

Palestine Polytechnic University

Dedication: **College of Administrative sciences and information system**



Research Portal

(E_Portal)

Prepared By

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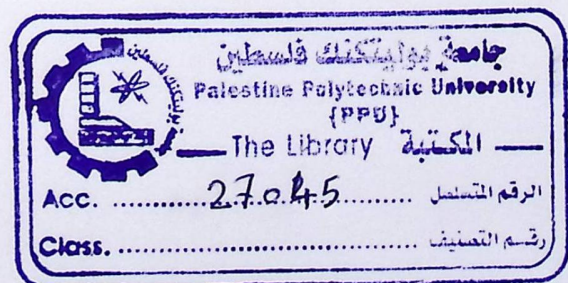
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Acknowledgment

Dedication

To our beloved mothers whose heart beat with every notion flashed in our mind and every single letter we wrote down....

To our father....

To the most expensive people to my heart.....

My dear husband ... my beloved sons

To the candle which lighted and guide us through darkness and frustrating moments.....

To all the lovers of Palestine who died for it or still waiting....

And to all who are not cited and whose names may be inadvertently not mentioned....

Acknowledgement

Extend our sincere thanks and gratitude to all members of the faculty in the College of Management Science and Information Systems at Palestine Polytechnic University.

As we draw thanks and appreciation to Dr. Ismail Al-Romi supervisor on this project out of respect for his efforts and for his valuable feedback As we draw

Thanks and respect to all those who contributed to the completion of this project humble

المخلص

تقوم فكرة هذا المشروع على إنشاء نظام لشبكة بحثية ؛ بحيث يقوم كل من الأساتذة والطلاب بتبادل المعلومات والأبحاث المحملة على الموقع الالكتروني ، كما ان يمكنهم التواصل بشكل سهل ومفتوح والتعرف على أحدث الأبحاث واستخدام الشبكة في عمل حلقات بحثية مرئية ؛ كما وأن هذه الشبكة تساهم في دعم أفكار الطلاب ، إضافة لذلك تقوم الشبكة بتوفير فرصة لكل من الطلاب بعمل مناقشات بحثية وتبادل المعلومات البحثية ، حيث يقوم كل من الأساتذة والطلاب بتحميل أبحاثهم الخاصة على الشبكة ومشاركتها مع الآخرين ضمن مجموعات

Abstract

In the areas of command and control information vendor at the national, regional and international. As a result of these efforts, many of the information systems and networks collaborative With this in mind we went to the idea of the project "creates own social network at the University of Palestine Polytechnic" "Research Portal" where the site for scientists, researchers, where it is a question and answer questions and be there also find collaborators and described this network like site combines Facebook and Twitter and includes profile pages, comments, groups, "continue", "buttons", where information is exchanged and the statement failed experiences, successes and exchange of knowledge and cooperation with researchers in various fields

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The risk.

Chapter one

Introduction

1.2 Study Problem

1.1 Introduction

1.2 Problem of study.

1.3 The importance of the study.

1.4 The limits of study.

1.5 Determents of the study

1.6 The goals of study.

1.7 The Gantt Chart.

1.1 The introduction:

This chapter contains the problem of the study, the importance of study, the limits of the study and its determinants as he addressed the desired goals of the study.

1.2 Study Problem :

At present pass educational institutions at present in the process of a radical transformation refer to the rapid development of the life science. On the one hand the technological development of all aspects of life on the other hand, there is no means of a private university for the exchange of scientific articles, research, and information was one of the factors for the start of the study.

Tended institutions of higher education, particularly with the increasing repeated for researchers to use research networks in scientific research. And more encouraged this topic networks of researchers to share their research with other researchers. Where some educational institutions saw that this method is a way to attract students and professors who can post their research within the university, as it sees it as a way to encourage scientific research among students and professors.

With the increasing use of modern techniques, accept all of the universities and students alike changes that have occurred in the education environment. That's where research and scientific articles are available on the research networks. The networks a private research university, encourage student and a professor of registration, enrollment network research, swap information, articles and references and books by logging on to the network research. Students with different disciplines and professors with degrees and specializations different share information, articles and research that have been searched for by them, it lets the interaction between them, and also allows the system to send their views and comments for yards discussion. Participation in this type of research networks provides the opportunity for the exchange of information, open debate and comment on the research and articles

Therefore, this study tries to answer the following:

What is the importance of the research network?

How to take advantage of the research network?

1.3 The importance of the study:

2.1 Gantt's Chart

The study aims to find a private research network, Palestine Polytechnic University, like the "Research Portal", so this study aims to devise a way for the exchange of researchers, professors, students ideas, research projects, research information, provide interest and benefit for each of them.

1.4 The limits of the study:

spatial limit: Palestine, Hebron, Palestine Polytechnic University

temporal limit: the 2013_2014 school year

reduce human: a sample of students and professors of the Faculty of Administrative Sciences and Information Systems

1.5 Determinants of the study:

- 1) The lack of private research network Palestine Polytechnic University
- 2) The students and teachers find it difficult to search for the information they want, it difficult to know the real information and original.
- 3) The need to see the mistakes that have fallen by the others so as not to fall out again.

1.6 The goals of study:

- 1-Improve the capacity of the person to communicate with others, including already understands and request explanations on issues outside his knowledge.
- 2-Research ideas and ,research projects and exchange among the participants.
- 3 -Development of scientific achievements into perspective.
- 4-Encourage innovation and creativity among the public, researchers and students.
- 5- Save time and effort in terms of the search for information and different ideas.

1.7 Time Schedule/Gantt Chart:

To discuss the time schedule of the project ,it is good to refer to the Gant chart that's shown in table where the key activities are started and the time period for their completion .

2.1 Gantt's Chart

Table(1_1)

Weeks/activity	2	4	6	8	10	12	14	16	2	4	6	8	10	12	14	16	
Data collection	■							■									■
Literature review			■					■									■
Description of system requirement					■			■									■
System design								■	■								■
System implementation								■			■						■
System testing								■					■				■
System maintenance								■							■		■
System documentation	■							■	■							■	

Chapter Two

System analysis

2.1 Introduction.

2.2 The risk.

2.3 The solution to this risk.

2.4 Alternative.

2.5 Feasibility study.

2.6 Literature view

2.1 The introduction:

In this chapter the research team will study the economic feasibility of the system and the parameters that the system will face risks in addition to the system requirements and resources needed to build and analyze.

2.2 The risk:

- 1- The lack of harmony between students and teachers because of the different levels of education and the lack of harmony between the teachers themselves and among the students themselves because of the different specialties.
- 2- to information security.
- 3- The high cost of resources and the unavailability of some of them.
- 4- The gap between the old and new generations in decision-making.

2.3 The solution to this risk:

- 1- Could manufacture some of the items or search for less expensive alternatives.
- 2- Set up a system for secure information.
- 3- The establishment of appropriate infrastructure for the system.
- 4- Formation of the management team in coordination between students and teachers if necessary.

2.4 Alternatives

The first alternative:

Business seminars, meetings and conferences to exchange research and ideas.

The second alternative:

The use of various means of technology to search for and exchange of information such as the Internet, Facebook and others.

The third alternative

The research network(research gat).

The pros and cons of the alternatives:

The first alternative:

Pros:

- 1- Exchange of information face-to-face and formally.
- 2- How easy simple and inexpensive

Cons:

- 1- The inability to display large amounts of information and research.
- 2- Limited time, place and people.

The second alternative:

Pros:

- 1- Anyone can access to information anywhere and anytime.
- 2- Speed, ease and inclusiveness.

Cons:

- 1- Lack of reliability of the information.
- 2- high cost.

The third alternative:

Pros:

- 1- Reliability of the information.
- 2- research and exchange of ideas and information anytime, and anywhere.
- 3- easy and convenient.

Cons:

- 1- Can not enter the network randomly, there are specific laws such as the password and others.
- 2- Cultural differences between the participants may hinder the process of information exchange.

2.5 Feasibility study:

This part will discuss the technical feasibility and the cost feasibility.

2.5.1 Technical feasibility:

1. Performance: the system must perform all the requirements in the strongest way, by storing all information related to any activity in the database.

2. speed: this include (speed of research, speed of interaction between the system and participants).

3. security: this is needed to prevent unauthorized people to access or change the system ,information ,or database, so we can make security by the order of manager .By insert the password and user name.

4. Ease of use:

- The easiness to access and to use the system.
- Easy to transfer and exchange the information.

2.5.2 Cost feasibility:

-Human resources budget:

The following table specifies the number of developers needed to accomplish the project, and their overall cost per month.

Table (2.1) Human resources budget

Human resources	Quantity	Cost per hour	Overall cost for month	Overall cost
System developer	1	20\$	400\$	
System designer	1	20\$	400\$	
System programmer	2	40\$	800\$	
Total: Overall cost * number of months=1600*8				12800\$

-Physical budget:

The following table specifies the needed physical component and their cost.

Table (2.2) Physical budget

Item	Quantity	Specification	Cost
Desktop computer	1	• core i3 •Dell •ram 2G Windows 7	720\$
Removable desk	3	4GB	30\$
Printer	1	Canon	300\$
Server	1	•HD 500G Ram •BW10T 24CPU•8G	Available
Overall cost	1050\$		

-Hardware cost: The following table lists the cost of the H.W that we need develop the system.

Table (1-2):The HW cost

Item	No. Of Items	Cost Per Unit \$	Total Cost
Computer (Dual Core)	1	400	400
HP Server	1	1200	1200
Total Cost	2400\$		

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Total Cost	2400\$		

- Software cost

Table (1-3): SW cost

Item	No. Of Items	Cost Per Unit \$	Total Cost
Microsoft Vista	1	120	120
Programming Language	1	99.95	99.95
Total Cost	219.95\$		

2.6 Literature view.

Academic Research Networks: A Key to Enhancing Scholarly Standing (PHILLIP J. McKNIGHT, 2004)

This research shows provides knowledge and understanding as to how academics develop and manage such networks. Many themes are presented that help academics develop and manage their networks. Key influences are identified. Network structures that academics use to facilitate publication are identified and implications for academics and business schools are discussed.

This paper solves the problem of no research on how academics develop and manage their research networks for the purpose of publication. Therefore the main aim for this research is to improving organizational performance in a range of activities and relationships, especially with regard to new product development.

The study definition:

development :is interested in the process by which the academic's research network was contrived and the form of its structure. Thus there looking for variables relating to how academics went about developing contacts and how they structured their relationships. These referred to as network development variables. In terms of network management: are most interested in variables relating to the process by which academics

expand and contract their networks and how the structure of the developed network contributes to publication output. These referred to as network development variables the finding of study :

is discovering how academics developed and managed their networks particularly with regard to expansion and contraction. While networks are developed and managed within the broader context of academic and economic pressures, they are operationalized within strategic relationships ,and distinct network structure types.

Academic and research network of Slovenia(Avgust Jauk et al,2002)

The Academic and Research Network of Slovenia (ARNES) was founded by the Government of Slovenia in 1992 as an agency to develop, operate and manage a computer network for education and research. This article describes the development of the computer networks facilitated the access to a variety of different types of information, and cooperation with related organizations are of crucial importance to the success of research institutes, universities and other organizations involved in development, education and culture.

This research solve the need to facilitate cooperation between education and research organizations, therefore the main aim for the study to provide a very high performance, advanced, pan-European network service connecting the services provided by Europe's NRENs.

The basis for connectivity inside Slovenia is the ARNES network backbone, consisting of Pops (Points of Presence) located in 18 major towns in Slovenia connected by leased lines.

The research clarify the detention of National Research and Educational Networks (NRENs):it is a network provide 'production' level services to educational, research and cultural institutions and serve as a test bed environment for the demonstration and validation of advanced networking applications in research and education.

the research finding is: The main task of ARNES is the development, operation and management of the communication and information network for education and research. a comparison of all NRENs in Europe The study highlights some differences in organization and the scope of supported user communities, however, the services provided for research and education are similar.

Academic research networks: Accessing resources for English-medium publishing (Curry M, Lillis T, 2010)

This research shows the Multilingual scholars located outside of Anglophone contexts face growing pressure to publish in English. and examine social networks, that have developed a “text-oriented ethnographic” approach that entails collecting and analyzing a variety of ethnographic and textual data to understand the production of texts for publication in their contexts. 4 Data collection has comprised observations of participants’ activities in their contexts; between one and eight semi-structured interviews conducted (mainly in English) with each participant; ongoing communication with participants by email, post, and telephone.

As English has become the dominant language of global scholarly publishing, concomitant pressure has been mounting for multilingual scholars to publish in English, particularly in English-medium journals, In many contexts outside of Anglophone ‘centre’ locations ,English-medium publishing has come to be highly valued by institutional reward systems, so the main goals for this paper toexamines the importance of networks and tracks how scholars gain access to and participate in them. We present ‘network histories’ that map out the network participation of four scholars, foregrounding several core dimensions: local and transnational, formal and informal, strong and weak, durable and temporary.

study exploring how 50 psychology and education scholars in southern and central Europe are responding to such pressure indicates that individual linguistic and rhetorical competence alone are usually insufficient for securing publication in English-medium journals.

The research definition social capital: is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group.

cultural capital: which Bourdieu sees as the symbolic goods created and circulated within the family—the notion of social capital helps us to understand the importance of securing access to resources beyond the family.

The finding for this research is analyses of scholars’ proficiency in English or experience with English-medium academic writing, participation in research networks provides an important means of access to English-medium publishing.

An Introduction to the IEA GHG International Research Network on Monitoring

(Beck.B, Aiken. T,2009)

This research shows the IEA Greenhouse Gas R&D Programme operates the International Research Network on Monitoring, which is one of a range of collaborative research networks, and has been established since 2004. Over the intervening years, the network has brought together groups and organizations working around the world to develop monitoring tools and techniques, with those using the tools to conduct monitoring surveys on carbon dioxide capture and storage projects (CCS). The meetings have continually attracted a wide ranging body of experts from around the world, as well as those working in academia and regulators alike. This poster will share the advancements made through the network

The overall aims of the network are to facilitate the exchange of ideas and experiences between experts in the monitoring of CO₂ storage projects, and to assess new technologies and techniques as they become available, Determine the limitations, accuracy and applicability of monitoring techniques, Disseminate information from research and pilot storage projects around the world, Engage with relevant regulatory bodies, and to promote the improved design and implementation of monitoring programmes that will support CCS projects.

The Monitoring Research Network was established to bring together the various groups who are involved in both the development and the deployment of monitoring technologies in pilot and industrial scale CCS projects. and Supervision The meetings attract international experts from industry, academia, and government organizations, and generate insightful debate, while facilitating the sharing of best practices and new technologies between members

The network have continually attracted a wide ranging body of experts from around the world, as well as those working in academia, industry, Technical experts and regulators alike

The definition of research:

a. CCS: CO2 Capture and Storage

b. Seismic surveying technology has proven to be a very effective tool for the monitoring and verification of underground gas storage, as is required for CCS

The main findings of study is Monitoring is an essential component to build public and regulatory confidence in CCS schemes. The IEA GHG network provides a unique forum for experts from around the world to share knowledge and work towards the improvement of monitoring tool selection and application. The net work has made considerable progress since inception, including the development of the online selection tool.

Data Management Procedures in the Asthma Clinical Research Network(Pogash etal,2001)

Data management activities in research network begin during the development phase of a clinical trial and continue until database files are cleaned and frozen for statistical analysis and archiving. The data management activities designed to support the mission of the Asthma Clinical Research Network (ACRN) during its first 5 years of existence (1993–1998) are described in this paper.

decentralizing data management activities saves time and resources at the DCC during data collection, freeing resources to develop new protocols. In addition, the staff can detect and resolve problems more quickly, thereby shortening the length of time from the initiation of a protocol to completing a clean dataset. Designing quality data collection forms facilitates the collection and entry of data and reduces the number of recorded errors. and To resolve the errors found during first entry, clinical centers have access to two additional database management system modules: an entry editor and an irresolveable module .the activities which they will include implementing, monitoring processes and systems to ensure high-quality data, and developed to enter, track, verify, validate, and edit collected data.

the research defined A database management system that a module was developed to identify, track, and report protocol violations during a clinical trial.

The finding to the research is The DCC staff continue to modify the database management system and data processing tasks to distribute more processing to the clinical centers and to automate data processing activities further. These modifications provide the DCC more time to monitor data quality, assist the clinical centers in improving the data quality, and provide the biostatisticians with clean data for statistical analysis in a timely manner.

Development of common data elements: the experience of and recommendations from the early detection research network (Winget et al,2003)

This research shows some of research consortia for example(NCI),(EDRN),(CGN),(SPORE),This consortia have central data collection plans similar to a multi-center clinical trial; whereas others plan to store data locally and pool or share the data at a later date. Some consortia might not have plans for pooling or sharing data but need to compare results of studies across institutions ,so it has a need to developing common data elements CDEs.

the research solves the lack of data elements that are collected and stored uniformly across institutions and studies are defined in a data dictionary. therefore The main aim of the research is to standardize the way certain data are collected and stored, transferred, or reported across the institutions involved.

The methodology used was applied on a worldwide federation of national standards bodies from 140 countries .that are ISO and IEC from the specialized system for worldwide standardization and collaborate in fields of mutual interest.

CDEs: are data elements that are collected and stored uniformly across institutions and studies are defined in a data dictionary.

data dictionary: that contains at a minimum: (1) the item name (e.g. height); (2) the way the item is collected (e.g. wording of a question); (3) valid values and coding (e.g. 0, No); and (4) data type (e.g. integer or character).

The main findings of the study is The development of the CDEs involved several stages Each stage required input from multi-disciplinary experts in oncology, epidemiology, biostatistics, pathology, informatics, and study coordination.

Grids and research networks as drivers and enablers of future Internet architectures

(Baxevanidis. K, Davies. H, Foster. I, Gagliardi.F,2002)

Grid applications span a wide range, from distributed computing for pharmaceutical design to distributed data analysis for high-energy physics and collaborative industrial design. Enabling infrastructure includes advanced networks, directory services, and authentication and authorization services. Most initial work on Grid concepts, and many contemporary Grid applications, are motivated by the particular demands of advanced science and engineering applications. However, it seems clear that Grid technologies will have applicability beyond this narrow domain in the world of business.

This study aimed first, to provide insights into the requirements that the grid technologies, grid applications, and networks can be expected to place on future Internet architectures, and second to communicate the opportunities that these same technologies, applications, and networks present as proving grounds for future Internet architecture mechanisms and concepts

The research solve the lack of High-speed networks enable rich resource sharing modalities and hence encourage exploration of innovative application concepts

The research definition:

- a. applications include desktop access to remote simulation capabilities (e.g., “science portals”), distributed collaborative work (e.g., “teleimmersion”), large-scale distributed computation (e.g., “metacomputing”), computer-enhanced instrumentation , and large-scale distributed data analysis
- b. the Grid refers to an emerging infrastructure designed to enable resource sharing, and coordinated problem solving, among participants in loosely or tightly coordinated distributed “virtual organizations”

- c. "Grid computing" the term has been coined to denote applications that involve resource sharing and coordinated problem solving in multi-institutional settings
- d. This sharing is not primarily file exchange, but instead involves direct access to computers, software, data, and other resources
- e. virtual organization A set of individuals and/or institutions defined by such sharing rules form what is sometimes

The main findings of study is the existence of the research networks Grid applications and technologies , Policy implications , International cooperation

The Construction of Higher Education Entrepreneur Services Network System a Research Based on Ecological Systems Theory (Xue.J ,2012)

This research show the structure, function and its basic features of higher education entrepreneur services network system, and puts forward the opinion that every entrepreneurship organization in higher education institution does not limited to only one platform. Different functional supporting platforms should be combined closed through composite functional organization to form an integrated network system, in which each unit would impels others' development

The overall aims to completely, systematically and objectively analyze the current situation of Entrepreneurship Education in China with Ecological Systems Theory Entrepreneurship service network system would base on the high-quality and deep rooted entrepreneurship education, and combine with resources of other researches, students' organizations and funds. Thus, the entrepreneurship activities would develop sustainably.

Therefore, colleges and universities should provide a comprehensive, poly-dimensional and interactive entrepreneur services network environment to support their students to obtain entrepreneurship abilities. so The system aims to provide a mutual platform for each entrepreneurship program and offer services for teachers and students, regional economic development and relevant industry and institutions. Integrating all of entrepreneurship resources helps to form a university-wide pattern . The research solve Social Main-stream Culture's Acceptance to Entrepreneurship Values the entrepreneurship culture in chains society is still in its formation stage. Thus, it would has significant impact on entrepreneurship education directly.

The definition of research:

The Main duties of Entrepreneurship Service Network System

Main duties of entrepreneurship service network system are:

providing web portal for any relevant activity; taking charge of the whole entrepreneurship community education and network events; promoting inter-discipline education and researches inside and outside school; (how)setting consulting hot-line to assistant communication between students and professionals in the

industry; keeping in touch with venture capitals and solving capital issue, the most crucial factor for successful universities' derivative enterprise.

Chapter Three

The main finding of study according to the ecological system theory, the author proposes that every entrepreneurship organization in colleges and universities is belongs to complexes functional platform supporting entrepreneurship. Only if nesting each other closely and functionally into a net, would these platforms make full use of ecosystem efficacy for entrepreneurship, which is self-regulation, dynamic balance, resources syntaxes and reasonable allocation, and exchanging of values

3.2 Description of the functional requirements.

3.3 Description of the nonfunctional requirements.

3.4 Description of the data flow within the system

3.5 Test Plan

Chapter Three

System requirements

3.1 Introduction

3.2 Description of the functional requirements.

3.3 Description of the nonfunctional requirements.

3.4 Description of the data flow within the system

3.5 Test Plan

3.2.1 Description of the functional requirements for the system user.

3.2.1.1 Add Topics

Table(3_1) Add Topic

Description	Allowing user to choose the topic of research
Input	Type of topic(books, magazine, journal, statistic)
Source	Teacher / student.
Out put	Research
Requirements	Log in
Conditions	prior to
Implementation	The possibility of choosing topic

3.1 Introduction.

In this chapter we will describe the functional requirements and give a full description of the terms of inputs and outputs, as well as, the source of the requirements, then we'll show the flow of data through the draw of some charts.

3.2 The functional requirements of the system.

- Determine the functional requirements and business functions performed by each of the system is used. In this chapter we will have a full description of these requirements, we will describe the requirements for each one of them.
- Description of the functional requirements for the system user.
- Description of the functional requirements for the system administrator.

3.2.1 Description of the functional requirements for the system user.

3.2.1.1 Add Topics

Table(3_1) Add Topic

Description	Allowing user to choose the topic of research
Input	Type of topic(books, magazine ,journal, statistic)
Source	Teacher / student.
Out put	Research
Requirements	Log in
Conditions prior to implementation	The possibility of choosing topic

3.2.1.2 Create Membership

Table(3_2) Create Membership

Description	Allowing the user to create account, and choose group that like to work with them
Input	User name, family name , qualification, e-mail, password
Source	Teacher / student
Out put	Confirmation
Requirements	The existence of a special register for the user in the database
Conditions prior to implementation	Contact the system / user name, password exists in the database

3.2.1.3 Send Question (Q)

Table(3_3) Send (q)

Description	Asking whatever comes to mind questions and answered these questions
Input	Link of the Search
Source	Teacher / student
Out put	Page which contain question and answer
Requirements	Upload paper
Conditions prior to implementation	Contact the system / user name, password exists in the database

3.2.1.4 Sharing

Table(3_4) sharing

Description	Allowing the user to post and exchange of information.
Input	Input data to be post or exchange.
Source	student / teacher
Out put	Updated database.
Requirements	The existence of a special register for the user in the database
Conditions prior to implementation	The possibility of amendment

3.2.1.5 Provide Service

Table(3_5) provide service

Description	Allowing user to choose type of service which help user to communicate with each other .
Input	Username, e-mail, video conference
Source	Teacher / student.
Out put	e-mail, videos
Requirements	The existence of a special register users in the database, network allowing to connect
Conditions prior to implementation	Contact to the system, a user is working on physical, contact to network.

3.2.1.6 Searching

Table(3_6) Search

Description	The user can search for any topic.
Input	Key word
Source	Teacher / student
Out put	result of research.
Requirements	The existence of a special register to the required research
Conditions prior to implementation	Connect to system, having a title search or search words in the database

3.3 Description of nonfunctional requirements:

3.3.1 Easy-to-use

User can interact with the system easily because it is characterized by the emergence and clarity of icons, which is an easy way to exchange information of various kinds.

How to Achieved?

a. User interface:

The interface should be graphical and clear

b. Color :

It is important element in design , it will use different color in the interface ,button and font must be homogenous with each other

c. Text

The content of text should be clear , meaningful for user ,and doing operation in right way.

3.3.2 Reliability

The system's ability to provide reliable information and corrective system .Also, features a continuity in their submission and the possibility of updating .

Hoe to achieved ?

Constraints on the run-time behavior of the system can be considered under two separate headings:

1-Availability - is the system available for service when requested by end-users.

2-Failure rate - how often does the system fail to deliver the service as expected by end-users

Many related items:

1-Dependability

Dependability of a computing system is the ability to deliver service that can justifiably be trusted by user.

Reputation :the general opinion (more technically, a social evaluation) of public toward a person , a groupm of people.

3.3.3 Accuracy

The system must perform requirements at the high level of precision .

3.3.4 Security :

This most important issue in this system to keep system security , so the system enable user to use only one user name and one password , also it should be all as one part .

How to achieved ?

- a. The system use technique that allow only authorized person to access the system ,by use user name and password
- b. The system use encryption and decryption technique in transfer data

3.3.5 Speed:

To be the time spent on the user's system response at high speed.

How to achieved?

- a. The system use technique that allow user to download /upload faster.
- b .The operating working in right way .

hy

3.4 Description of the data flow within the system

3.1 Use Case.

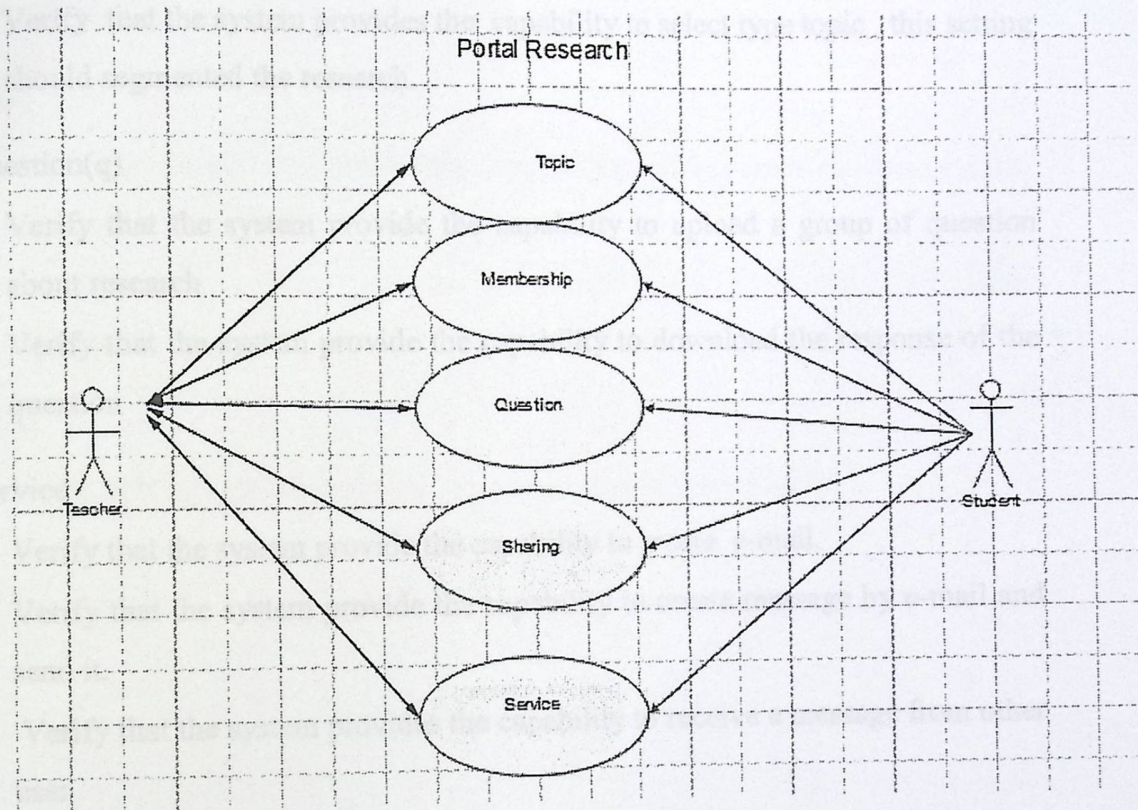


Figure (3_1) use case

3.5 Test plan

This documents is strategy that will use to verify and ensure that a product or system meets its design specifications and other requirements

3.5.1 Functionality

1.2 Topic

- Verify that the system provides the capability to select type topic , this setting should segmented the research.

2.2 Question(q)

- Verify that the system provide the capability to upload a group of question about research
- Verify that the system provide the capability to download the response of the question

2.3 Service

- Verify that the system provide the capability to create e-mail.
- Verify that the system provide the capability to create message by e-mail and send it.
- Verify that the system provides the capability to receive a message from other user
- Verify that the system provide the capability to upload video.

2.4 Sharing

- Verify that the system provide the capability to upload the research on the main page, this setting can see it any one on the portal.
- Verify that the system provide the capability to upload the research on specific group.

2.5 Member ship

- Verify that the system provide the capability to connect with specific group.
- Verify that the system provide the capability to create group with same attention.
- Verify that the system provide the capability to remove group from its list.
- Verify that the system provide the capability to create favorite list of group.

4.1 Introduction

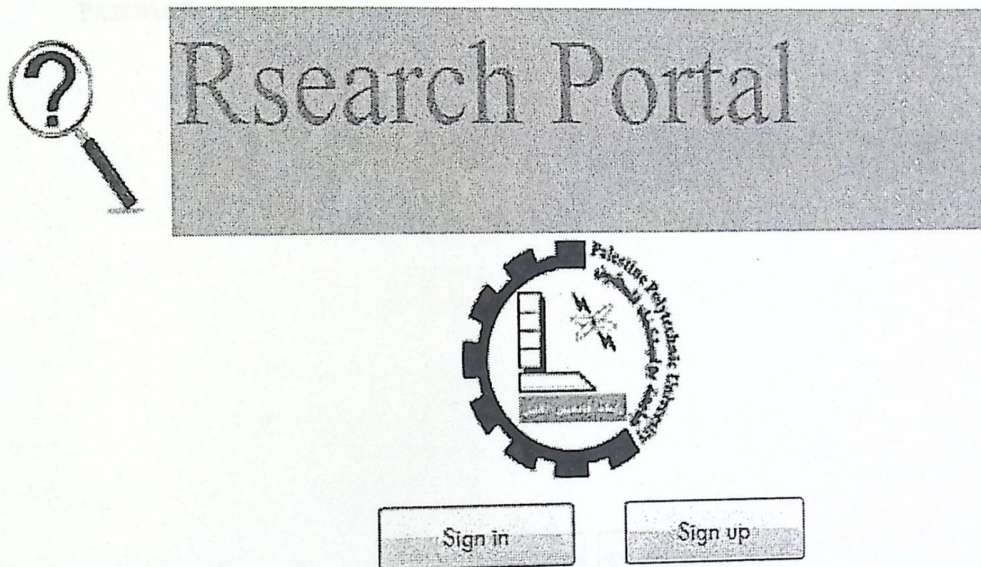
This chapter describe the design level of the project which include the output design, input design, database design , and process design.

4.2 system design

System output will be e_portal , it will be a part of ppu system such as e_library , and e_learning.

4.2.1 Main page design

Screen depicting the main screen which contain two button sign in button , and sign up button ,That can allow to user to be a member of the net work. .



Figure(4_1): Main page

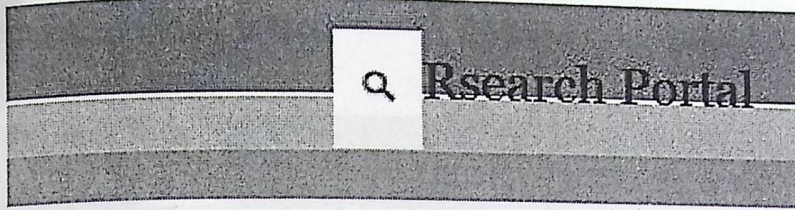
Figure (4_2) sign in screen

Table (4_1)

Definition	Data Type	Size	Constraint
User name	Text box	Varchar(6)	Must be Unique for each user
Password	Text box	Varchar(6)	Must be cipher

4.2.2 Log in screen

This screen show the user name that the user login, the password that allowed the user to login and two button log in or exit form the system.



User Name

Password

Figure (4_2): sign in screen

Table (4_1)

Detection	Data Type	Size	Constraint
User name	Text box	Varchar(6)	Must be Unique for each user
password	Text box	Varchar(6)	Must be cipher

4.2.3 Create Account

This screen is used to create a new account for users. Which include the personal information as in Figure(4_3) such as (first name, last name, Phone number, specialization, e-mail, password, type of user)where the table show the main content of the screen

The screenshot shows a web form titled "Research Portal" with a search icon. Below the title is a header bar with the text "Please Fill The following information:". The form contains several input fields: "First Name", "Last Name", "Password", "E-mail", "Phone number", and "Specialization". The "Specialization" field has a dropdown arrow. Below these fields is a "Description" section with two radio buttons: "Student" and "Teacher". At the bottom of the form is a "Create Account" button.

Figure(4_3):create account screen

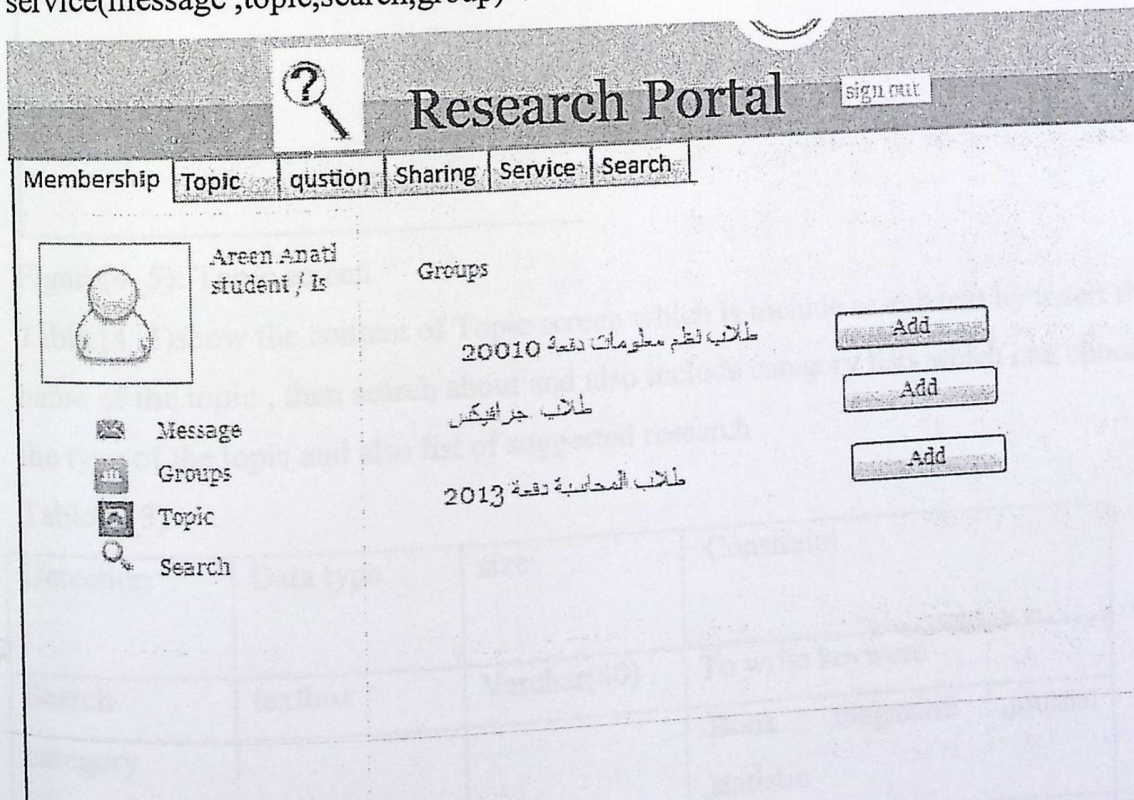
Table(4_2) show the content of create account which is include the first and last name of user with size 40 characteristic and include the institution of the user what will be business or is or anything else. Also, the department which is the place user is study at , the e-mail of user for sending to him messages ,Finally the password and also the check box if the user agree of the terms

Table(4_2) Create Account

Data Item	Data Type	size	Constraints
First name	Textbox	Varcha(6)	User name
Last name	Textbox	Varchar(6)	
Phone	Textbox	varChar(10)	
specialization	Textbox	varChar(32)	
e-mail	Textbox	varChar(32)	
password	Textbox	varChar(15)	Should be more than 8 character

4.2.4 Membership

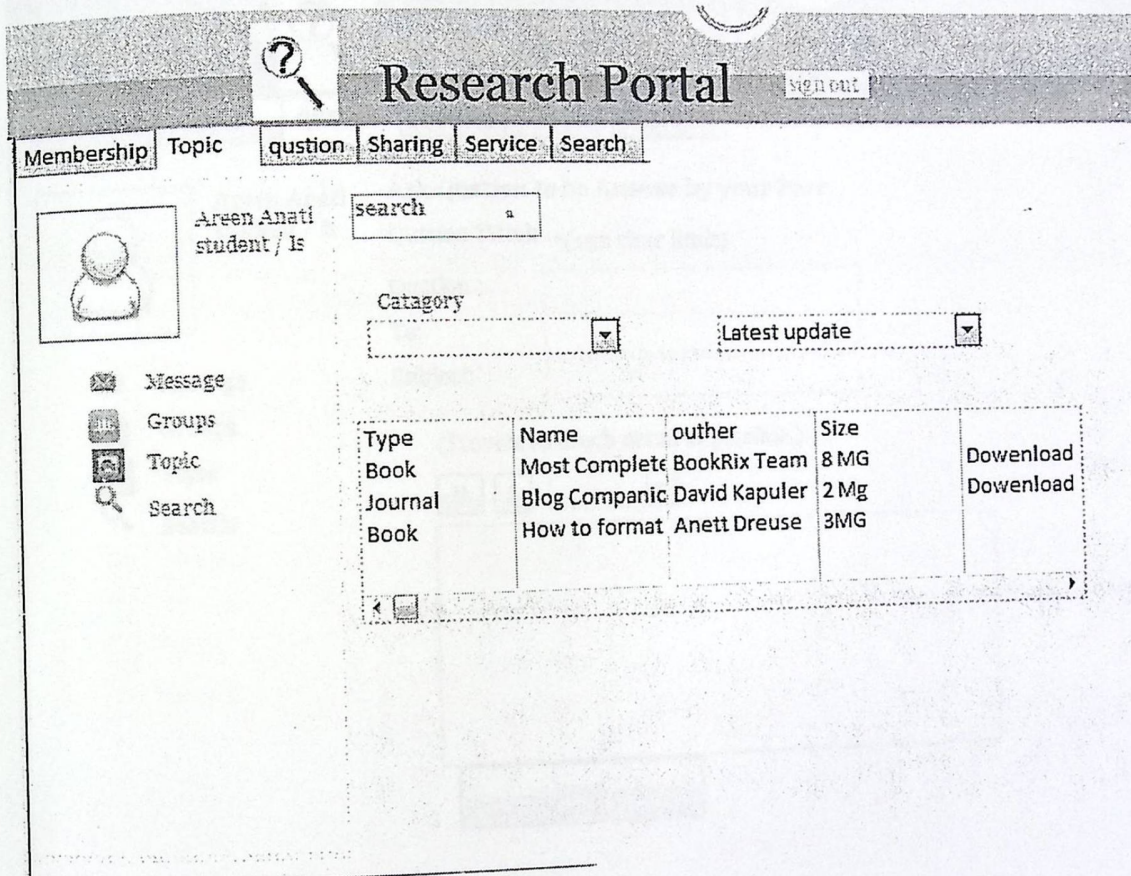
This Screen used to choose favorite groups , any group suggested by choose +Add Button, also this screen provide who are the user and what is his specialize and other service(message ,topic,search,group) .



Figure(4_4): membership screen

4.2.5 Topic

This screen show search box, category of topic like, (book ,magazine , journal, article, statistic), also list of the(newest topic or latest update) ,and include of suggested topics with research can download it by clicking on Download link, or you can looking on the research by using search text.



Figure(4_5): Topic screen

Table (4_3) show the content of Topic screen which is include search text by insert the name of the topic , then search about and also include category lists which can choose the type of the topic and also list of suggested research .

Table(4_3)

Detection	Data type	size	Constraint
Search	textbox	Varchar(40)	To write keyword
category			Book ,magazine ,journal ,statistic
Other list box			Latest update, newest

4.3.5 Question

This screen used for send question and its answers by using e-mail. which is the user can write message to another user, and he can edit it by using font button ,also the user can attach files .

Figure(4_6):Question

Table (4_4) show the content of Q&R screen which is include title text box and address receiver text box and button that edit the text and send button.

Table (4_4)

Detection	Data Type	Size	Constraint
Question	Textbox	Varchar(6)	
To	Textbox	Varchar(64)	Sender e-mail

Subject	Textbox	Varchar(32)	User name
Text	Textbox	Varchar (300)	

4.2.5 Sharing

This screen show add post by user which is include (text box that helping user to write post about research ,helping him to upload audio or video , text and it is include list to whom posted this(teacher ,student) .Also, there is property to make desiccation about the post .

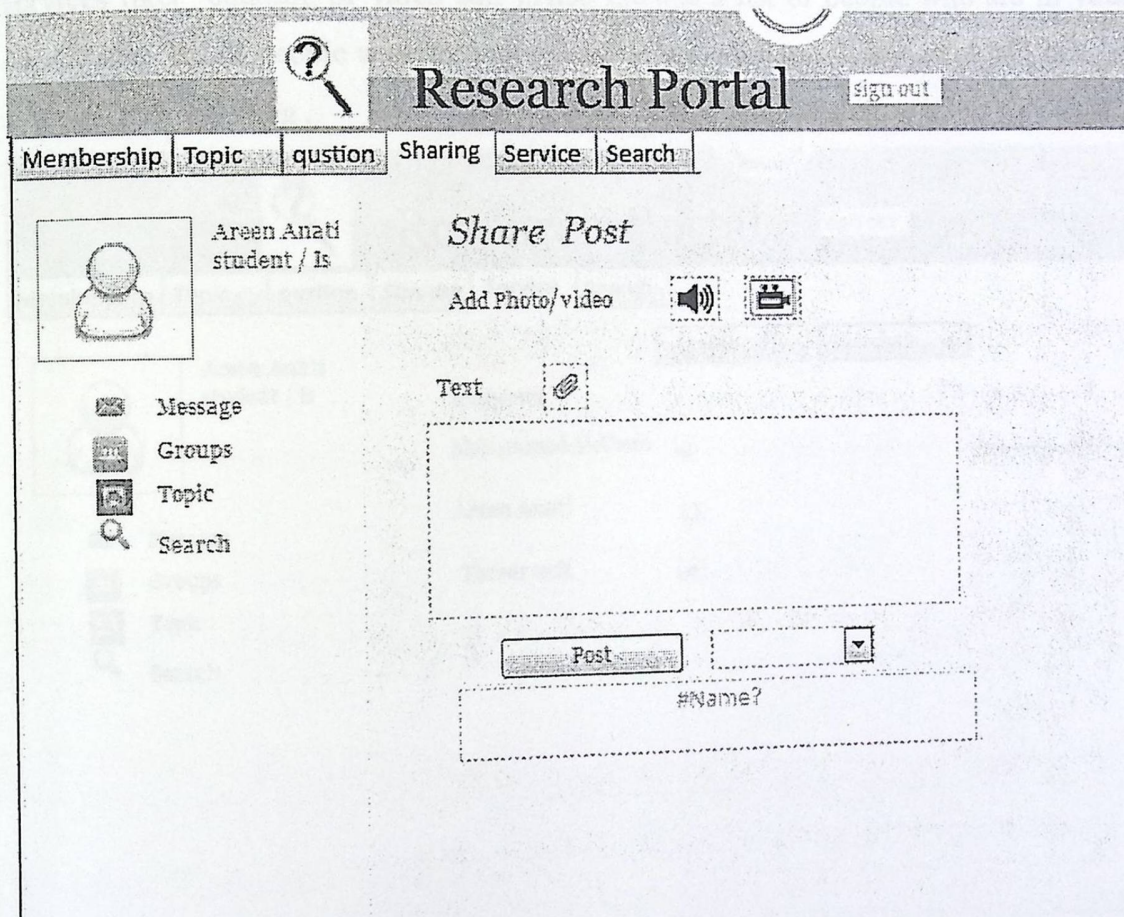


Figure (4_7):sharing screen

Table(4_5) show the content of sharing screen which is include text box for add title post , text box for writing post and list box to determine the person that the user will post to him or a group the post button.

Table(4_5)

Detection	Data Type	Size	Constraint
-----------	-----------	------	------------

Text	Text box	Varchar(300)	To write scientific articles
Post list			Teacher ,student.
Desiccation text	Text box	Varchar 64	

4.2.6 Service

This screen show the contents of services that provide by the network there is a list of services like(chatting or video call).Also include a list of people who are in your contact list ,list of people who are online and with tow button if you want call him by camera or by chatting .

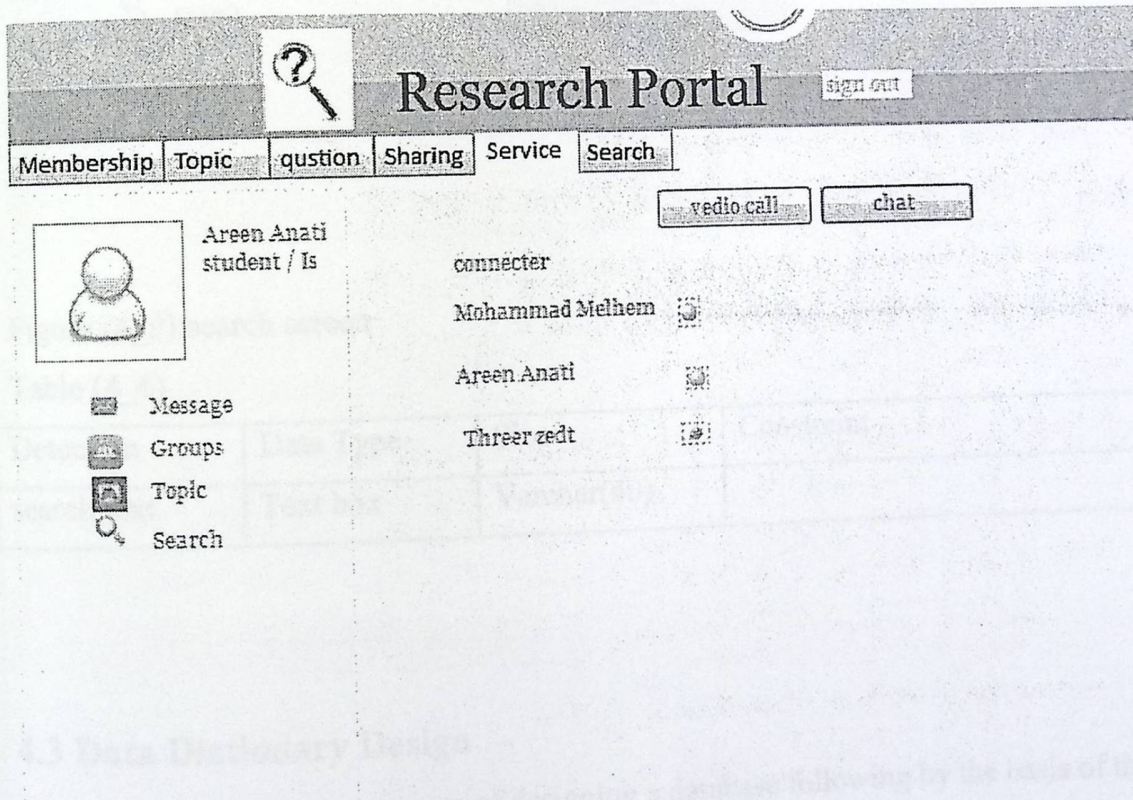


Figure (4_8):service screen

4.3.7 Search

This screen is the last screen which is strapped in university website(www.PPU.edu.ps) , to help the user in searching about any topic that is not found in network

Topic
 User Number , topicName , Author , Category File , type
 Question

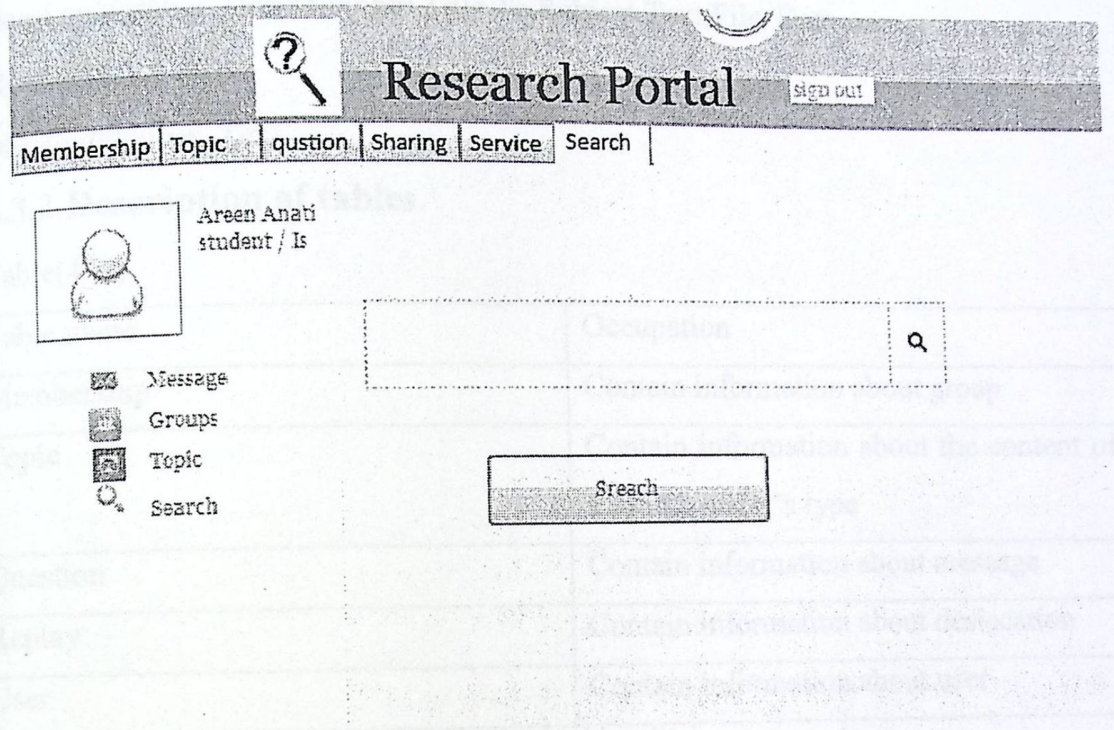


Figure (4_9):search screen

Table (4_6)

Detection	Data Type	Size	Constraint
search text	Text box	Varchar(40)	

4.3 Data Dictionary Design

This section contains the process of designing a database following by the basis of the previously identified requirement for the development of this system. Thus, this section explains all the database requirements through the database tables.

4.3.1 Database Requirements

Membership

UsersNumber, Membershi

User

UsersNumber Fi rstName ,LastName ,Institiuon ,Department ,E-Mai ,Password

Topic

UsersNumber , topicName ,Author ,Category ,File, type

Question

QuestionNumber ,UsersNumber,Title,To,Subject Text,File, Date

Replay

QuestionNumber ,Text.

4.3.2 Description of tables

Table(4_7)

Table name	Occupation
Membership	Contain information about group
Topic	Contain information about the content of research and it's type
Question	Contain information about message
Replay	Contain information about desiccation
User	Contain information about user

4.4 Database Design

This part present a system database ,through tables , which contain the database and fields in each table:

4.5.1 database Tables:

- Table (4_8) Membership Table

Attribute	Type	size	Key	Related table	Null?	Description
UsersNumber	integer	6	P.k		No	Unique
Membership	varchar	64			No	

- Table(4_9)User Table

Attribute	Type	size	Key	Related table	Null?	description
UsersNumber	integer	(6)	P.k		No	
Fi rstName	varchar	(32)			No	
LastName	varchar	(32)			No	
Spcialization	varchar	(32)			No	
Phone	varchar	(32)			No	
E-Mail	varchar	(32)			No	
Password	varchar					

- Table(4_10) Topic Table

Attribute	Type	Size	Key	Related table	Null	description
UsersNumber	Integr	6	F.k	User table	No	
Name	varchar	64			No	
Author	Varchar	64			No	
Category	Varchar	64			No	
File	Varchar	64			No	
Type	Integer	1			No	

- Question Table(4_11)

Attribute	Type	Size	Key	Related table	Null?	Description
Qustione num	integer	6	p.k	Replay table/usertable	No	
User num	integer	6			No	
Tittel	Varchar	32			No	
To	Varchar	64			No	
Subject	Varchar	64			No	
Text	Text				No	
File	Varchar	32			No	
Data	timestamp				No	

- Replay Table(4_12)

Attribute	Type	Size	Key	Related table	Null?	Description
Question num	integer	6	F.k	Question Table	No	
Text	Text				No	

4.6.1 Sign in

As a main process in the system, sign in which includes insert username and password then .

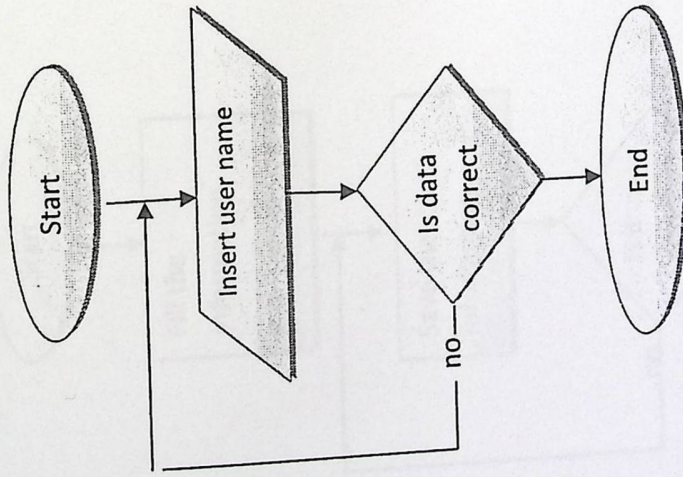


Figure (4_12) sign in

4.6.2 Create Account

One of the main process of this system is to create an account in portal ,this can achieve by fill the form by the suitable information.

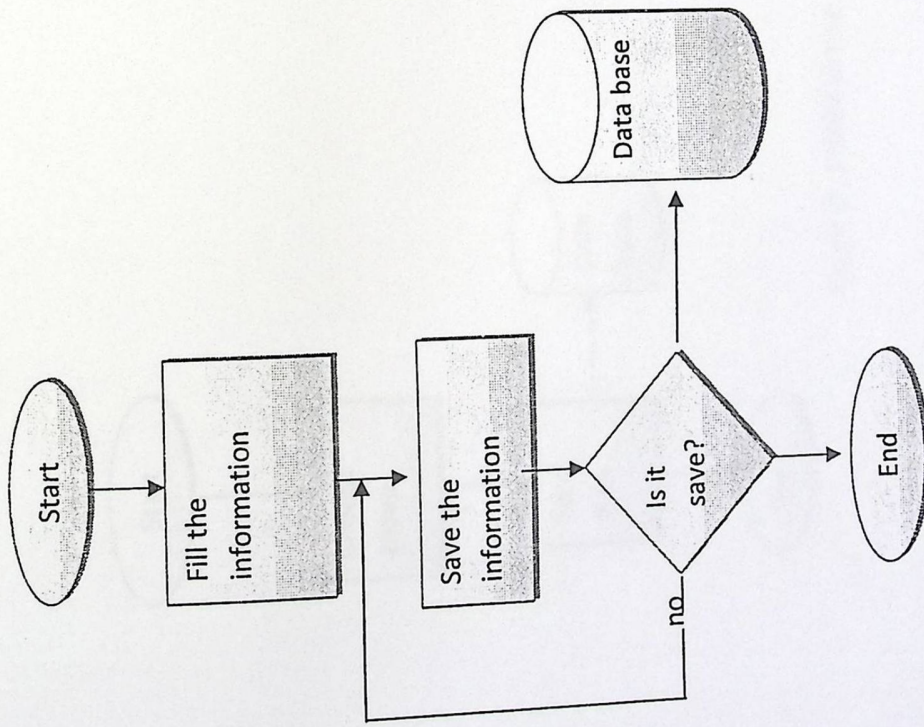


Figure (4_13)Create Account

4.6.3 Add group

In this stage add one of group is important process in this system , which is help user to be more specific on his/her choices , which is store his/her group in database.

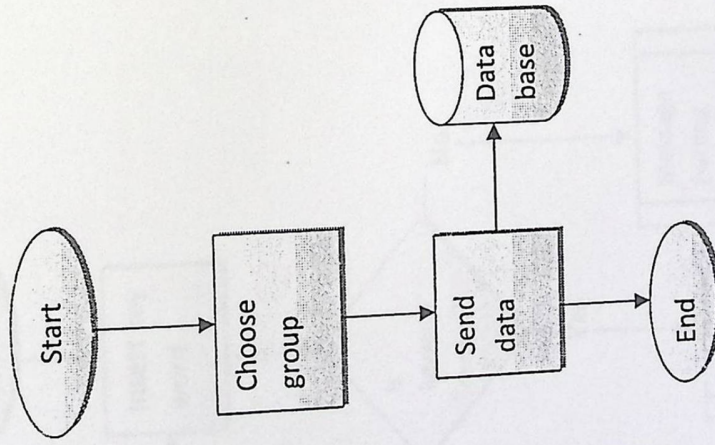


Figure (4_14)Add Group

4.6.4 Searching about topic

Searching about topic process it is provide easy way to found any topics user need it, and it is short the time that user need it to searching .

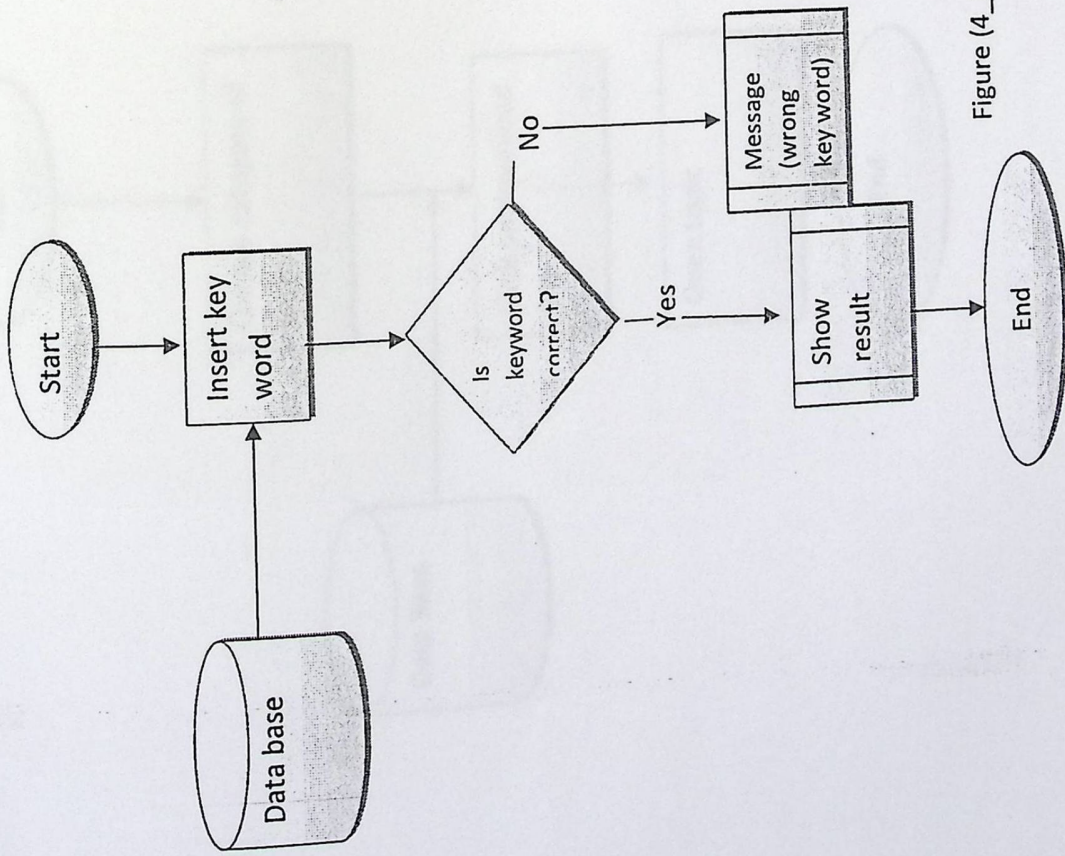


Figure (4_15)sharing Topic

4.6.5 Download Topic

An additional requirement, which is provide download topic that user want to read it, or save it, it is get out of database to the user device .

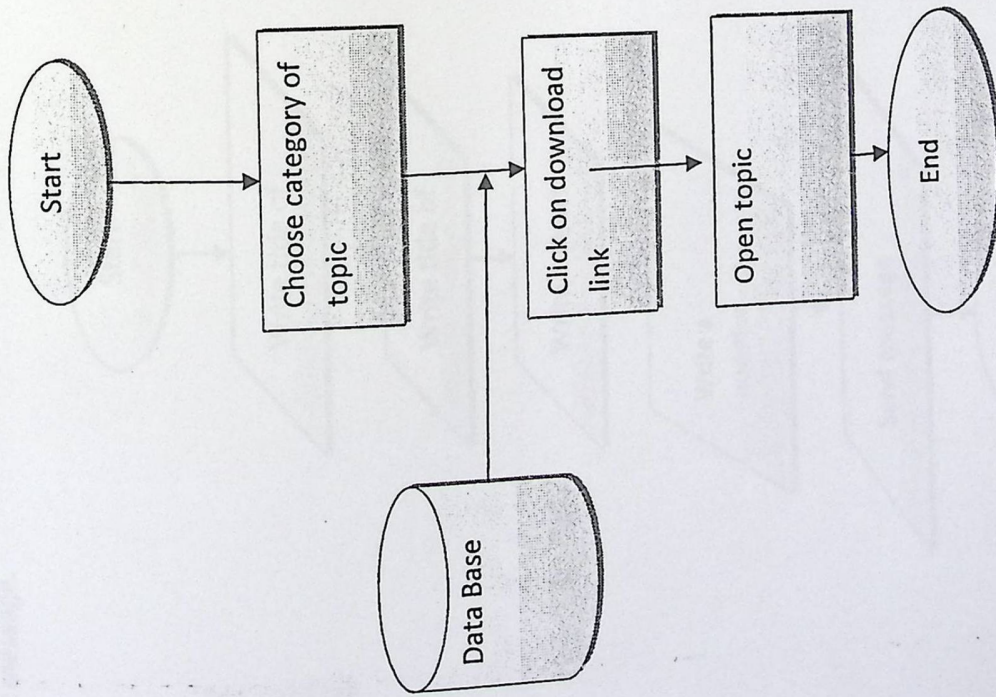


Figure (4_16) downloading

4.6.6 Send Question by message

To keep system active it is need to make desiccation between members ,so user can send a message to any member and the he/she can reply him by another message.

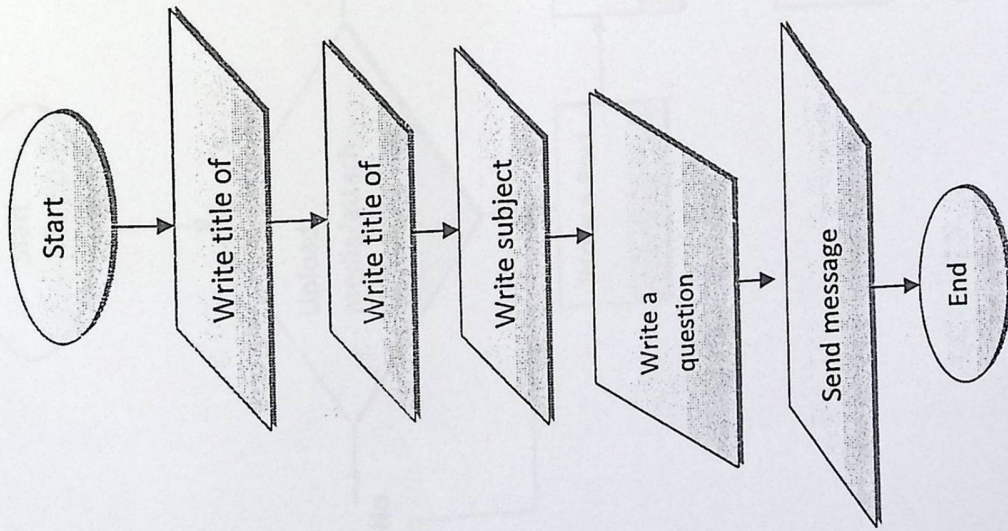


Figure (4_17)send message

4.6.7 Sharing Post

as much important of messages ,sharing post is important which allowing users to be more effective by comente on each article or thought write it , this is stage give user opportunity to be more logical.

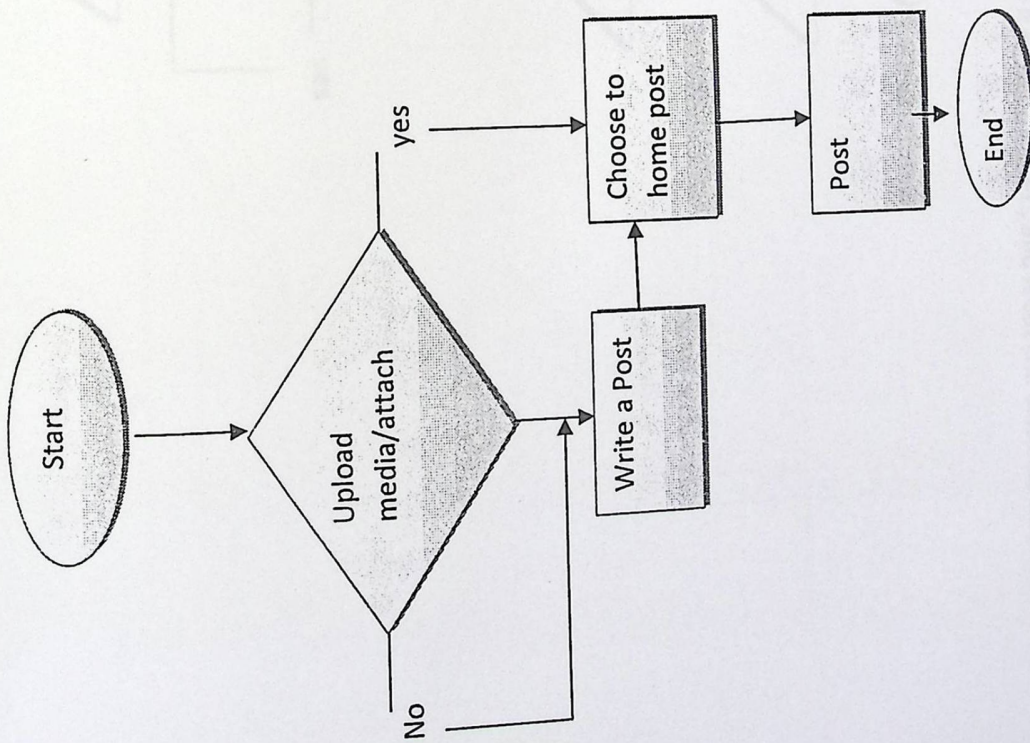
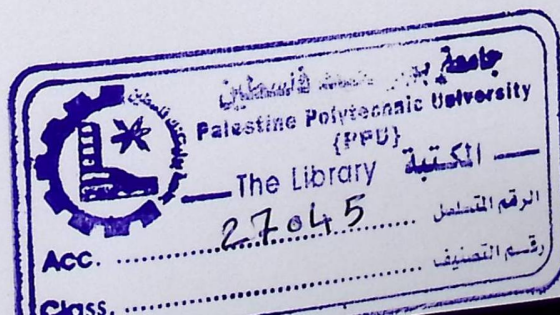


Figure (4_18) Posting



4.6.8. Calling service
also ,there is many service provide it the system , that is make it easier for user , and it cut the distance between member, also it is available any time

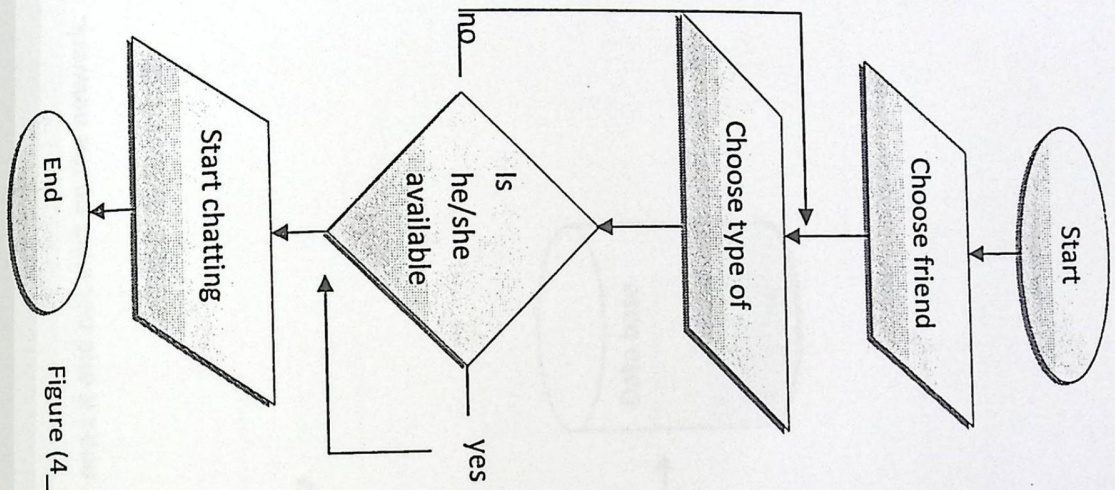
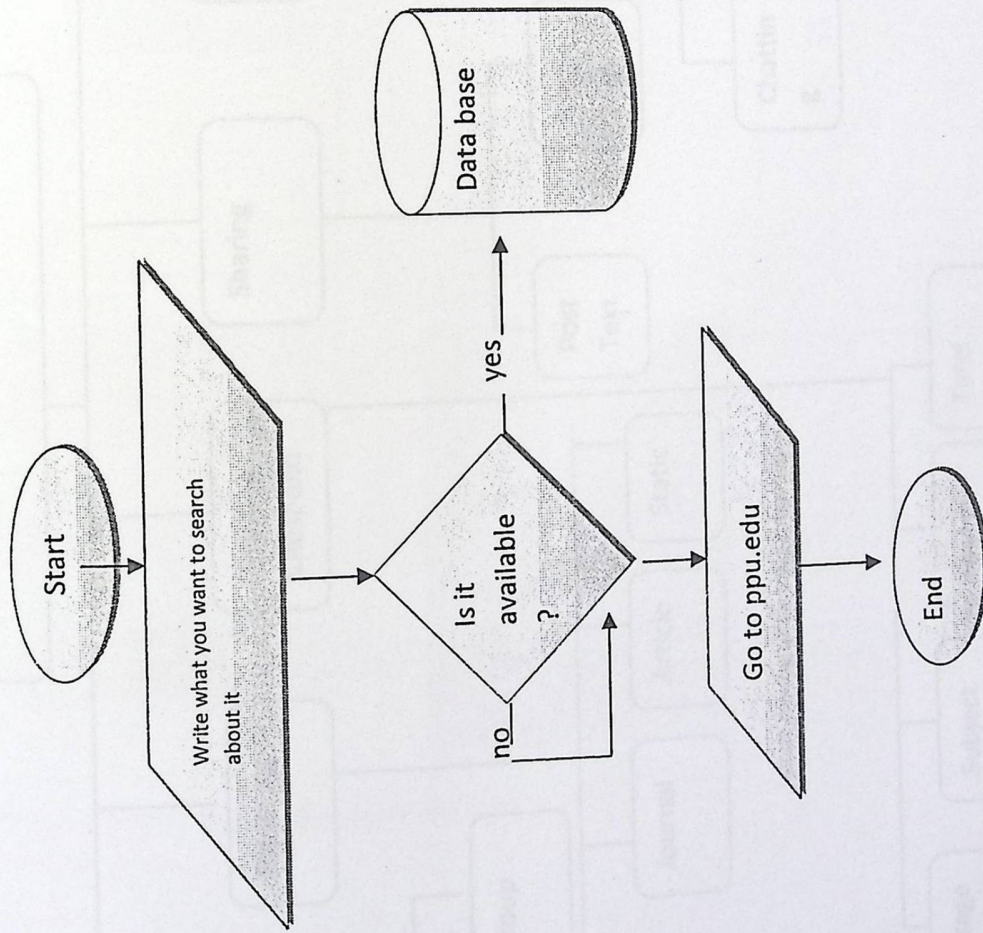


Figure (4_19) Calling service

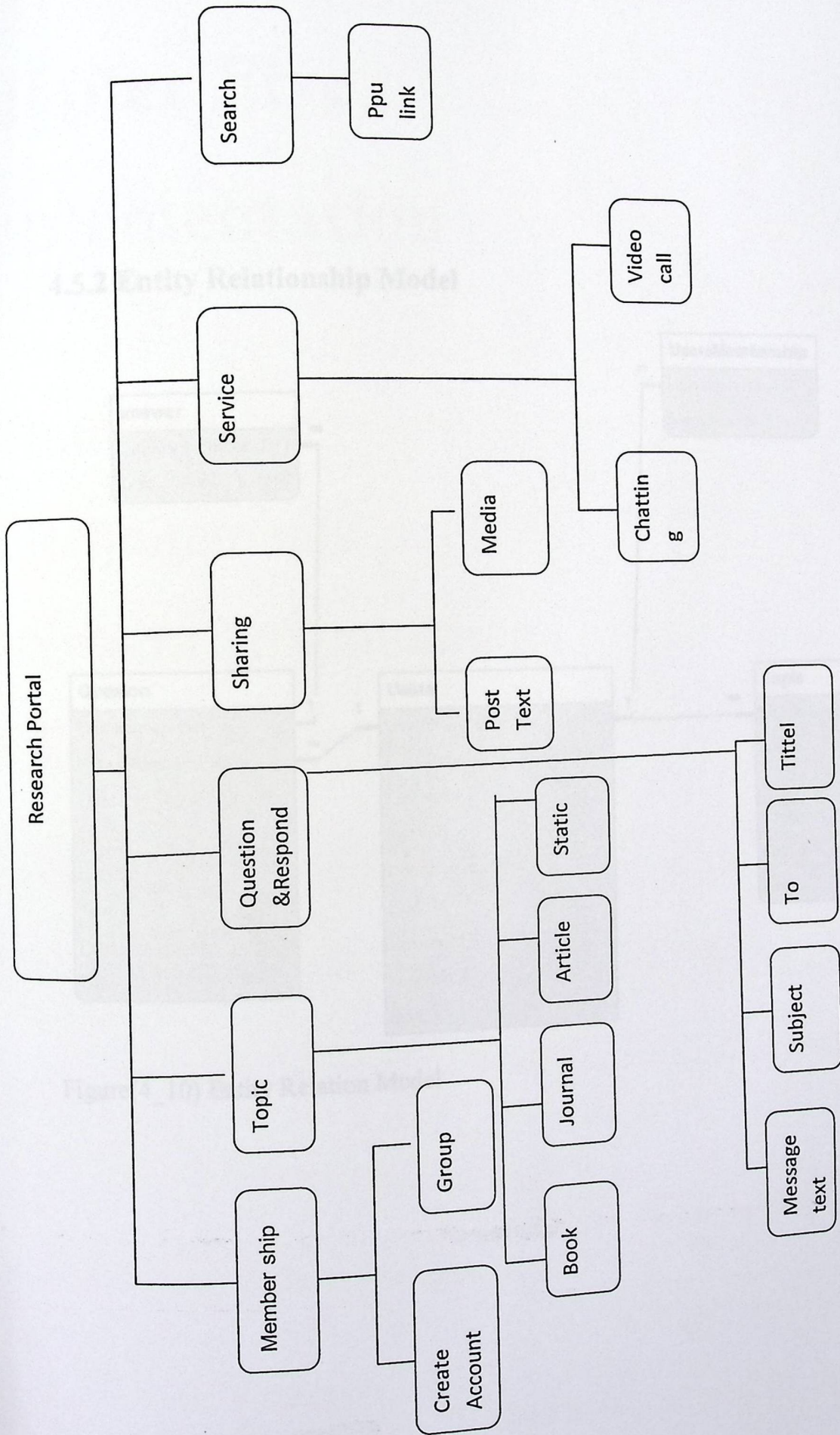
4.6.9.Search

Finally is searching which link with college to provide way to find what user need it and not exist on the network.

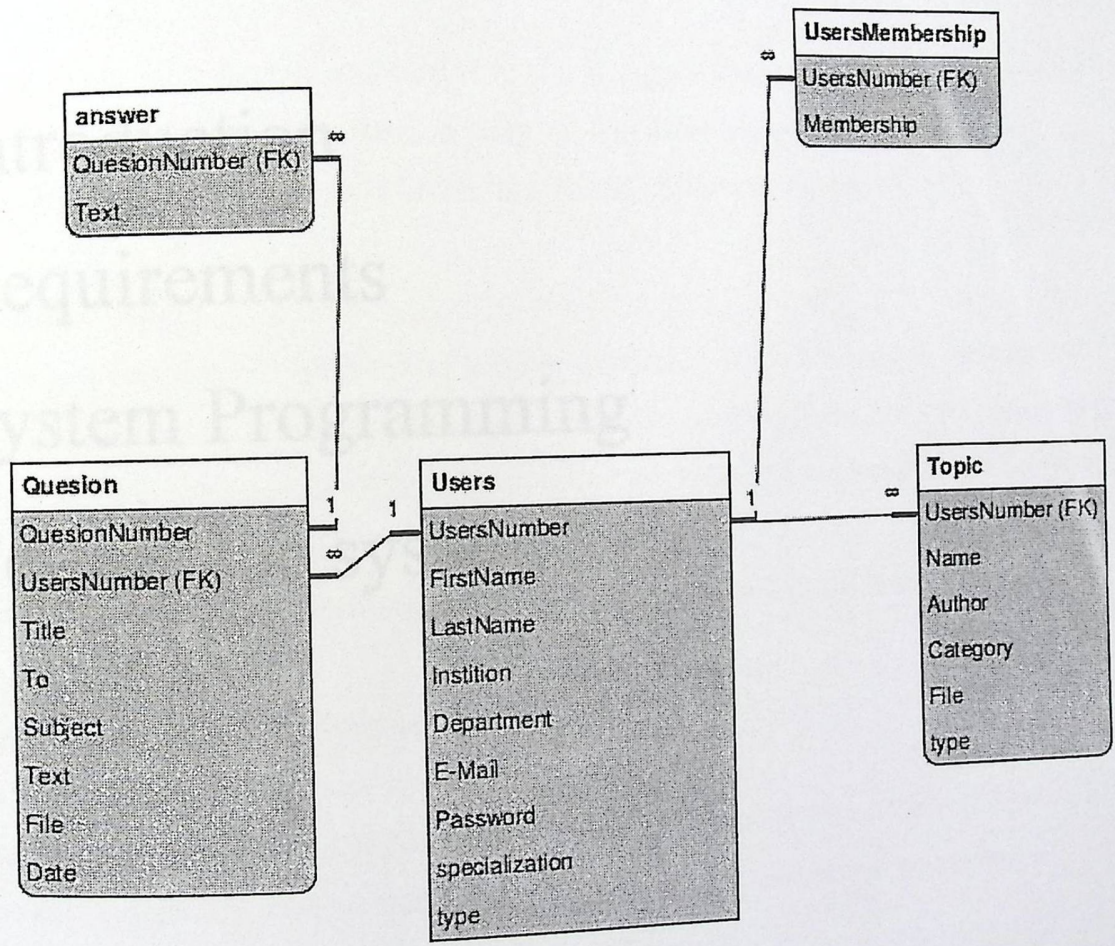


Figure(4_20)service

4.7 Navigation chart



4.5.2 Entity Relationship Model



Figure(4_10) Entity Relation Model

Chapter Five

Implementation

5.1 Introduction

5.2 Requirements

5.3 System Programming

5.4 Testing the system

5.1 Introduction

This chapter discusses the implementation phase which more technical details of this project, tools, physical equipments, and environments for essential programs that are required for developing and implementation the system.

5.2 Requirements

For completing the project a collection of software and equipments were used. These include the following:

1. Windows vista

Windows vista most famous and used now that is support many requirements needed in this project. As Microsoft Access is used as the developing tool for the project, a supporting platform must be used, and Windows vista is the best choice.

2. Microsoft Access

The Microsoft Access program and one of the most popular databases, which are used in the order of databases and extract conclusions from them and the work necessary inquiries. It is a graphical program runs under Windows graphical environment. This program contains a variety of objects that can be used to view and manage information such as tables, forms, reports, and queries. This is a Database management program is strong, is designed to be used easily, and is using this tool to complete the design phase of the system.

The project team choose this environment because of the features are:

- 1-Ease developers use, as all elements of language in this system.
- 2-support largely dealing with the database needed by the system, which it has the ability to deal with the data more effectively and quickly without making errors affect the effectiveness of the system.

3. Microsoft office 2007

It is a complete package to facilitate the various office work such as word processing and presentations, its include, Microsoft office word 2007, Microsoft office power point 2007.

4. PHP Language

PHP language is considered one of the strongest and fastest current language is a programming language, especially for programming and web development. It is one of the interactive languages that rely heavily on the database and it can be used in all the means were negative or positive.

5.3 System Programming

The system consists of two parts, which each part is used environment developed different terms were used (NetBeans) through the building site system. The control panel of its own, and the database is created by the system requirements. Also it was been using the programming language PHP to be through the establishment of The second part system. Then it was integration between all parts of the system and linkage with other and with the system database.

5.4 Testing the system

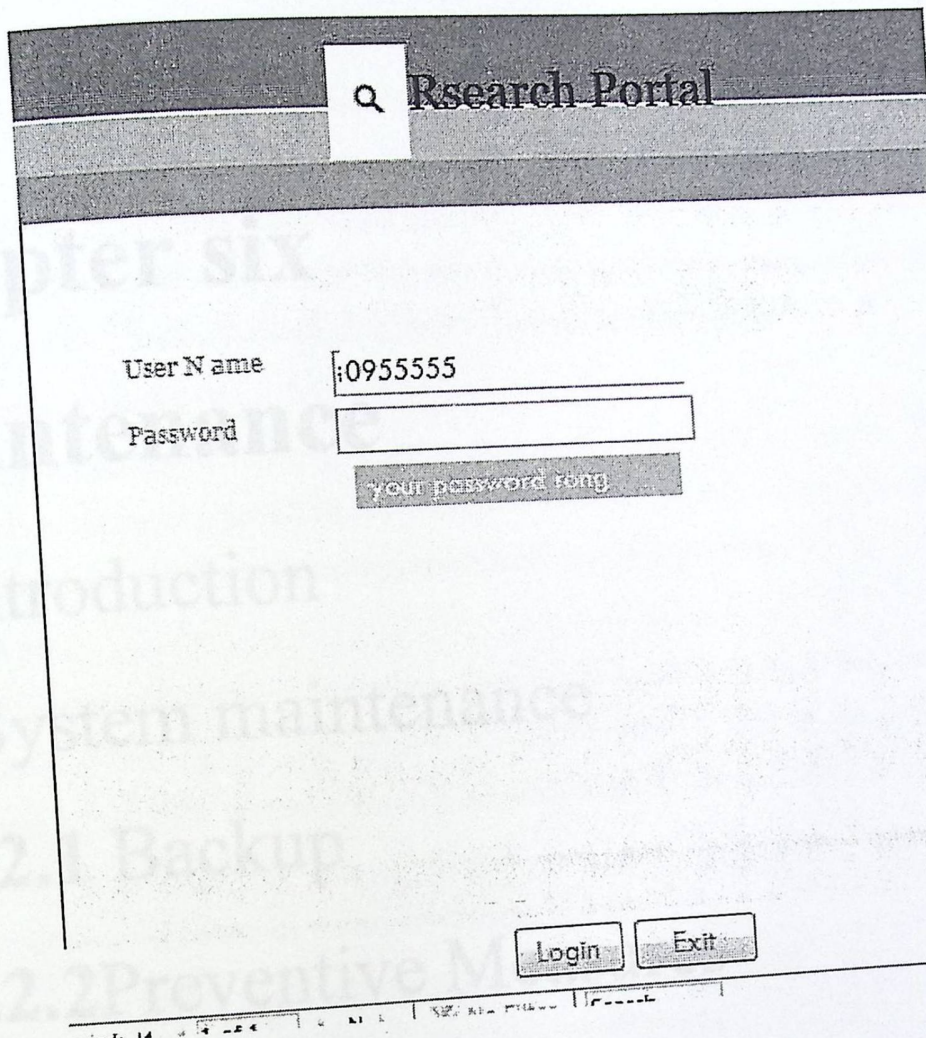
Testing the system is very important in order to ensure that system functional requirement are conformity trusting and reliability .This phase usually comes after the design phase. Integrated examined process identified the examination of individual units ,check the form, check the integration, and check the system.

1. Unit Testing

At this stage, functions system are examined to make sure it works properly .All the processes must be examined independently from the other by entering the correct values, the other wrong ,and examine the results.

Examples of processes that have been tested:

Log in with error password :



Figure(5_1)

2. Form Testing

At this stage, collected interrelated components with each other in the system are examined as a whole, all values entered in each entry, then form are checked completely.

3. Integration Testing

This stage about testing the integration between the different components, and the interaction between these components, this phase appear in generating prescription and discharge it.

4. System Testing

In this stage, project team will test the system to ensure that works properly, and includes all processes in the system.

Chapter six

Maintenance

6.1 Introduction

6.2 System maintenance

6.2.1 Backup

6.2.2 Preventive Measures

6.3 Building the system

6.1 Introduction

After the completion of development and testing the system, it becomes eligible to take a place in the work in real environment. As known, the user does not have the experience and adequate information about a new introduced program or software. Developer and programmers must provide users with needed steps information and guidance for deployment and maintaining the system. This chapter clarifies necessary operations to maintain the system.

6.2 System maintenance

While the system has been running, there is always the possibility of system failure or the occurrence of certain errors, problems that should be avoided. So this section attempts to depend the proposed plan for system maintenance, which includes the following:

6.2.1 Backup

During the minding of the system some times these errors cause stopping in the system. In order to avoid this problem is copy data system (Backup) include all data in the database and the system, create a system to restore order in malfunction in the system, and this process must be carried out periodically and regularly

6.2.2 Preventive Measures when Building the system.

1. Use of validation control to prevent users from entering wrong values.
2. Use of the Data set to prevent direct contact with the database.
3. Use of the Stored Procedure in order to prevent direct contact with the database.
4. Use of the 3Tier architecture as a coding technique in order to create the flexible and reusable application.

6.2.4 SQL Server maintenance

SQL Server is an important component of operation system through the provision of protection and security of the system pages, so you must make sure the correct settings SQL Server, and it works correctly and efficiently.

Chapter seven

Conclusion

7.1 conclusion

7.2 Result

7.3 Recommendation

7.4 Future Work

7.5 Appendix

7.1 conclusion

This web application has been build to achieve the objective of the project, this web application enable to teacher and student to search about any journal, book, article , statistic ,any other subject , also it is provide opportunity to the user to write what's he/she want in scientific way , it is allow exchanging experiences and connecting with other , also developing user skills.

7.2 Result

1. online system was built
2. requirment was achievement and desired report are generated

7.3 Recommendation

1. Improve the efficiency of the system through an evaluation of the site by students and professors
2. linking the system with the electronic university system which is provide full support , such as e_library.

7.4 Future work

1. Expand the network to include all institutions of higher education.
2. make a database for all professor in Palestine.

The References

- 1- Multiple incentive internet pricing for national academic research networks: a case study(Apostolopoulos etal,2000).).
- 2- Data Management Procedures in the Asthma Clinical Research Network(Pogash etal,2001).
- 3-Academic and research network of Slovenia(Avgust Jauk etal,2002).
- 4- Grids and research networks as drivers and enablers of future Internet architectures(Baxevanidis. K, Davies. H, Foster. I, Gagliardi.F,2002).
- 5-Development of common data elements: the experience of and recommendations from the early detection research network (Wingetetal,2003).
- 6- Academic Research Networks: A Key to Enhancing Scholarly Standing(PHILLIP J. McKNIGHT,2004
- 7- Academic research networks: Accessing resources for English-medium publishing(Curry M, Lillis T,2010).
- 8- The Construction of Higher Education Entrepreneur Services Network System a Research Based on Ecological Systems Theory(Xue.J ,2012).
- 9- An Introduction to the IEA GHG International Research Network on Monitoring(Beck.B, Aiken. T,2009)

The project team preparing a special questionnaire to students and a other one special for professors, where the questionnaire students distributed to sample his professors to the supervisors of the project at random from the College of Administrative Sciences and Information Systems The questionnaire professors have been distributed to teachers supervising the project and through the results that appeared to have been extracted functional requirement .

Appendix A

Questioner

The research networks of the most important sources used in the search for information and knowledge sharing, and this in mind we went to the idea of the project entitled "Research Portal at the university: Application to the Faculty of Management Science and Information Systems"; so that the site is where the exchange of information, the statement failed experiments and successes, and the exchange of knowledge and cooperation in various fields. so; we hope you answer this questionnaire and thank you very much.....

1.Specialization:

information system

Business administrator

Project Management

Graphic

2.Do you use research networks?

yes No

If the answer to the previous question No, go to question (5):

3. Do you find it difficult to deal with these networks?

yes No

4. What is the profit generated by these networks?

High Very high Medium low very low

5. Do you want to build membership in the Research Portal?

yes No

6. If you answered No Do you want to enter the gate without restrictions?

yes No

7. Why do you prefer that contain Research Portal (you can choose a group of the following):

- Access to articles
- statistics
- Books
- Access to previous studies
- Ask questions
- Answer questions on the table
- Research ideas
- Exchange of views on certain topics

Other (please specify):

8. What is the content of research that you prefer?

- Theory Research
- Applied Research
- Descriptive Research
- Other
- All of the

9. With those who want to share research?

- Subscribers of the same specialty
- Subscribers from other disciplines
- I do not want to share

10. What is your preferred method to choose to deal with the research network?

- List of the names of all the articles

- List of the names of names of research
- List of the names of subject of research
- List of the names of the books

11. Are you ready for the Publishing of ideas and research projects?

- yes No

12. Do you prefer to be your relationship within the network level: (You can choose more than one answer):

- Student Teachers Both of them

13. How you can benefit from the assumed Research Portal for the University?

14. What content and services that you want to research their existence in the network?

Thanks for answer this questioner .

The team work

Areen Anati Threer Zedat

Under the supervision of

Dr. Ismail Romi

Questioner

The research networks of the most important sources used in the search for information and knowledge sharing, and this in mind we went to the idea of the project entitled "Research Portal at the university: Application to the Faculty of Management Science and Information Systems"; so that the site is where the exchange of information, the statement failed experiments and successes, and the exchange of knowledge and cooperation in various fields. so; we hope you answer this questionnaire and thank you very much.....

1. Qualification:

Diploma Bachelor Advanced studies

2. Do you use research networks?
yes No

If the answer to the previous question No, go to question (5):

3. Do you find it difficult to deal with these networks?

yes No

4. What is the profit generated by these networks?

High Very high Medium low very low

5. Do you want to build membership in the Research Portal?

yes No

6. If you answered No Do you want to enter the gate without restrictions?

yes No

7. Why do you prefer that contain Research Portal (you can choose a group of the following):

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- Other
- All of the

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- Subscribers of the same specialty
- Subscribers from other disciplines
- I do not want to share

10. What is your preferred method to choose to deal with the research network?

- List of the names of all the articles
- List of the names of names of research
- List of the names of subject of research

List of the names of the books

11. Do you prefer to be your relationship within the network level: (You can choose more than one answer):

Student Teachers Both of them

12. Are you ready for the Publishing of ideas and research projects?

yes No

13. What is the amount of detail that you want to publish?

Thanks for answer this questioner .

The team work

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