

Proposed Internship Information System (IIS) for Private Universities in Bahrain: A Case Study on the Applied Science University-Bahrain

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Most universities provide undergraduate students with capstone courses, in particular internships or industrial training courses, where the student links theories with practice and experiences working life prior to graduating. The Applied Science University - Bahrain (ASU) recognised the importance of internship courses at an early stage, and all undergraduate programmes in ASU featured an internship course in their programme curricula. After completing prerequisite courses, students at the Applied Science University -Bahrain (ASU) register for the internship program, which is considered one of the graduation requirements in any department. Then they are required to get connected with their supervisors until the final assessment. This study aims to design an information system that computerises the whole process and makes it more accessible. This system will provide advantages to students, their supervisors and other parties involved in the process. Qualitative data are collected by conducting many interviews with different parties to focus on the main requirements of the system. The research flows starts from requirements analysis then moves on to designing interfaces for implementation. The system is based on four major components, namely academic supervisor, intern students, head of the unit, and secretary. The information system contains many features that facilitate coordination to implement the internship program. This system is integrated with the database system that assists supervisors to monitor and manage the applications of their students.



One of the key functions of this system is that it reduces effort and wastage of time. Thus, in a general aspect, this system will benefit not only the students but also all those participating in this process.

Key words: *Internship Information Systems, Private Universities, Applied Sciences*

Introduction

Today technology has brought a lot of changes to our daily life; the advantage of information technology (IT) is that it allows us to conduct our work in novel, more efficient and effective ways, not possible in the past (Klopfer, Osterweil, Groff, & Haas, 2009). This is the era of technology, where every detail in our lives is connected to technology. Nowadays the implementation of information technology has become more ubiquitous. The massive and continuous evolution of information technology has been entered in various fields and thus enables organisations to enhance efficiency. Information systems and technologies are essential parts of assisting any organisation to succeed (Baltzon, 2017).

Information technology can differentiate the way businesses compete. Computers serve as the artificial brain that is made by humans to assist and facilitate performing several tasks in less time and sometimes with greater accuracy. Many organisations agree to receive technology as a tool to improve the quality of their business. An information system implies a variety of information technology, like computers, software, databases, and much more, to execute business and interact with others (Parry & Battista, 2019).

The main feature of the information system is how technology is devoted to managing various stakeholders' information to attain specific goals. People depend on modern IS as a mean of communication with each other, by using physical devices, information processes, or stored data. The information system has a crucial role in any business. It is considered as a backbone to support business processes and decision making. Information technology consists of a management information system that is used to automate all business tasks, even simple and routine activities (Cascio & Montealegre, 2016).

This will enable the business to generate more efficiently and profitability. By using software, computers and the internet, many companies have shifted their business from local places to the national and global markets. Many companies take the steps and adapt these changes. They alter their business processes and automate them to obtain the advantages of technology. In our digital world, it is difficult to find any business that has not shifted its processes to a computer information system. Business organisations depend on IT to gain a competitive advantage in the market. Universities also become familiar with the modifications of IT in their



systems. This is considered as the power to expand the speed of all academic and administrative activities. Every university must be able to manage all the information of students and faculties by computerising all processes to improve its management. Modern universities could not be imagined without an efficient information system (Cascio & Montealegre, 2016).

The successful implementation of an information system will bring a lot of benefits to performing daily tasks or long-term decision making. The good combination of human resources and information technologies will enhance any process and reduce excess time consumption.

Research Problem

Manual data storage may take a long time, especially when searching for specific data, while the information system stores data in a comprehensive and appropriate database that facilitates creating and searching for data (Hasan, 2018).

At each college in ASU, every semester there is a massive number of students who register for an internship. When applying to the course, students are required to complete the registration process, and all is done manually. Moreover, the secretary needs to type a letter for each intern and enter all the required data in Microsoft Excel.

Then after receiving the acceptance letter from the company, students must update their supervisor for approval. Also, students need to document tasks while they are undergoing the training and their supervisor will mark them every week until the final mark is given. The manual performing of various tasks is considered time consuming and a waste of human efforts. Besides this there is the possibility of errors. The whole process is difficult to manage, as Microsoft Excel is used for storing data records. The filing process for the data is inefficient, as hard copies are scattered in various folders.

Research Objectives

The main objective of this research is to develop an Internship Information System for the Training and Internship Unit at the Applied University to automate the process of collecting, reviewing, and managing the applications for internships.

Research Scope



The scope of the system is to provide the Applied Science University in Bahrain with a set of interfaces that are easy to use to support the Training and Internship Unit.

Research Significance

With the increasing utilisation of the computer, many organisations are working electronically on data processing. So, IT plays a part in any organisation's environment and IS influences the operations and data processing. The electronic work environment enhances productivity and reduces time and cost (Hasan, 2018).

This research is practical, highlighting a problem in our digital world. This research attempts to find a solution to this problem by recognising the impact of a computer application on any process. When applying a manual process, there is potential for many errors, as well as a lot of effort and time wasting for staff. Thus, promoting a system that facilitates these processes more efficiently will reduce these problems. It also will reduce errors, data redundancy, and data loss, and will minimise the problem of losing or misplacing forms and damaging the hardcopies.

The system is developed to manage and coordinate the internship process at the university. There will be better communication between students and their faculties. Also, students will be able to understand the requirements and view their progress. Supervisors also can update the progress of students and interact with them. All data will be stored in one database. Students and faculty members will be able to interact with each other by easy to use interfaces.

Literature Review

Theoretical Background ***Overview of Internship***

The internship is defined as a bundle of expertise that is presented within the framework of the specialised areas of practice, which aims to transfer students from their limited level of understanding, skills, and directions to a level that enables them to practice many tasks independently (Lei & Yin, 2019).

In the eleventh century, the term apprenticeship (the great-grandfather of internships) was created. It is a type of education that focuses on learning crafts, manual or applied professions, and other forms of a career that provide services to society (Huhman, 2013). In the early 1900s, during the Industrial revolution, the Accounting Department of the University of Cincinnati in the US was the first to create an academic internship program. In 1960, the term was adopted by the government and businesses, then they started to evolve internships on colleges (Student



Internship, 2008). Colleges started to transit the process into modern-day internship programs. However, only 3% of students finished the internship programs before their graduation.

From 1990 to the present day, the internship program has become an essential requirement for students' graduations. The number of colleges and universities that provided the programs expanded from 200 to 1000. Nowadays, the evolution of internship programs is becoming wider with technology. The Virtual Internship is the latest in the digital world. It allows interns to gain experience without appearing physically in the workplace (Small Business, 2014).

Internship Types

The internship is very important and reflects greatly on the individual and society, so that individuals can be able to engage in society with all its challenges and obstacles. The types of internships selected depend on the goals to be achieved at the end of the program. Here are some of the better known types of internship:

- **Paid and Unpaid Internships:** a paid internship is mostly found in the private sector, while an internship in government and human services is often unpaid. Typically, when the student produces a physical benefit to the organisation, he will be paid for the internship position. When the student is under an internship, he should provide a weekly log of his tasks and submit it to his supervisor.
- **Cooperative Internship:** it is defined as an educational system, where the internship period is divided between the educational system and practical experiences that are related to the educational curriculum in a specialised field. The idea of the program is based on linking the student's academic program with the requirements of working to graduate a group of students familiar with the practical life with all its requirements and challenges.
- **E-training:** is also known as computer-based training (CBT), and it is a form of education that takes place on the internet by involving a variety of multimedia elements, including graphics, audio, video, and accessible web links which can all be accessed from a web browser. In addition to displaying educational materials and content, online training allows the trainees to interact in a lively fashion, give opinions, and participate through questions, short quizzes, and competitions. The interaction between trainer and trainees is also conducted by other means such as discussions, blogs, e-mail and other forms of online communication (Ben Amara & Atia, 2016).

Impact of Internships on Students



The internship is considered as a preparation program for students. It offers students a huge benefit where they can apply it in their professional life later. Field training represents the student's first area of expertise by applying what he has learned theoretically in the real world environment. Also, the internship allows students to deal with various pressures that they may face and be exposed to when they will enter the labour market (Saniter et al, 2016).

Internships help students to develop an understanding of educational theories and enhance their learning skills. Also, it enables them to interact with experts and understand the needs and characteristics of the work they are involved in. It allows them to search for a job in their majors, as field training eliminates the gap between what they study and what they find in the labour market (Harmz, 2017).

An internship allows students to get used to taking responsibility for work, and performing the required tasks in the specified time. Working is not only the practice of theoretical knowledge; it is also made up of responsibilities and qualifications. Therefore, the field training prepares the students and helps them to cope with all circumstances that they might face in the future (Barnwell & Stirling, 2016).

The Impact of Using Technology in Internship Units

People in different businesses and institutions strive to always work in shorter time periods, with greater efficiency and productivity, which makes information technology an important and necessary way for them to reach their goals and develop their businesses. IT is a strategic asset for the organisation that helps in building capabilities by providing the best data and information. Technology gives the ability to obtain, process and exchange data to make effective decisions in the organisation (Harwati, 2018).

Technology has a major role in the life cycle of information systems, starting from database (DB) technology, which is structured as a collection of information or a group of facts. Principally, DB stores current and future data so that it can be used at any time (Hasan, 2018).

The effect of using computer applications in teaching is becoming an essential concern. And thus, adopting systems that automate the process is an effective plan for any unit in the university. As large numbers of students enrol in the internship every semester, it is obvious to have a system that automates the process and ensures effective interaction for anyone involved (Elhaouari, 2016).

Analysis and Limitation of the Existing System Internship Unit Existing Process-ASU



The internship program is an interrelated process between the head of the internship unit, students, administrators, and academic supervisors. Once the student subscribes to the internship course, he has to fill in the forms and complete all the requirements. This is done manually. Then the secretary will give him/her a request letter for the Internship Destination. Once he receives a letter in response, the student needs to update the secretary with all the information needed. The intern student is also obliged to fill in the form of tasks done weekly to update their supervisors with their daily jobs. At the end of the semester, students will be assessed on their reports. All of the steps in this process are carried out manually, which means there is a chance of losing hardcopies.

Also, during the period of training, there is a lack of communication between students and their supervisors. The academic supervisor needs to follow up on the student in the internship, however, it is not permitted in all destinations. The secretaries at each college, after receiving the list of students who register for an internship course, need to manually add each student's information to give them a typed letter for the relevant Internship Destination. The secretary also needs to update the information of each student and add the company name and supervisor's contact number. Microsoft Excel is used for entering all the data collected. There is no information integration.

The Internship Unit depends on Microsoft Excel, which may appear as a database. However, it is not as powerful as a database especially for a big volume of data. Entering data manually, exporting and importing data to other files, and getting information into and out of spreadsheets is time consuming. By using spreadsheets the secretaries at each college can't easily manipulate, analyse and move data to other applications. It is time consuming to search, change and use data in a spreadsheet as it grows in complexity. Spreadsheets lack relationships, which is essential to overcome data redundancy.

Need for a New System

The internship is one of the compulsory university courses that must be taken to complete the graduation requirements. The program goes through a long process, starting from registration of the course and ending in the assessment. Based on the explanations in the previous section, it is clear how the impact of using the computer system will aid the unit of the internship. Computerising the whole process will facilitate and ensure communication between students and their supervisors. As specific and detailed information is vital for each student's record, data management is an important aspect. Data management is a structured and direct process of controlling data, from collecting and entering it through processing it and then extracting and sorting it. The database management system is the key to these requirements. It is a set of computer software whose primary function is to manage the process of building, maintaining



and using the database (Gehrke, 2003). Developing the new system will permit an effective collection and reviewing of data. It will unify the database and make it easier for it to be updated or modified. Automating the whole process will let interns interact with their supervisors effectively. It will also eliminate a massive amount of papers usage and reduce the time and effort spent on manual work. The new system will avoid loss of hardcopies, reduce errors, and eliminate redundancy of data.

Research Methodology

Project Planning

Feasibility Study

To find out the probability of completing the project successfully, it is important to analyse all the project's relevant factors including technical, economic, operational and scheduling. At the end of the study, crucial information will be provided to help determine the possibility of developing the system.

- **Technical Feasibility**

Technical feasibility aids in obtaining the technical resources that are needed for conducting the specification of the user of the software within a particular budget and time. Therefore, it helps in obtaining the availability of the required techniques and deduces whether it is coherent or not. For this project, the technical resources are available and the ability to acquire them is easy.

- **Economic Feasibility**

This type of study is required to determine the cost outlay for the software and hardware requirements needed to develop the system. Since all the requirements are available and free to download, the budget will be very slight. In addition to that, the university will not change its operating system to implement the new system and will not pay for training the users to use the system. So, the new project will reflect high benefits with low costs.

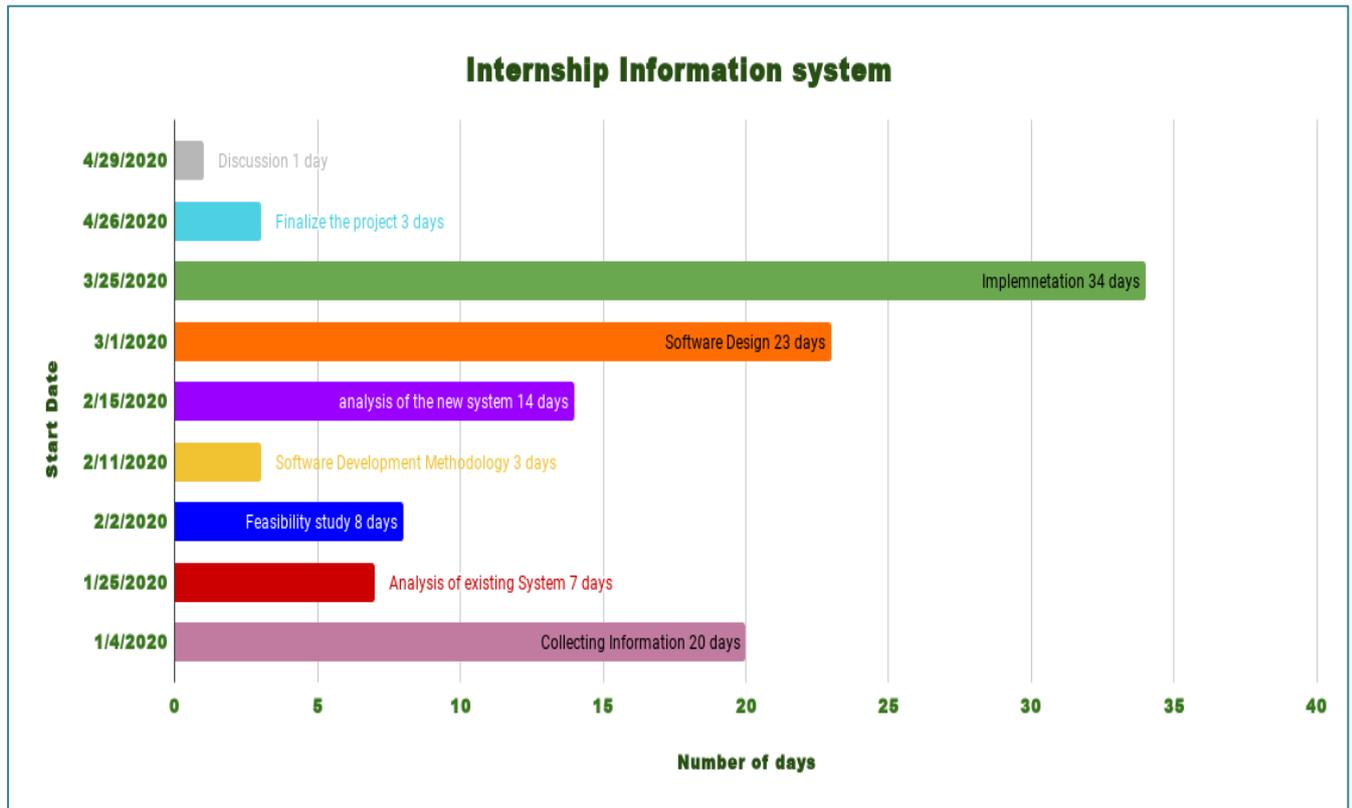
- **Operational Feasibility**

This study is done to verify whether the software will be operated properly or not and if it will be easy to use. The system that will be developed will generate user friendly interfaces that will be easily employed by users to solve their problems and become more satisfied.

- **Scheduling Feasibility**

This is a crucial study, as it measures how the project will be successful. The project must be completed within the estimated time. For this project, it must be completed within three months, otherwise it may face unexpected difficulties. The Gantt Chart that is represented in Figure 1 shows the project schedule.

Figure 1. Gantt Chart



Software Development Methodology

Project development methodologies are methods that determine the life cycle of the project by dividing it into stages. The choice of a specific methodology is a decision that will affect the project throughout, so developing a methodology is an important step for the project.

Software development can be defined as a set of processes to build software applications, and these processes involve several stages. Typically, there are seven phases: planning, defining requirements, design and prototype, software development, testing, deployment, and maintenance. The System Development Life Cycle is a structural process to produce software with high quality and accuracy. The purpose of SDLC is to build a framework plan to

accomplish the project within the time and cost defined. The process goes through detailed phases and each phase has its tasks and outputs that are delivered to the next phase (Jevtic, 2019).

There are different methodologies, such as the Waterfall Methodology, through which each stage of the software development cycle is completed sequentially before the beginning of the next stage, and this method is considered a classic method of software development. Another is Agile Methodology, where a composed team of planners, designers, developers, and testers work together to create several different versions, and upon its completion, the team gives feedback about the process.

Analysis of the New System

Analysing the new system is the practice of estimating the fundamental elements of it and determining how to get them together in the best way to reach the goal and solve the problem. Generating requirements from stakeholders will lead to a successful project (Garima, 2019). The types of requirements are user, system, and domain.

User Requirements

The key activity in system development is to view user requirements properly and make them available. Otherwise, the development process can't be notified about what is required from the use of the system (Bevan, 2018). In other words, user requirements cite all the needs of the user and describe the needs of the system. It is essential documentation, because once the users provide the information about their needs and wants, the analyst will understand it and carefully construct and document the high-quality requirements to meet a high-quality system. In the end, there are two components of user requirements: functional and non-functional requirements.

❖ Functional Requirements

Functional requirements explain the principles of the system behaviours. They are what the system does. They are the components that permit the system to operate purposefully. The functional requirements in this project will be divided into four sections: Head of Unit, Supervisors, Student, Secretary, and System Administration. The requirements of each section and descriptions are shown in tables 1, 2, 3, 4 & 5 respectively.

1. Head of Unit Section

Table 1: Head of Unit Requirements

| No. | Requirements | Description |
|-----|------------------------|--|
| 1 | Login | The Head of the Unit can log in to the system by ID and password |
| 2 | Approve request letter | The head of the unit must approve all the letters, the intern will submit to the secretary to be sent to the workplace |
| 3 | Supervise | The head of the unit views the student's progress report |

2. Supervisors Section

Table 2: Supervisors Requirements

| No. | Requirements | Description |
|-----|----------------------------|--|
| 1 | Login | Head of unit and supervisors can log in to the system by their ID and password |
| 2 | View student profile | Each supervisor will have a list of students involved in the internship program with full details of each one. The supervisor can assess each student weekly |
| 3 | Manage reports & documents | Supervisors update assessment reports for each student, upload guidelines, and can arrange a visit to the workplace |
| 4 | Add notifications | Supervisors will communicate with students by adding notifications and highlights on due dates |

3. Intern Students Section

Table 3: Intern Students Requirements

| No. | Requirements | Description |
|-----|----------------------------------|--|
| 1 | Login | Each student from any faculty can log in to the system by ID and password |
| 2 | Manage profile | After receiving an acceptance letter from the company, the student can update his profile |
| 3 | Submit proposal | Students can submit a proposal with all the information required to get a request letter for the company |
| 4 | Upload files/ Download documents | Student needs to complete form task every week. He can also download supervisor' documents |
| 5 | View progress | Student can view their progress marked by supervisor |
| 6 | Find company | Students can easily find a company based on their field from the list of workplaces updated every semester |

4. Secretary Section

Table 4: Secretary Requirements

| No. | Requirements | Description |
|-----|-----------------------------|---|
| 1 | Login | Each faculty administrator has an ID and password to enter the system |
| 2 | View/Modify student profile | Update student (trainee) information, after assigned to a specific workplace |
| 3 | View student proposal | View a list of students and prepare a request letter and send it to the head of the unit for approval |

5. System Admin Section

Table 5: Admin Requirements

| No. | Requirements | Description |
|-----|-----------------|--|
| 1 | Login | Admin has a list of privileges to perform once entering AdminID and password |
| 2 | Backup Database | Create a backup of the entire database in case of database failure |
| 3 | Reset Password | In case any applicants forget the password, the admin is ready to reset or retrieve it |

| | | |
|---|-----------------|--|
| 4 | Add workplace | Upload and update the list of workplaces (containing the name of the company, contact number, brief description) |
| 5 | Maintain system | System admin can update the database by adding, deleting or modifying faculty |

❖ Non-Functional Requirements

Non-functional requirements describe how the system should perform. Hence, the system can still perform without the non-functional requirements. However, meeting non-functional requirements in a system will allow users to perform their tasks more effectively and efficiently. Non-functional requirements state the general features that affect the user experience. The system is judged based on its performance, usability, and other requirements that will be explained as the following:

✚ **Performance:** It is an essential measure to be taken into consideration. The performance of the system refers to the ability to respond within a defined period. The internship system will have a clear response time within the overall users of the system, they will not need to wait for long periods for their target operations to be actioned.

✚ **Availability:** The Internship Information System will be reachable to all users at a given point in time. All users will get the ability to submit, review and modify any document.

✚ **Reliability:** Data integrity is a crucial issue; thus, the system will run without failure under a predefined condition. Any critical failure will be defined clearly and a strategy for correction will be available.

✚ **Maintainability:** This refers to the period required to solve or fix any components in the system.

✚ **Easy to use:** The system will provide a friendly user interface that can be used by all the users.

✚ **Security:** To ensure that all data in the system will be protected, only authenticated users can log in to the system. Also, the login session will end once the user leaves without logging out.

Domain Requirements

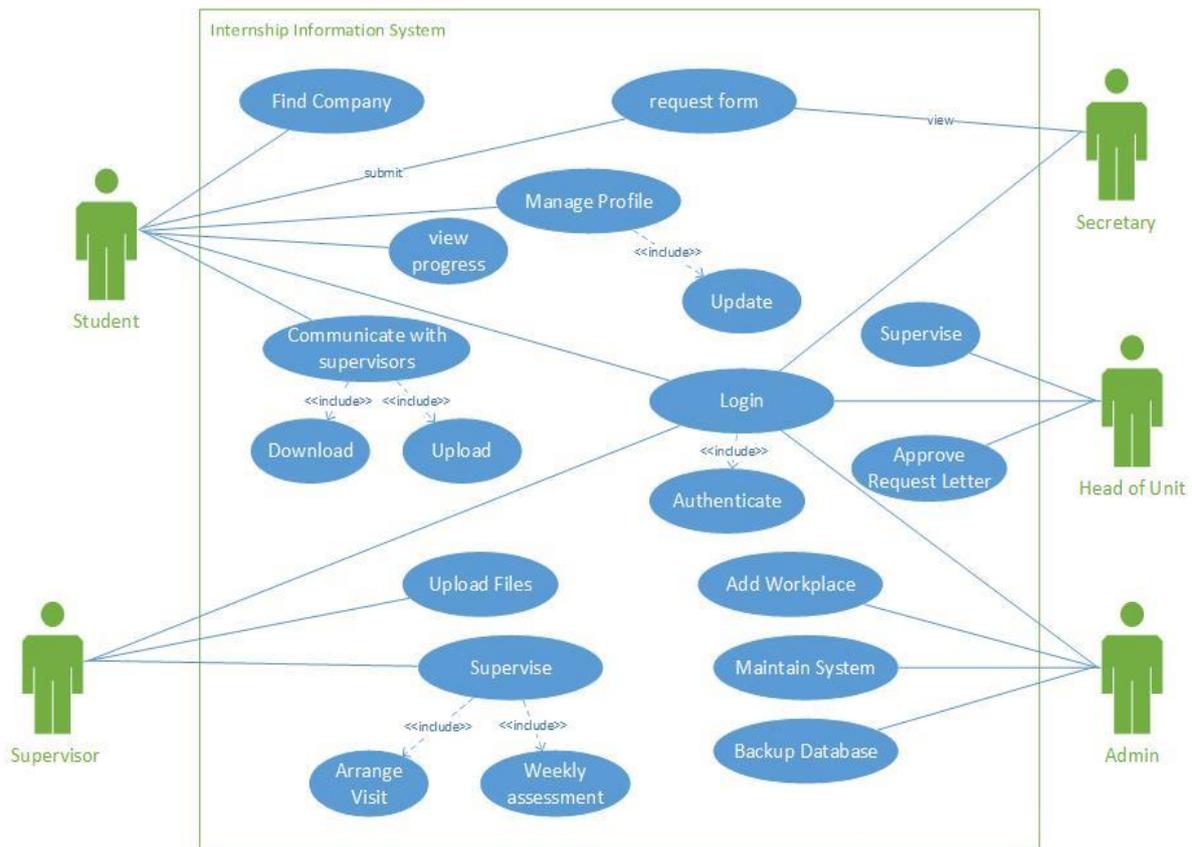
These requirements consider the whole circumstances in which the system will operate. Domain requirements are essential because they cover the basics of the system. It must meet the satisfaction of users, otherwise, it is impossible to make the system work adequately as it will reflect the environment (Sommerville, 2019). This system will be related to the environment as it will be used as a practical solution. This system can be used in any academic institution.

Software Development and Implementation

Use Case Diagram

According to Creately (2019), the use case is a description of how a person who uses the system will accomplish a goal. It's typically associated with a software system, but can be used about any process. The use case describes through a series of written steps how the users would go about completing activities and reaching their goals. A use case helps to understand where errors could occur in the process and design features to resolve those errors. In other words, we can say that the use case tells a story of the main requirements of the system to deliver efficiency to users. Stakeholders are the entity that plays a role within the system, in other words they interact with the system functionality. The use case diagram that gives details of the functional requirements of each user for the internship information system is shown in Figure 2.

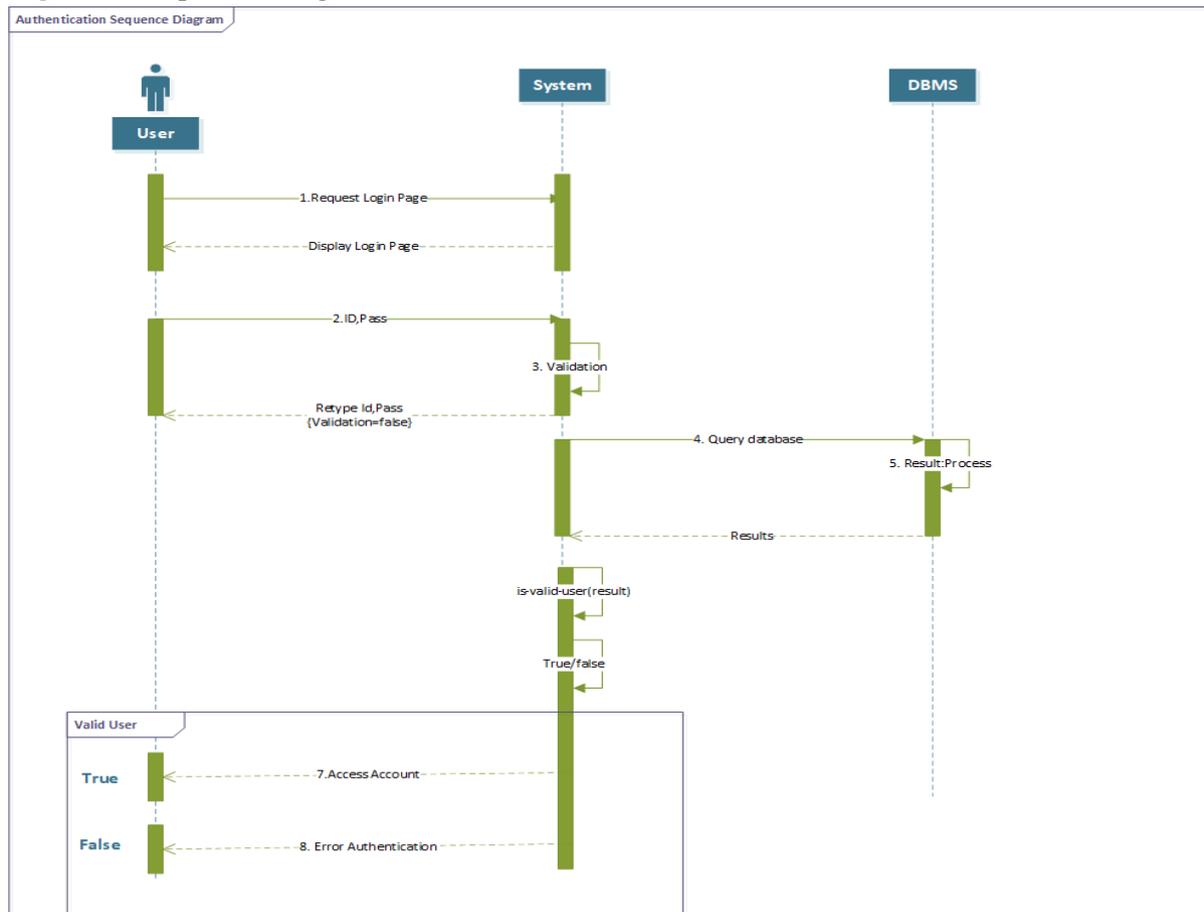
Figure 2. Use Case Diagram



Sequence Diagram

UML sequence Diagrams are diagrams of interactions that describe how operations are performed. In the sense of a partnership they capture the interaction between objects. Sequence diagram are time based and visually show the order of the interaction by using the diagrams vertical axis to represent time when messages are sent and when. Figure 3 shows the sequence diagram that shows the user authentication sequence diagram.

Figure 3. Sequence Diagram



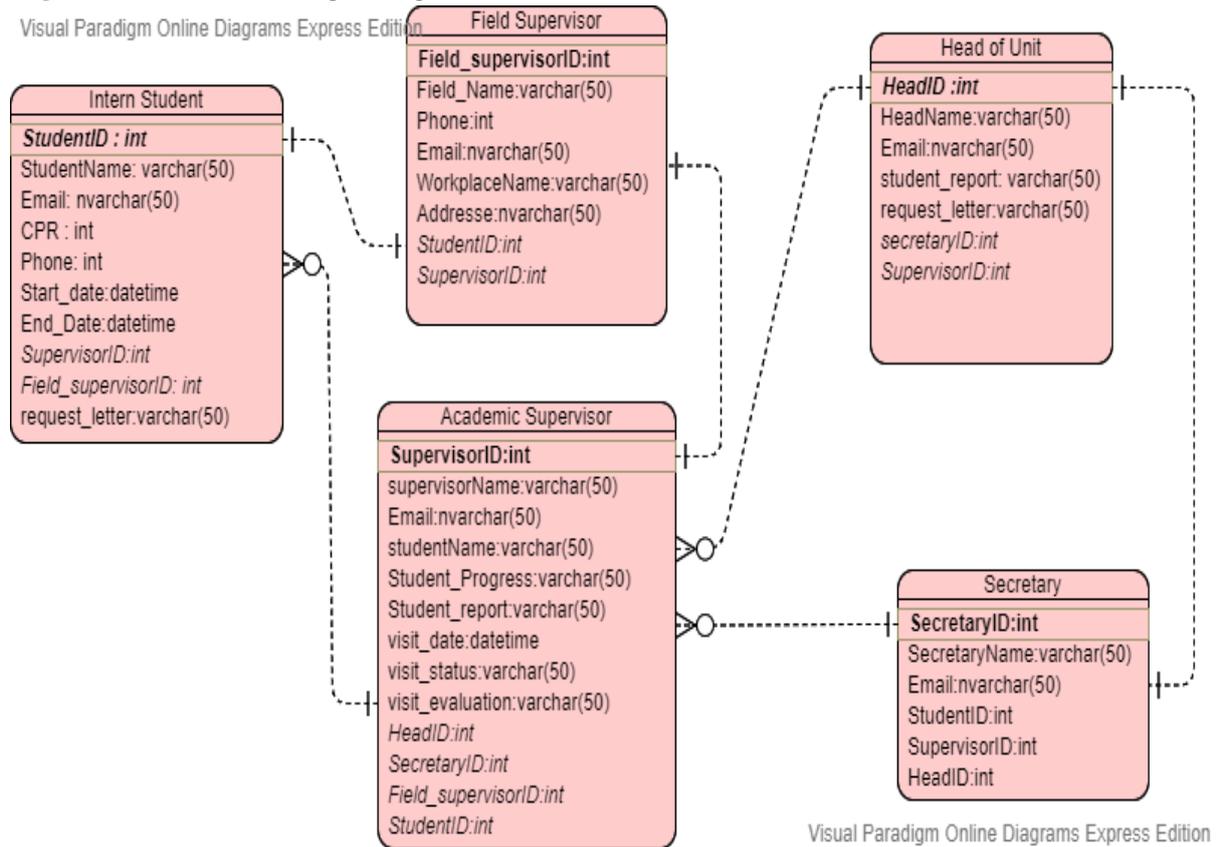
Design of Database

With the great developments in technologies and with the increasing reliance and dependence on the internet, developers needed to develop a data portfolio in ways that information can be used in the best and easiest way. Data is necessary today, as processing leads to giving results to make the appropriate decisions for different jobs. The database is a set of logical data elements that are related to each other with mathematical relationships. It consists of one or more tables as needed, and that one table consists of one or more records containing one or more fields. The database helps to speed up the process of accessing the data that they contain. Instead of searching here and there, the necessary data is collected to facilitate the process of

accessing it or employing it in different businesses in the future. The database facilitates the process of modifying the data in the future, and facilitates the process of making the necessary updates. Also, it facilitates the operations of deletion or addition (Gerhke, 2003).

As shown in Figure 4, the database design diagram shows the relations between entities, their attributes, and primary and foreign keys.

Figure 4. Database Design Diagram



Implementation

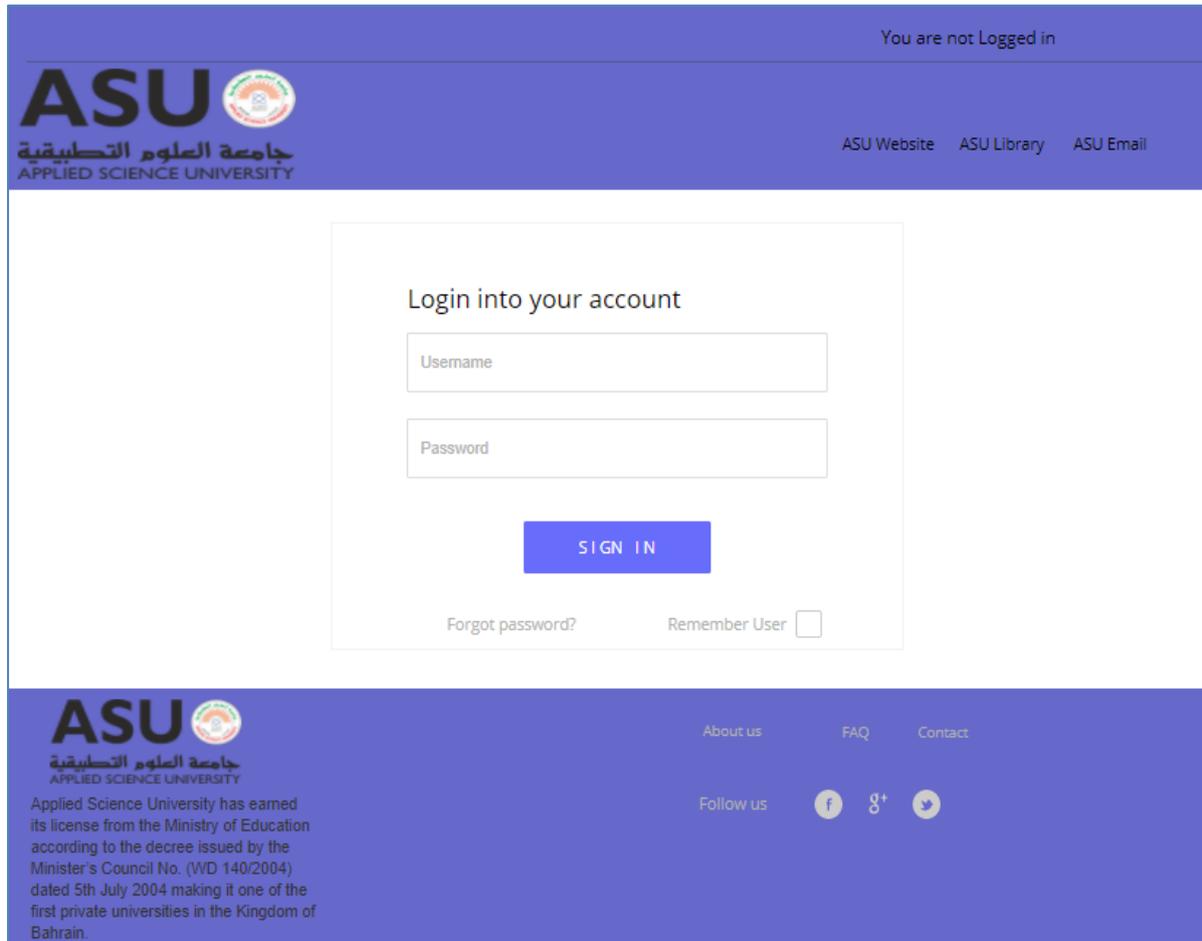
System implementation is the process of clarifying how the information system should be modelled. It ensures that the information system is functional and viable. Also, it ensures that the system covers all the quality standards.

Login Page

There are five users of this system, and for each user, there is a different interface that serves their functions. Figure 5 shows the Login Page where each user will enter a valid user ID and password. After authentication, each user can enter his homepage. The user can save his information for later use, and the session will be ended when no more browsing is taking place.

If the user forgets his username or password help can be requested, and in the case of invalid usernames or passwords an error message will appear and the user can re-login.

Figure 5. Login Page



The screenshot shows the login page of Applied Science University (ASU). The page has a blue header with the ASU logo and name in Arabic and English. The main content area is white and contains a login form with the following elements:

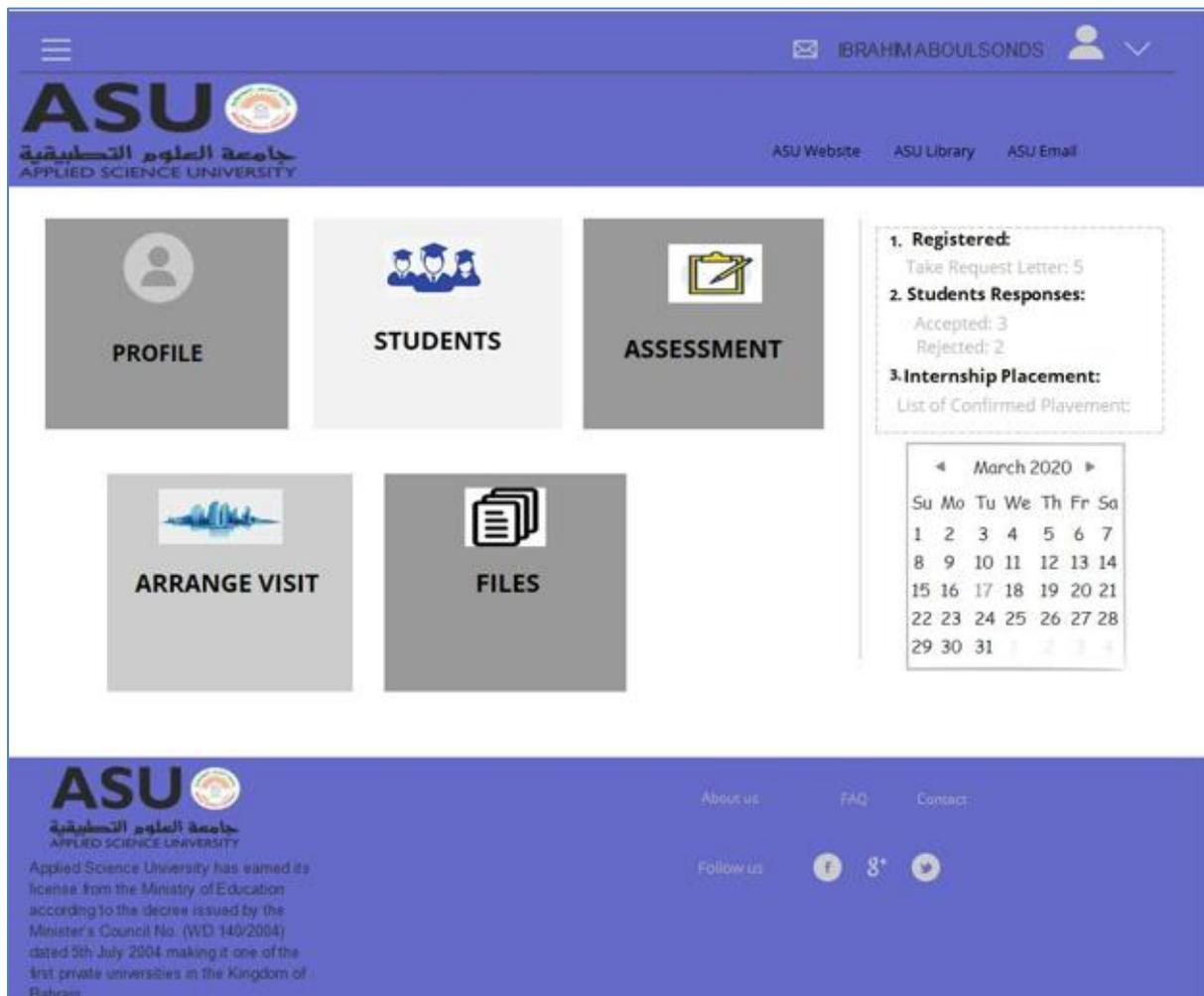
- Text: "Login into your account"
- Input field: "Username"
- Input field: "Password"
- Button: "SIGN IN" (blue)
- Text: "Forgot password?"
- Text: "Remember User" with a checkbox

The footer is blue and contains the ASU logo, name, and a paragraph of text: "Applied Science University has earned its license from the Ministry of Education according to the decree issued by the Minister's Council No. (WD 140/2004) dated 5th July 2004 making it one of the first private universities in the Kingdom of Bahrain." There are also links for "About us", "FAQ", "Contact", and "Follow us" with social media icons for Facebook, Google+, and Twitter.

Academic Supervisor Homepage

Figure 6 shows the academic supervisor's homepage. The academic supervisor can view and follow the students who register in the internship course, communicate with them by sending emails or notifications, arrange to visit with their field internship and assist intern students by following weekly records.

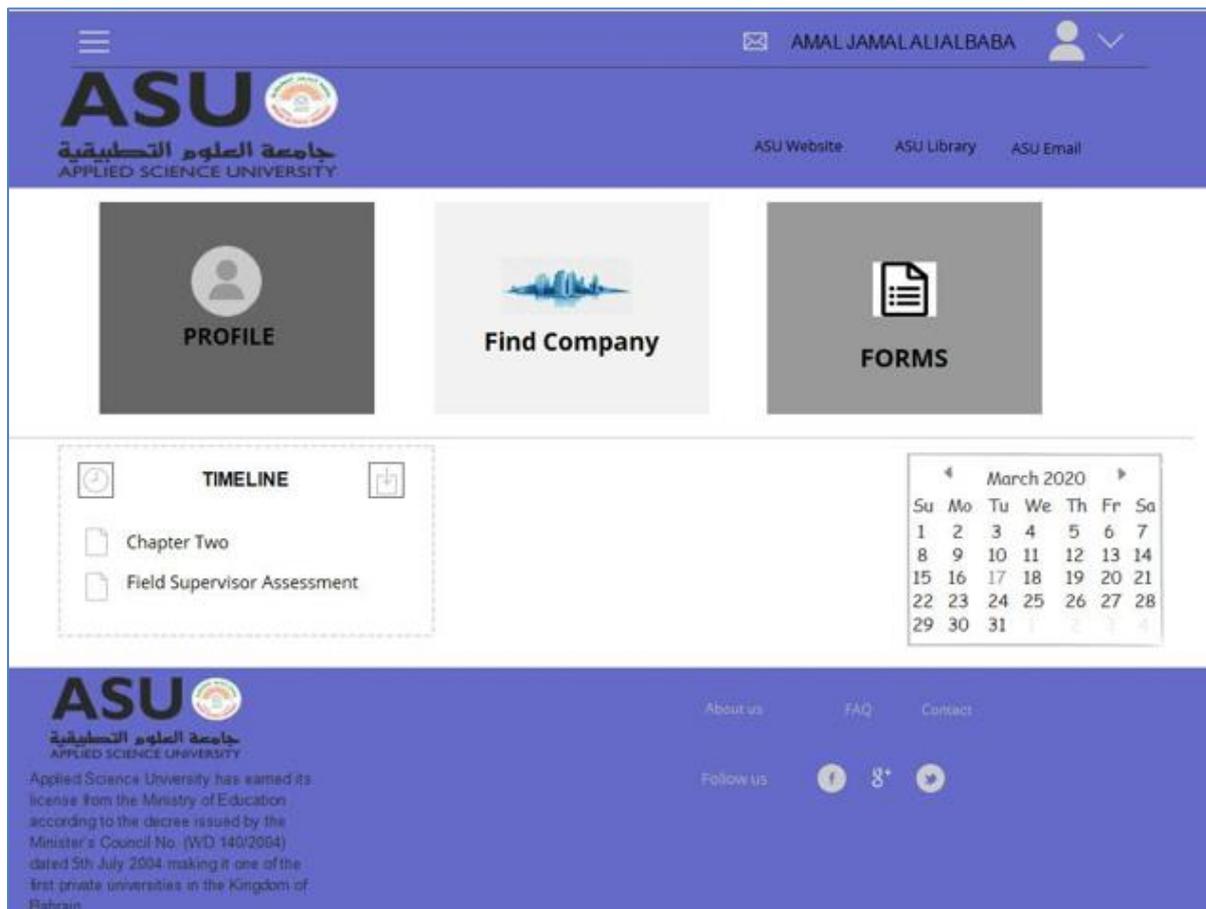
Figure 6. Academic Supervisor Dashboard



Intern Student Page

The intern student is another user of the system. Figure 7 shows the homepage of the intern student. The student can find a company, upload and download forms, and update his profile.

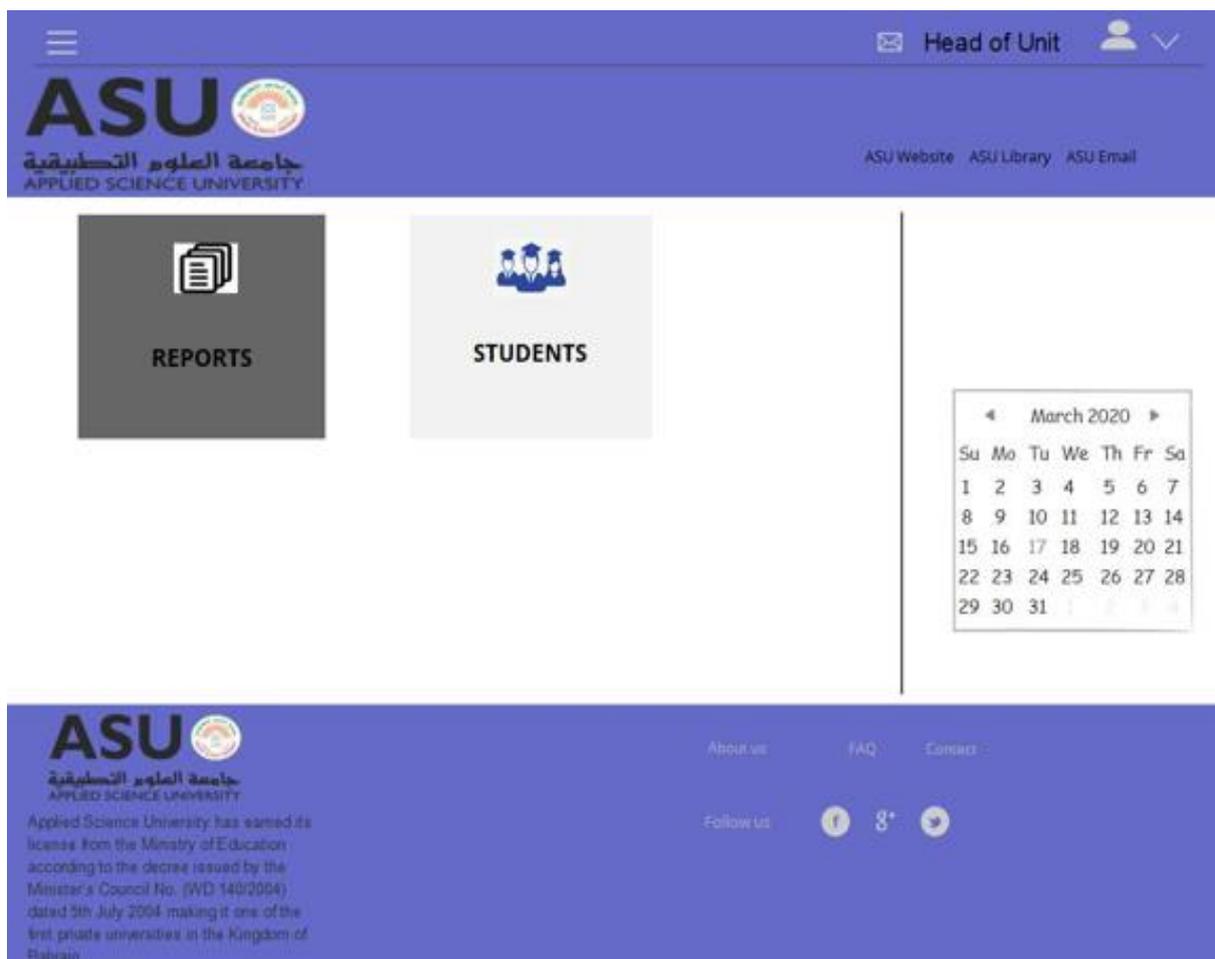
Figure 7. Intern Student Dashboard



Head of Unit Page

The head of the unit must approve all the request letters that will be sent to the internship destinations. He is also responsible for preparing annual reports of the unit's achievements. Figure 8 shows the homepage of the head of the unit.

Figure 8. Head of Unit Homepage



Secretary Homepage

The secretary at each college is also a user of the system. The secretary is responsible for viewing the request forms of the intern students and preparing the request letters. Figure 89 shows the homepage of the secretary.

Figure 9. Secretary Homepage



Conclusion and Recommendations

Conclusion

The internship is a mandatory requirement for graduation. During this period graduates will catch the opportunity to gain their first experience in labour work. To promote effective communication with their supervisors, a user-friendly system must be applied. All parties involved in this process can get connected more efficiently.

Information systems are one of the most significant modern technological ingredients that affect human lives positively. IS provides appropriate information at all levels so that there is the ability to make the right decision and carry out planning and direction operations within any organisation. Any institution needs to have a system that facilitates and speeds any process involved. From this standpoint, these papers recommend user-friendly interfaces that help reduce efforts and time.



It also enables users to effectively manage their process with fewer efforts, time, and paper wastage. The system will integrate all required data into one database as it will be easy to add, retrieve, or modify it. With the help of this system, users will avoid data losses or data redundancy. All institutions need to record their activities to find the causes of problems and appropriate solutions to them. Thus, comes the importance of the information system in facilitating the storage of operational data and communication data. Manual data storage may take a long time, especially when searching for specific data, while the information system stores data in a comprehensive and appropriate database that facilitates searches and data creation.

Recommendations and Future Work

This system can be used in any department that offers an internship program. It is expected to reduce or eliminate the manual process. Also, it encourages two-way communications (students and their supervisors). It provides a level of security as only users are authenticated to use it. The system is easy to build and incorporates user friendly interfaces. The database of the system can be built simply by Microsoft Access. The interfaces can be built by Microsoft Visual Studio. Within the integration of the two software applications, it will be easy to link databases in interfaces to implement the system.

Many features or requirements could be added in the future without affecting the current information. Other graphics, such as a bar graph or pie chart can be displayed to show the progress. The system could be integrated with another information system in the university like the student information system. Another possible feature to be added is access for a field supervisor to the system. This will help the process to be fully implemented online.

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