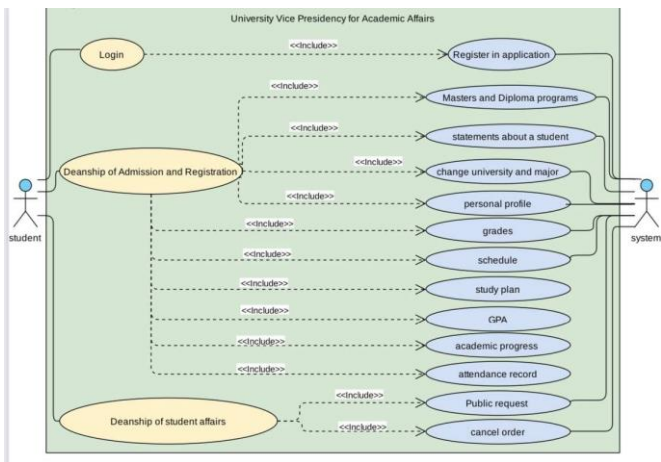
### 2.3.1 User-Use case model



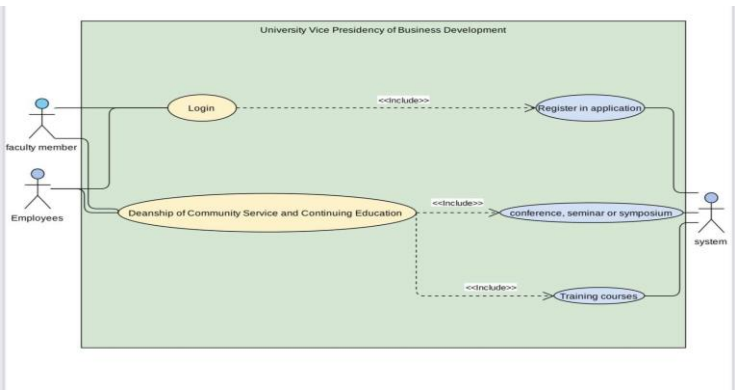
University vice presidency for graduate studies and scientific research-User-Use case (Figure 3)



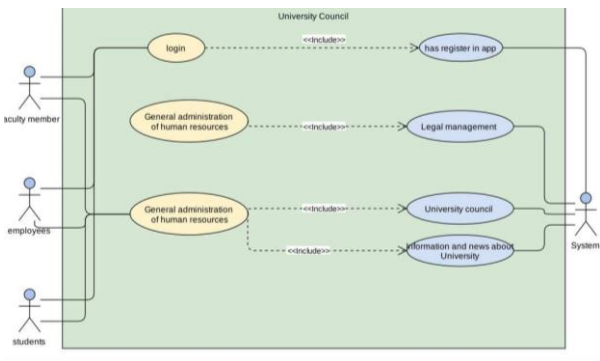
University council -User-Use case (Figure 5)



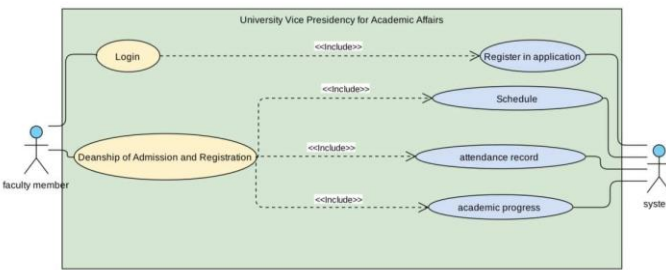
University Vice Presidency for Academic Affairs-User-Use case (Figure 7)



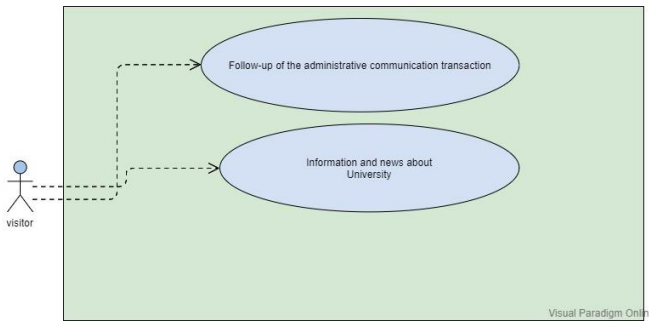
University vice presidency of Business development-User-Use case (Figure 4)



University council -User-Use case (Figure 6)



University Vice Presidency for Academic Affairs-User-Use case (Figure 8)



visitor-User-Use case (Figure 9)

## 2.3.2 Use case brief description

University council: Employment Request .	
Actors	Employee and System.
Description	The employee attaches his personal information to the system, and a response is made by the system, whether the request has been processed or there is an error.
Data	User’s Personal Information.
stimulus	User request a employment Request.
response	System provide for the employee the ability to send this request.

University vice presidency for graduate studies and scientific research: Mange scientific research.	
Actors	Student, faculty member and System.
Description	The user can manage his scientific research, including (request to close a research project, request to extend a research project, request to end a research project, and so on) where his request is sent to the system. And the response is done by the system(some requests done by faculty member), whether the request has been processed or there is an error.
Data	User’s Personal Information.
stimulus	User request a service to manage his scientific research.
response	System or faculty member provide for the students ability to send this request.

University Vice Presidency for Academic Affairs : Public request	
Actors	Student and System
Description	The user fills out a form for a request that does not fall under any of the available application requests.
Data	User attach a supporting document.
Stimulus	User requests a public request.
response	System provides a public request form for students.

University Vice Presidency for Academic Affairs : Statements about a student	
Actors	Student and System
Description	Letter containing the user’s personal information and conformation from the university that the information is correct.
Data	Students personal information.
Stimulus	Student receives a letter and confirmation.
Response	System sends the letter to the student of confirmation correctness about their personal information.

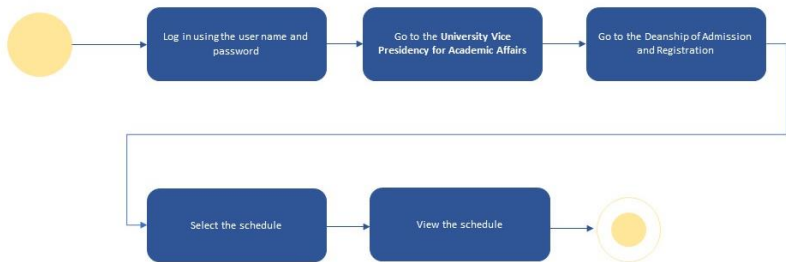
University Vice Presidency for Academic Affairs : Academic Progress	
Actors	Student, system
Description	Statements show the students courses with their symbols and numbers, the symbols and values of the grades, and GPA.
Data	Student academic progress information.
Stimulus	student access their academic progress.
Response	System displays the academic progress for students.

University Vice Presidency for Academic Affairs : Cancel Request	
Actors	Student, system
Description	the cancellation for students of any request that is selected should be deleted from the requests that are under processing.
Data	Users cancel request information.
Stimulus	Student cancels a request.
Response	System provides for the student to cancel a request.

## 2.4 Activity diagram

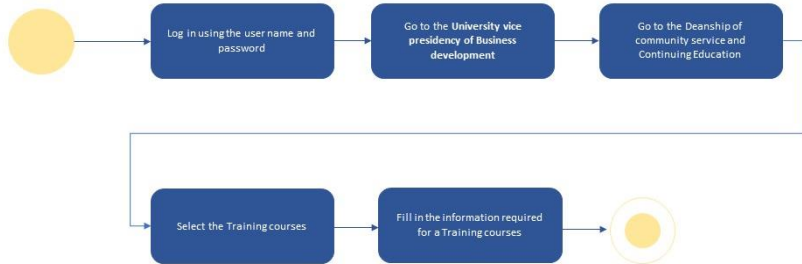
we used this activity diagram to show the scrum master the activities involved in the process or in data processing. There is an activity diagram for each sprint in general.

Activity diagram to show a series of actions (steps) for view the schedule  
(University Vice Presidency for Academic Affairs- Deanship of Admission and Registration )



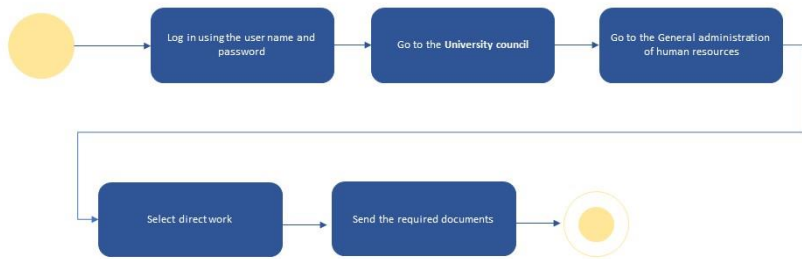
Activity diagram (Figure 10)

Activity diagram to show a series of actions (steps) for view the Training courses  
(University vice presidency of Business development- Deanship of community service and Continuing Education)



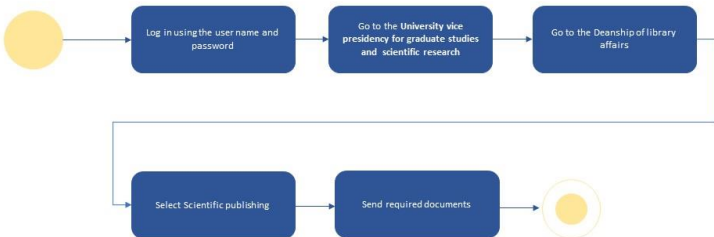
Activity diagram (Figure 11)

Activity diagram to show a series of actions (steps) for view the direct work  
(University council - General administration of human resources )



Activity diagram (Figure 12)

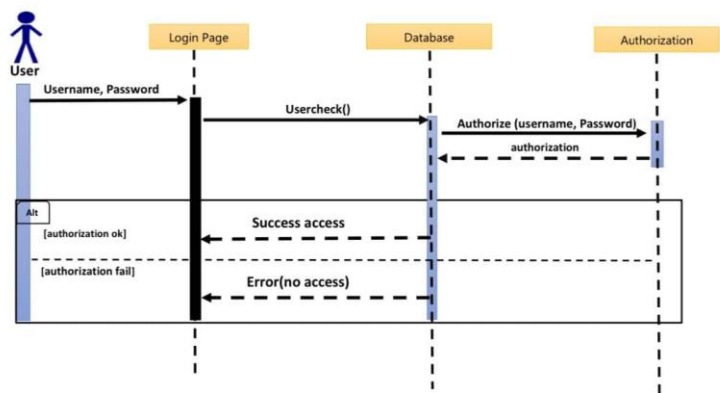
Activity diagram to show a series of actions (steps) for view the Scientific publishing  
(University vice presidency for graduate studies and scientific research - Deanship of library affairs)



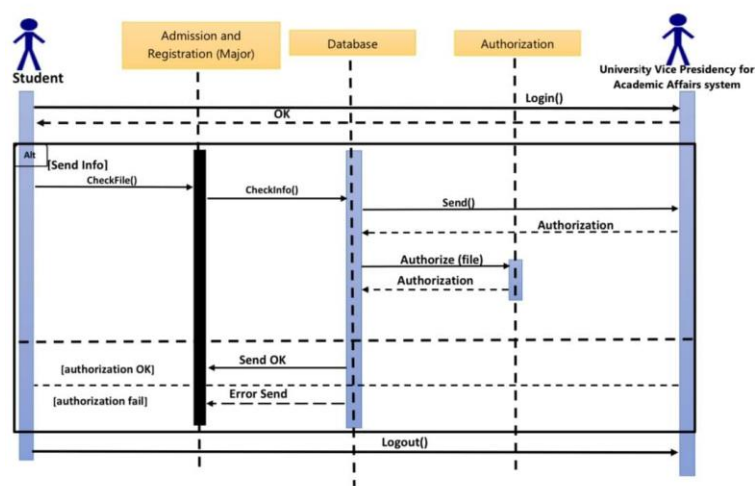
Activity diagram (Figure 13)

## 2.5 Sequence diagram

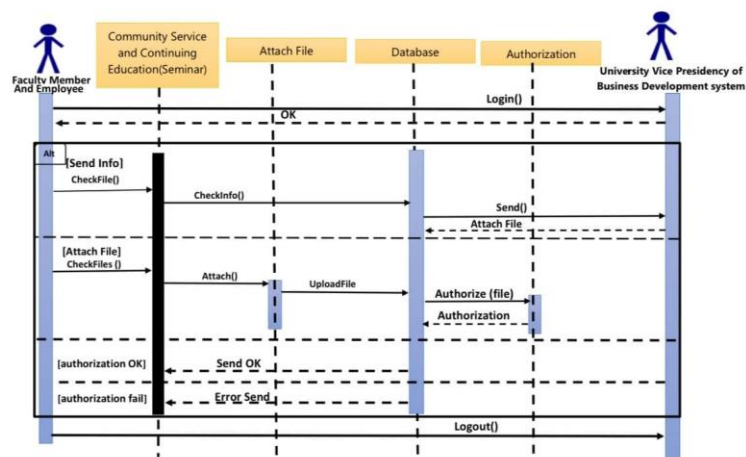
we used the sequence diagram to show the developer the interaction between actors and the system and between system components. There is an sequence diagram for each sprint in general except login.



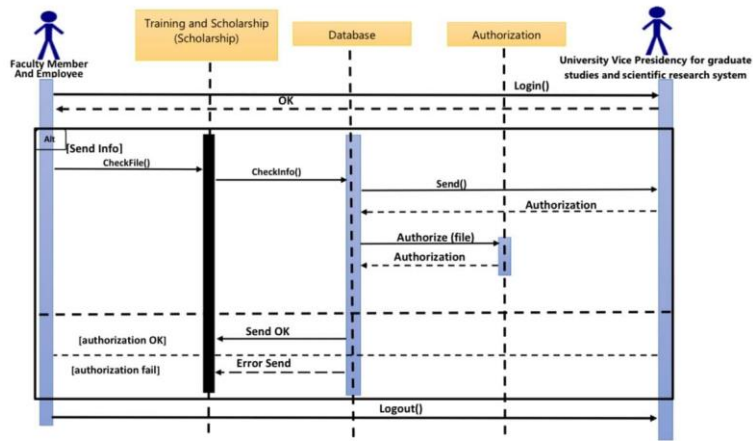
Sequence diagram (Figure 14)



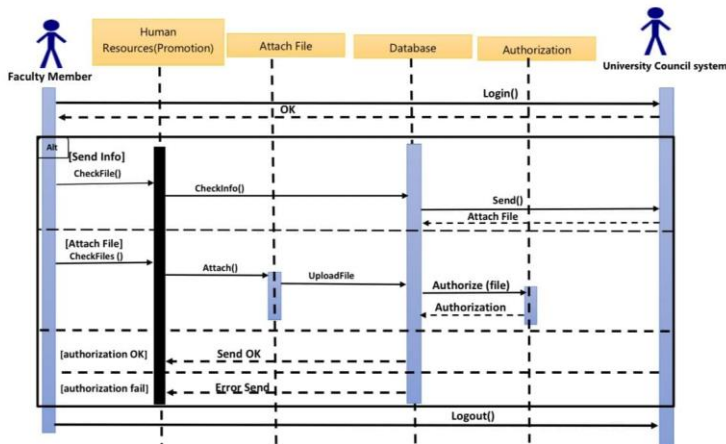
Sequence diagram (Figure 15)



Sequence diagram (Figure 16)



Sequence diagram (Figure 17)



Sequence diagram (Figure 18)

## 3- Architecture Design And Pattern

### 3.1 Why Would We Use Layered Architecture Design?

Our project is an extension to an already existing system which needs its independency. Flexibility is also crucial since there is the possibility of adding new or editing current features or extending the business rules. some facilities can be redundant which makes a layered approach better suited and easiest to implement and edit. Also, since it is easier to understand, code will be easier to understand. It is for developer .

### 3.2 Layered architecture model



layered architecture (Figure 19)



# 4- Prototype

we use prototype to show the product owner the requirements in a simple way that mimics the reality and to make sure that it meets his desire.

The link of prototype in figma:

<https://www.figma.com/file/LmD3nm79fNHLWmqpeyYrVI/sw?node-id=0%3A1>



(Figure 20)



(Figure 21)



(Figure 22)



(Figure 23)



(Figure 24)



(Figure 25)



(Figure 26)



(Figure 27)



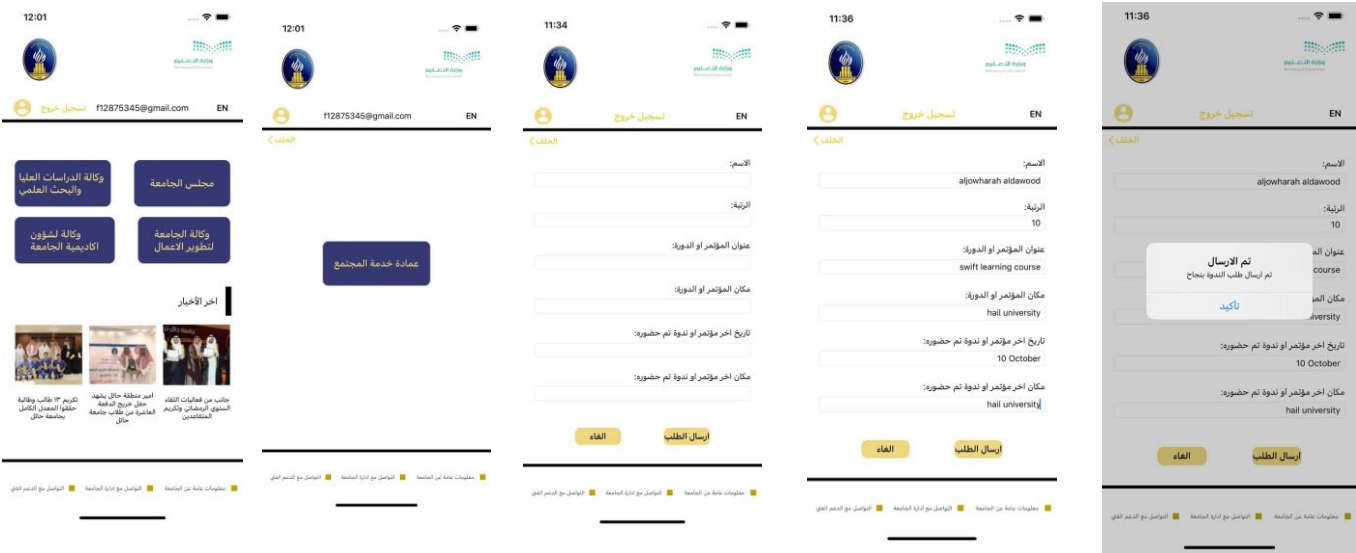
(Figure 28)

Example :



(Figure 29)

in this example, the users username and password was incorrect so the user does not have the permission to enter



(Figure 24) (Figure 28) (Figure 30) (Figure 31) (Figure 32)

in this example, the user goes from the university vice presidency of business development to the Deanship of community service and continuing education and then chooses the seminar request to attach and fill the required information.



# **Project Systems Management Regulations for the Hail University Phase 3**

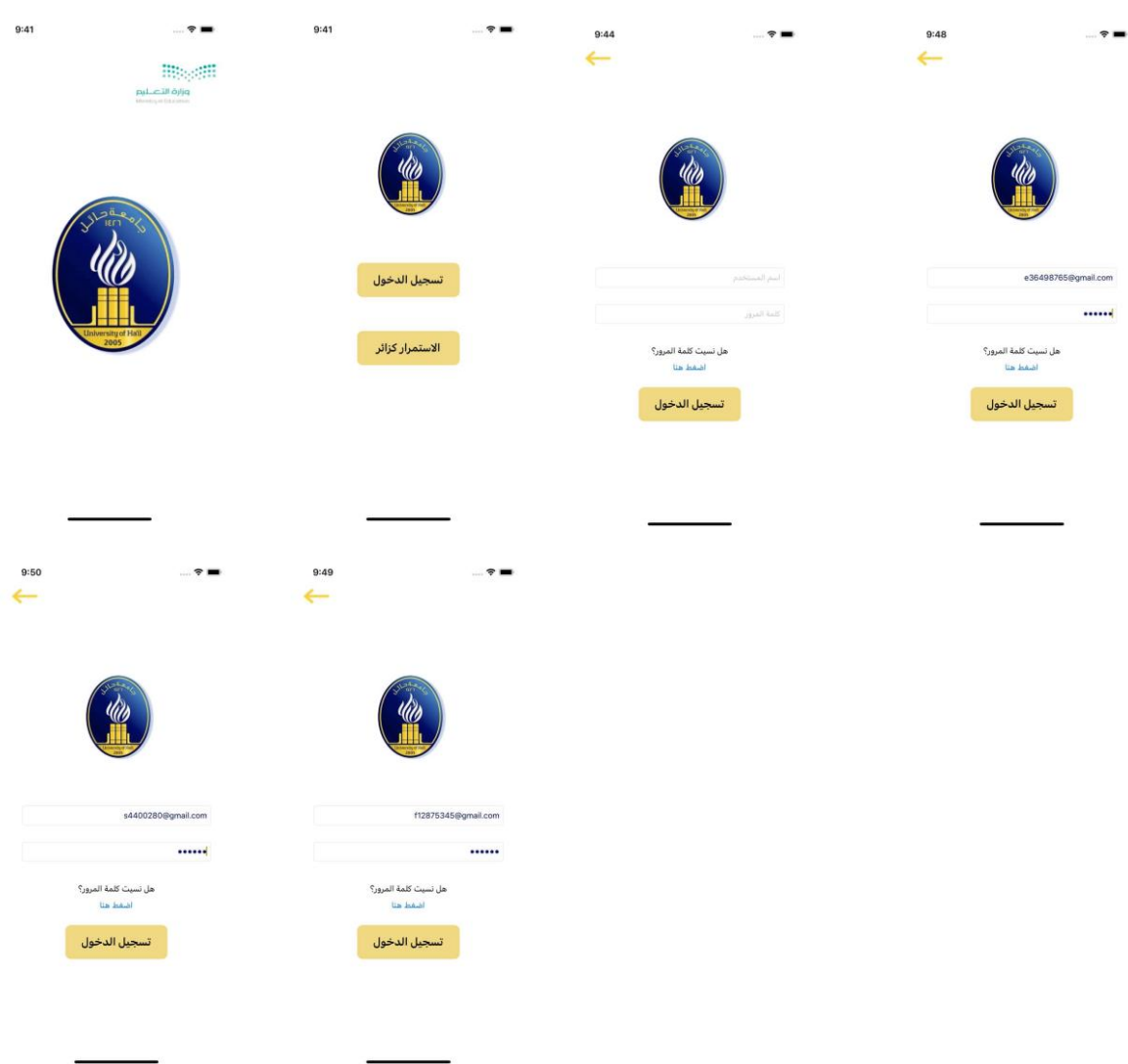
Date
9 / 12 / 2021

# Table Contents

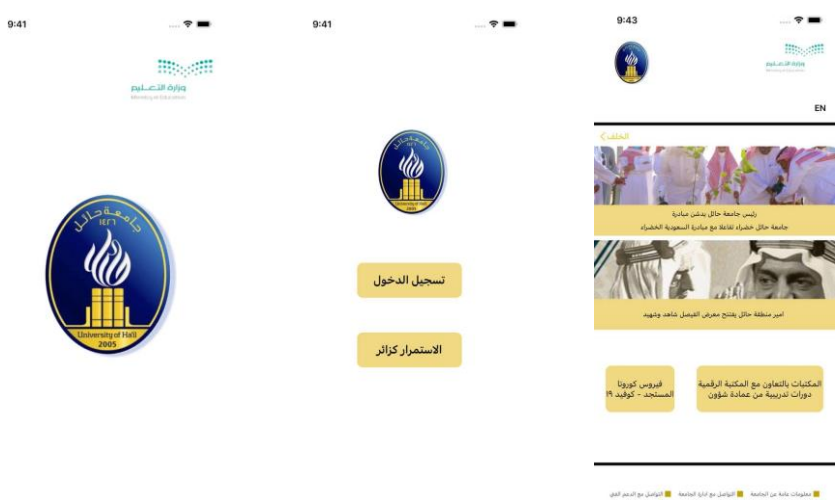
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# Implantation

## 1.1 The interface of the application

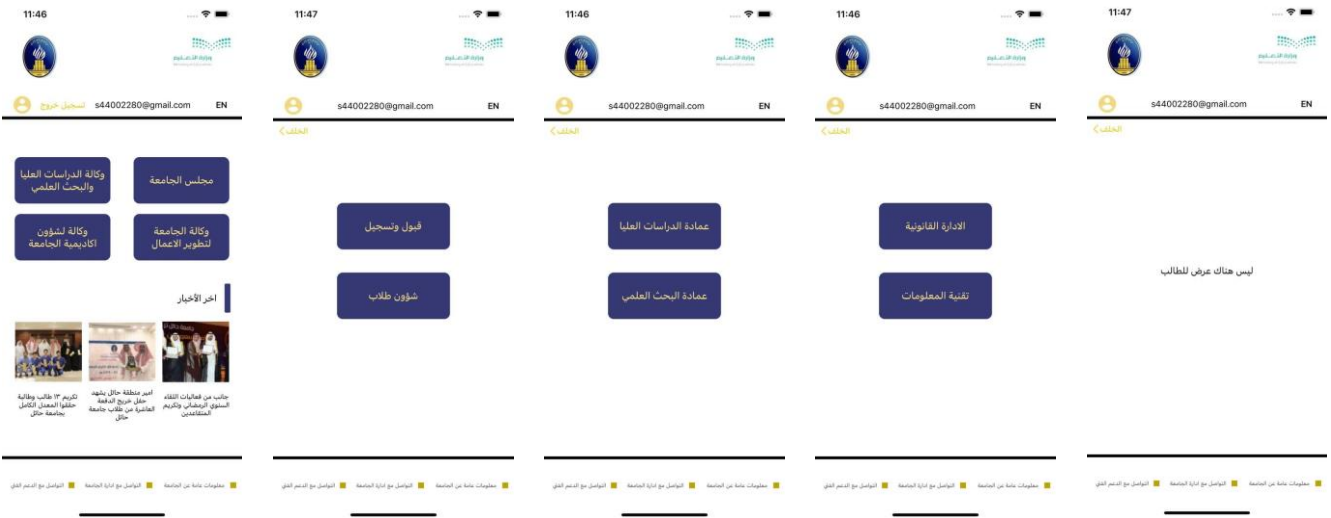


The users of this application login by clicking the button. The student will login and will be identified as a student through the username where it starts with the letter ‘s’. As well, the faculty member will be identified through the username where it starts with the letter ‘f’. Along with, employees will also be identified through the username that starts with ‘e’ and login by clicking the button.

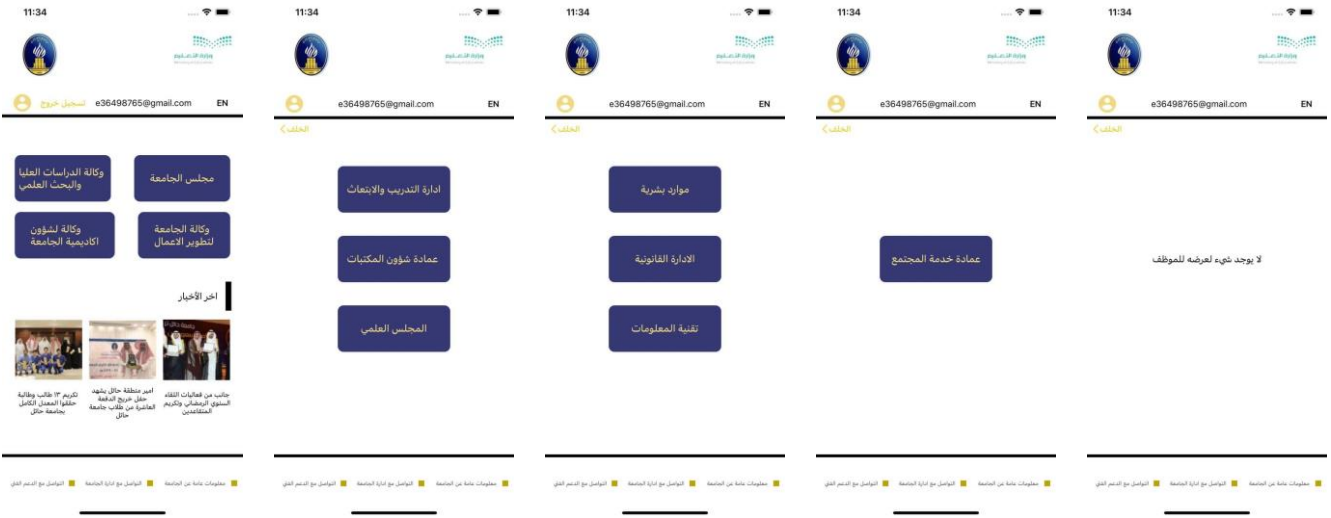


The visitor would click on the visitor icon box and the system will display university news, and information about the university.

## 1.2 home page for each user



The system will display and allow **students** to access university vice presidency for graduate studies and scientific research and through it will access deanship of postgraduate studies and deanship of scientific research. Also access university council and its deanships administration of law and deanship of information technology and E-learning. Final, access the university vice presidency for academic affairs and its deanship of admission and registration and deanship of student affairs.

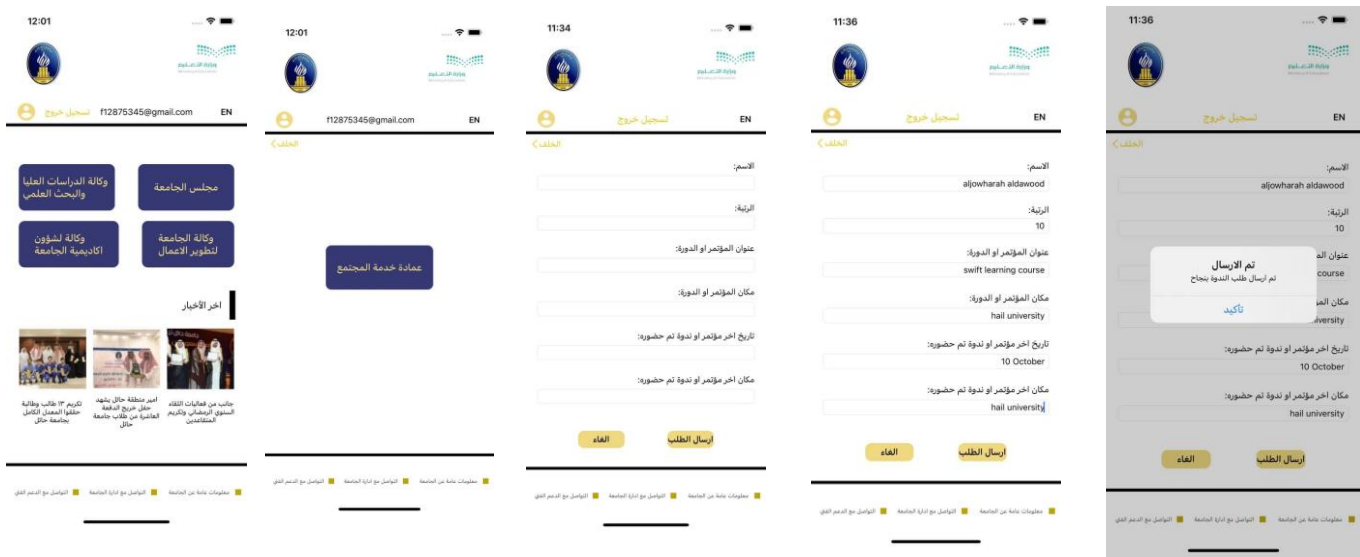


The system will display and allow **employees** to access university council and its deanships administration of law, general administration of human resources and deanship of information technology and E-learning. Also, access the university vice presidency for graduate studies and scientific research and its deanship of library affairs, training and scholarship department and scientific council. Last, university vice presidency of business development can also be accessed and its deanship of community service and continuing education.



**Faculty member** is allowed by the system to access university vice presidency for graduate studies and scientific research and its deanship of library affairs, scientific council, deanship of scientific research and Training and scholarship department. Also access university council and its deanships administration of law, general administration of human resources, and deanship of information technology and E-learning. Also, access the university vice presidency for academic affairs and its deanship of admission and registration. Final, also the faculty member can access the university vice presidency of business development and the deanship of community service and continuing education.

### 1.3 example of a request for employees and Faculty member

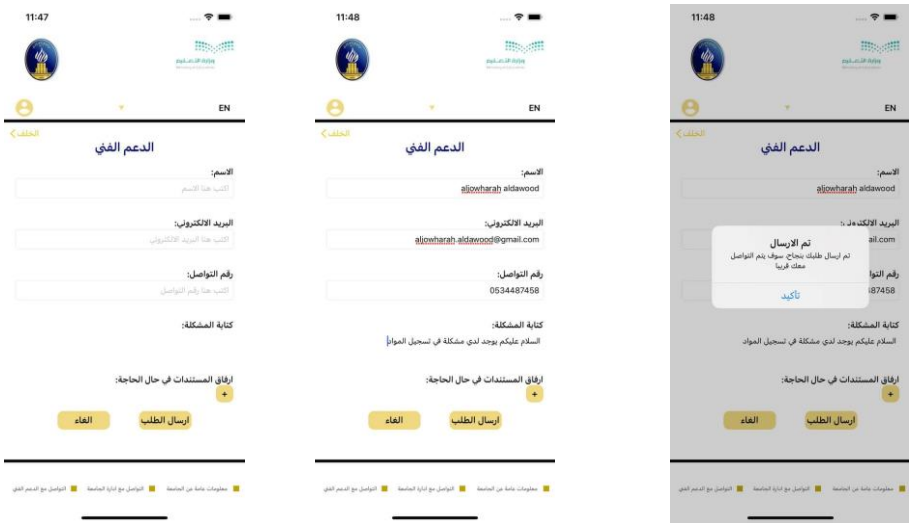


in this example, the user goes from the university vice presidency of business development to the Deanship of community service and continuing education and then chooses the seminar request to attach and fill the required information.

# 1.4 Description for three icons



On all of the screens there will be three buttons on the bottom of the screen, and all user can access them. the first one contact technical support, the second one is communicate with the public admission example twitter, Facebook, and email. The third public information about the university such as the vision, the message and the goal of the university.



Technical support all users have the right to access and request the problem by filling the required information, writing the problem and attaching files if needed. Then, submit the request by clicking on the button so the message will appear on the screen that the request is successfully submitted.

# Testing

## 2.1 Regression testing

**Test Case ID:** Promotion request..

**Test Priority:**(Low/Medium/High): Low.

**Module Name:** IOS Application system Promotion request.

**Test Title:** sends Promotion request successful .

**Description:** Test the system if saves the entered and attached data or not.

**Test Designed by:** Aljowharah Aldawood.

**Test Designed date:** 28/11/2021.

**Test Executed by:** Lubna Alrabiah.

**Test Execution date:** 1/12/2021

Pre-condition: The User must be logged into the system.					
Step No	Test Steps	Test Data	Expected Result	Actual Result	Statues(Pass/Fail)
1	Login as faculty member or employee.		The system should be able to login for faculty member and employee.	The system logged in successfully.	Pass
2	Click on"University Council system".		The user should be able to click on"University Council".	The user clicked on"University Council".	Pass
3	Click on"General administration of human Resources".		The user should be able to click on "General administration of human Resources".	The user clicked on "General administration of human Resources".	Pass
4	Click on"Promotion request".		The user should be able to click on"Promotion request".	The user clicked on"Promotion request".	Pass
5	Provide date request promotion.	6/12/2021	The user should be able to enter date request promotion.	The user entered date request promotion.	Pass
6	Provide date guardianship of the council.	3/5/2021	The user should be able to enter date guardianship of the council.	The user entered date guardianship of the council.	Pass
7	Provide name in English.	Lubna Alrabiah	The user should be able to enter name in English.	The user entered name in English.	Pass
8	Provide current degree.	lecturer	The user should be able to enter current degree.	The user entered current degree.	Pass
9	Provide attach the recent academic file.	Academi.PDF	The user should be able to attach the recent academic file.	The user attached the recent academic file	Pass
10	Attach the Qualifications.	Qualification.PDF	The user should be able to attach the Qualification	The user attached Qualificatio	Pass
Post-condition: The system saves the entered and attached data into the database and sends message "sends successfully".					

**Test Case ID:** Promotion request..
 **Test Priority:**(Low/Medium/High): Low.
 **Module Name:** IOS Application system Promotion request.
 **Test Title:** sends Promotion request failure.
 **Description:** Test the system if saves the entered and attached data or not.

**Test Designed by:** Aljowharah Aldawood.
 **Test Designed date:** 28/11/2021.
 **Test Executed by:** Lubna Alrabiah.
 **Test Execution date:** 1/12/2021

Pre-Conditions: The user must be logged into the system.					
Step No	Test Steps	Test Data	Expected Result	Actual Result	Statues(Pass/Fail)
1	Login as faculty member or employee.		The system should be able to login for faculty member and employee.	The system logged in successfully.	Pass
2	Click on"University Council system".		The user should be able to click on"University Council".	The user clicked on"University Council".	Pass
3	Click on"General administration of human Resources".		The user should be able to click on "General administration of human Resources".	The user clicked on "General administration of human Resources".	Pass
4	Click on"Promotion request".		The user should be able to click on"Promotion request".	The user clicked on"Promotion request".	Pass
5	Provide date request promotion.	6/12/2021	The user should be able to enter date request promotion.	The user entered date request promotion.	Pass
6	Provide date guardianship of the council.	3/5/2021	The user should be able to enter date guardianship of the council.	The user entered date guardianship of the council.	Pass
7	Provide name in English.	Lubna Alrabiah	The user should be able to enter name in English.	The user entered name in English.	Pass
8	Provide current degree.		The user should be able to enter current degree.	The user entered current degree.	Pass
9	Provide attach the recent academic file.	Academi.PDF	The user should be able to attach the recent academic file.	The user attached the recent academic file	Pass
10	Attach the Qualifications.	Qualification.PDF	The user should be able to attach the Qualification	The user attached Qualificatio	Pass
Post-Condition: The system does not save the entered and attached data into the database due to its incompleteness and sends message "send failed".					



Test Case ID: Seminar Request.

Test Priority:(Low/Medium/High): Low.

Module Name: IOS Application system Seminar Request.

Test Title: sends Seminar Request successful.

Description: Test the system if saves the entered data or not.

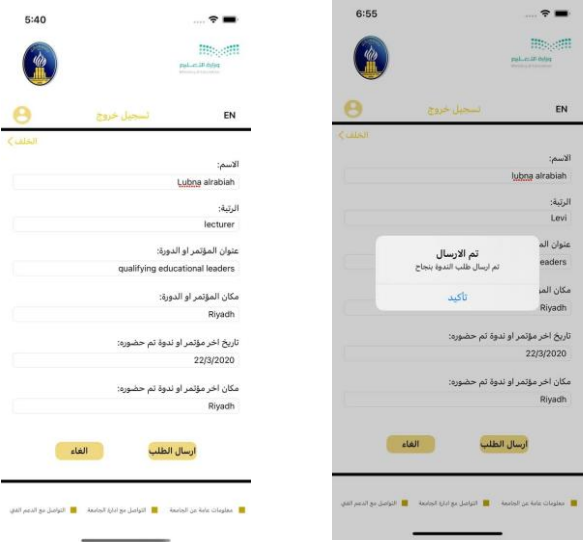
Test Designed by: Aljowharah Aldawood.

Test Designed date: 29/11/2021.

Test Executed by: Lubna Alrabiah.

Test Execution date: 2/12/2021

Pre-condition: The User must be logged into the system.					
Step No	Test Steps	Test Data	Expected Result	Actual Result	Statues(Pass/Fail)
1	Login as faculty member or employee.		The system should be able to login for faculty member and employee.	The system logged in successfully.	Pass
2	Click on"University vice presidency of Business development".		The user should be able to click on" University vice presidency of Business development".	The user clicked on" University vice presidency of Business development"	Pass
3	Click on"Deanship of community service and Continuing".		The user should be able to click on "Deanship of community service and Continuing".	The user clicked on "Deanship of community service and Continuing".	Pass
4	Click on"Request a seminar".		The user should be able to click on"Request seminar".	The user clicked on"Request a seminar".	Pass
5	Provide name in English.	Lubna Alrabiah	The user should be able to enter name in English.	The user entered name in English.	Pass
6	Provide current degree.	lecturer	The user should be able to enter current degree.	The user entered current degree.	Pass
7	Provide seminar title.	Qualifying educational leaders.	The user should be able to enter seminar title.	The user entered seminar title.	Pass
8	Provide seminar location.	Riyadh	The user should be able to enter seminar location.	The user entered seminar location.	Pass
9	Provide date of the last seminar attended.	22/3/2020	The user should be able to enter date of the last seminar attended.	The user entered date of the last seminar attended.	Pass
10	Provide location of the last seminar attended.	Riyadh	The user should be able to enter location of the last seminar attended.	The user entered location of the last seminar attended.	Pass
Post-condition: The system saves the entered data into the database and sends message "sends successfully".					



Test Case ID: Seminar Request..

Test Priority:(Low/Medium/High): Low..

Module Name: IOS Application system Seminar Request.

Test Title: sends Seminar Request failure.

Description: Test the system if saves the entered data or not

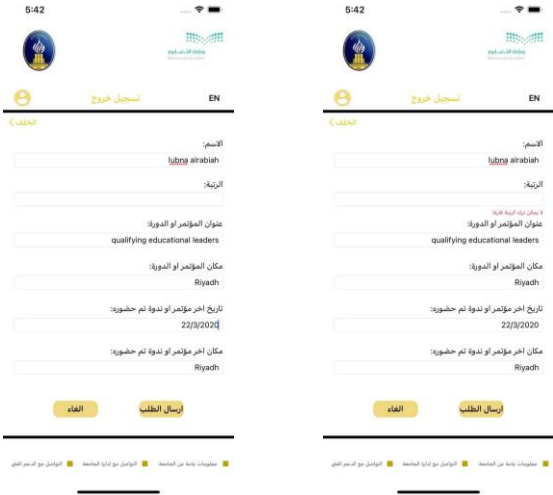
Test Designed by: Aljowharah Aldawood.

Test Designed date: 29/11/2021.

Test Executed by: Lubna Alrabiah.

Test Execution date: 2/12/2021

Pre-condition: The User must be logged into the system.					
Step No	Test Steps	Test Data	Expected Result	Actual Result	Statues(Pass/Fail)
1	Login as faculty member or employee.		The system should be able to login for faculty member and employee.	The system logged in successfully.	Pass
2	Click on"University vice presidency of Business development".		The user should be able to click on" University vice presidency of Business development".	The user clicked on" University vice presidency of Business development"	Pass
3	Click on"Deanship of community service and Continuing".		The user should be able to click on "Deanship of community service and Continuing".	The user clicked on "Deanship of community service and Continuing".	Pass
4	Click on"Request a seminar".		The user should be able to click on"Request a seminar".	The user clicked on"Request a seminar".	Pass
5	Provide name in English.	Lubna Alrabiah	The user should be able to enter name in English.	The user entered name in English.	Pass
6	Provide current degree.		The user should be able to enter current degree.	The user entered current degree.	Pass
7	Provide seminar title.	Qualifying educational leaders.	The user should be able to enter seminar title.	The user entered seminar title.	Pass
8	Provide seminar location.	Riyadh	The user should be able to enter seminar location.	The user entered seminar location.	Pass
9	Provide date of the last seminar attended.	22/3/2020	The user should be able to enter date of the last seminar attended.	The user entered date of the last seminar attended.	Pass
10	Provide location of the last seminar attended.	Riyadh	The user should be able to enter location of the last seminar attended.	The user entered location of the last seminar attended.	Pass
Post-Condition:The system does not save the entered data into the database due to its incompleteness and sends massage "send failed".					





**Test Case ID:** Reset password  
**Test Priority (Low/Medium/High):** High  
**Module Name:** IOS Application system reset password  
**Test Title:** verify reset password  
**Description:** Test the IOS application system reset password

**Test Designed by:** Aljowhara Aldawood  
**Test Design Date:** 12/4/2021  
**Test Executed by:** Teef Aloschan  
**Test Execution Date:** 12/6/2021

Post-Conditions: User resets password					
Step No	Test Steps	Test Data	Expected Result	Actual Result	Statues (Pass/Fail)
1	Navigate to Login screen		The system should display login page.	Login page is displayed	Pass
2	Click on the forgot password button		The system should display reset password page.	The system displayed reset password page.	Pass
3	Enter username	s44002280@gmail.com	the user should be able to enter username	the user enters username	pass
4	Link sent to email		The user is able to click on the link to open	The user clicks on the link to open the page	pass
5	new password page		The system displays new password page and asks to enter new password.	the system displayed new password page and asks to enter a new password	pass
6	Enter new password	123456	The user should be able to enter new password	The user enters a new password	Pass
7	Click “save” button		The user should be able to click button	The user clicks button to save	pass

Pre-Conditions: User forgot password





Hello,

Follow this link to reset your project-542480306544 password for your [s44002280@gmail.com](mailto:s44002280@gmail.com) account.

[https://hailuniversity-fb9b4.firebaseio.com/.../auth/action?mode=resetPassword&code=XEeOIOJaoNSCacQpzoMYt-CkoIEFBzZIUfKyl\\_o89vEAAAF9oAIC2Q&apiKey=AlzaSy8rZeJS0J8xWYopWely7ZIAnt5\\_e\\_UmZL8&lang=en](https://hailuniversity-fb9b4.firebaseio.com/.../auth/action?mode=resetPassword&code=XEeOIOJaoNSCacQpzoMYt-CkoIEFBzZIUfKyl_o89vEAAAF9oAIC2Q&apiKey=AlzaSy8rZeJS0J8xWYopWely7ZIAnt5_e_UmZL8&lang=en)

If you didn't ask to reset your password, you can ignore this email.

Thanks,

Your project-542480306544 team

Reset your password

for [s44002280@gmail.com](mailto:s44002280@gmail.com)

New password

SAVE

Password changed

You can now sign in with your new password

**Test Case ID:** Reset password  
**Test Priority (Low/Medium/High):** High  
**Module Name:** IOS Application system reset password  
**Test Title:** verify reset password  
**Description:** Test the IOS application system reset password

**Test Designed by:** Aljowhara Aldawood  
**Test Design Date:** 12/4/2021  
**Test Executed by:** Teef Alosan  
**Test Execution Date:** 12/6/2021

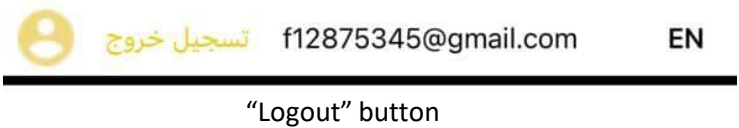
Pre-Conditions: User enters invalid username in the reset password page.					
Step No	Test Steps	Test Data	Expected Result	Actual Result	Statues (Pass/Fail)
1	Navigate to Login screen		The system should display login page.	Login page is displayed	Pass
2	Click on the forgot password button		The system should display reset password page.	The system displayed reset password page.	Pass
3	Enter username	s44002280	The system displays a message "username is incorrect".	The system displayed a message "username is incorrect".	pass
Post-Conditions: User resets password fail					



**Test Case ID:** Logout  
**Test Priority (Low/Medium/High):** High  
**Module Name:** IOS Application system logging out  
**Test Title:** Verify Logout  
**Description:** Test the IOS application system logging out

**Test Designed by:** Aljowharah Aldawood  
**Test Design Date:** 12/4/2021  
**Test Executed by:** Teef Alosan  
**Test Execution Date:** 12/6/2021

Pre-Conditions: User logs out form the home page.					
Step No	Test Steps	Test Data	Expected Result	Actual Result	Statues (Pass/Fail)
1	Navigate to Home Page.		The system should display home page.	Home page is displayed	Pass
2	Click on "Logout" button		The system should display Login page.	The system displayed Login page.	Pass
Post-Conditions: User is logged out.					



# Testing

## 2.2 Release testing

**Release Test Case ID:** Technical support  
**Test Priority (Low/Medium/High):** High  
**Module Name:** IOS Application system Technical support  
**Test Title:** Technical support Request  
**Description:** Test the IOS application system Technical support

**Test Designed by:** Aljowhara Aldawood  
**Test Design Date:** 12/4/2021  
**Test Executed by:** Teef Alosan  
**Test Execution Date:** 12/6/2021

<b>Pre-Conditions:</b> The user adds information to get the help needed for the problem.
<b>Inputs:</b>
Name: Valid: Aljowhara Aldawood Invalid:” “
Email: Valid: aljowhara.aldawood@gmail.com Invalid:” “
Phone Number: Valid:0534487458 Invalid:
Write your problem: Valid: There is a problem registering the courses Invalid:” “
Attach files If needed
<b>Expected:</b> The system displays a message “your request has been sent successfully and we will contact you soon” if everything is valid If one of the above is invalid a message will appear under the inputs.
<b>Post-Condition:</b> The user has sent their request successfully



Valid



Invalid

**Release Test Case ID:** Login  
**Test Priority (Low/Medium/High):** High  
**Module Name:** IOS Application system Login screen  
**Test Title:** Verify Login  
**Description:** Test the IOS application system Login

**Test Designed by:** Aljowhara Aldawood  
**Test Design Date:** 12/4/2021  
**Test Executed by:** Teef Alosan  
**Test Execution Date:** 12/6/2021

<b>Pre-Conditions:</b> The faculty member enters username and password.
<b>Inputs:</b>
Username: Valid: f12875345@gmail.com Invalid: f1287345
Password: Valid: 123456 Invalid: 111111
<b>Expected:</b> The system displays home screen if valid. If not valid it a message will appear “your username or password is incorrect”
<b>Post-Condition:</b> The faculty member logs in to their account.



Valid



Invalid username



Invalid Password

**Release Test Case ID:** Login  
**Test Priority (Low/Medium/High):** High  
**Module Name:** IOS Application system Login screen  
**Test Title:** Verify Login  
**Description:** Test the IOS application system Login

**Test Designed by:** Aljowhara Aldawood  
**Test Design Date:** 12/4/2021  
**Test Executed by:** Teef Aloshan  
**Test Execution Date:** 12/6/2021

<b>Pre-Conditions:</b> The employee enters username and password.
<b>Inputs:</b>
<b>Username:</b> Valid: e36498765@gmail.com Invalid: e36498765
<b>Password:</b> Valid: 123456 Invalid: 111111
<b>Expected:</b> The system displays home screen if valid. If not valid it a message will appear “your username or password is incorrect”
<b>Post-Condition:</b> The employee logs in to their account



Valid



Invalid username



Invalid Password

**Release Test Case ID:** Login  
**Test Priority (Low/Medium/High):** High  
**Module Name:** IOS Application system Login screen  
**Test Title:** Verify Login  
**Description:** Test the IOS application system Login

**Test Designed by:** Aljowhara Aldawood  
**Test Design Date:** 12/4/2021  
**Test Executed by:** Teef Aloshan  
**Test Execution Date:** 12/6/2021

<b>Pre-Conditions:</b> The student enters username and password.
<b>Inputs:</b>
<b>Username:</b> Valid: s44002280@gmail.com Invalid: s44002280
<b>Password:</b> Valid: 123456 Invalid: 111111
<b>Expected:</b> The system displays home screen if valid. If not valid it a message will appear “your username or password is incorrect”
<b>Post-Condition:</b> The student logs in to account



Valid



Invalid username



Invalid Password

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