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جامعة المجمعة

كلية العلوم بالزلفي

قسم علوم الحاسب والمعلومات

Graduation Project (1) Report

EXCHANGE LEARNING RESOURCES

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Abstract

The exchange learning resources site is a website that allows students to exchange Educational resources such as books and others, the site allows students to view and search for their educational resources

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Chapter 1

1-1 introduction

With the great reliance on self-education in the current period, the idea of creating a site for university students, so that students share learning resources such as books, lectures and discussions are examples of some universities that took this step and everyone can see its usefulness

1-2 The importance of the project

- Sharing and exchanging learning resources
- Diversifying the source of learning
- Search for learning resources
-Selling learning resources (for those who wish to benefit financially)

1-3 Project goals

- All resources to be exchanged in one location
- Shorten the time and effort in searching for learning sources
- Some people can benefit financially from selling learning sources

.

1-4 Research problem

- The idea of the project is to facilitate the exchange of educational resources among students and facilitate the search for these sources

- It also provides investment opportunities for students who want financial income

- Solving the problem of many inquiries about the university in general and educational courses

1-5 project Challenges

Challenges

1 Operational problem The site needs a large number of users to be effective and useful, this problem can be solved through the following:

- Advertise the site in social networking programs in general

- Develop university publications to advertise the site

2 Webmasters need to manage site:

The solution is:

- Advertise the need for webmasters on social networking sites

1-6 Project Scope

In scope:

- Serving university students specifically
- To facilitate the exchange of learning resources among students
- Exchange of learning resources such as books, and others

Enable organizations to put their products into the program

Outside the scope of the project:

This phase can be achieved after completing this project

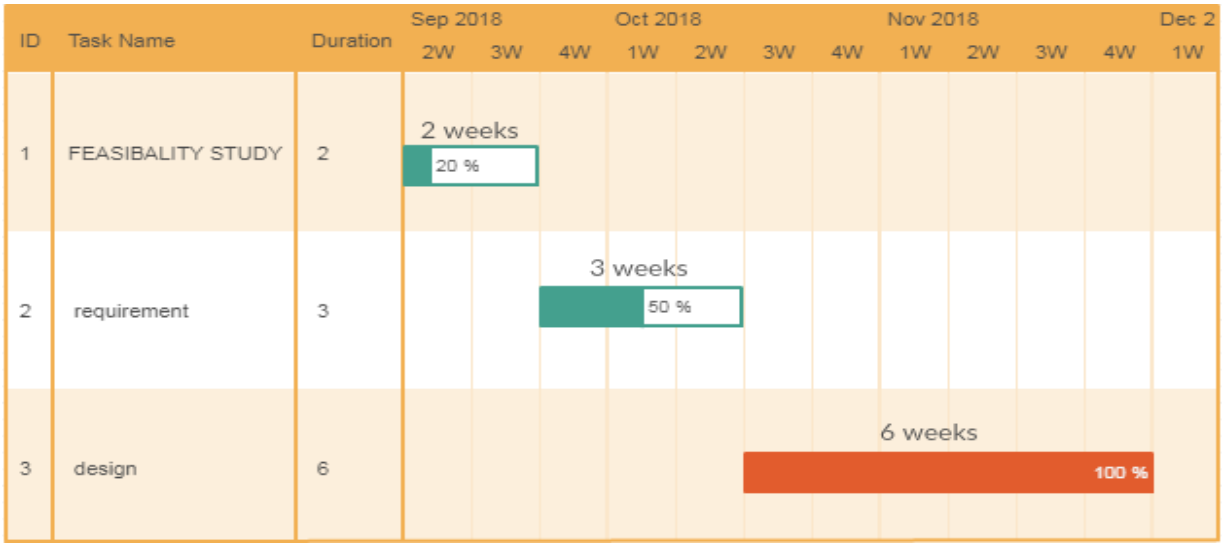
-Secondary and middle school students

-Teacher service

1-7 Questionnaire

Questions	no	not important	To some extent	yes
Do students need a site to share learning resources?	**9.09%**	**9.09%**	**18.18%**	**63.64%**
Have you ever tried searching for a learning resource exchange site?	**8.33%**	**8.33%**	**25.00%**	**58.33**
Do you support the idea of creating a learning resource sharing site?	**7.69%**	**7.69%**	**23.08%**	**61.23%**
If the site is created, will you contribute to it effectively?	**16.67%**	**8.33%**	**16.67%**	**58.33%**
Do you think that the idea is successful?	**0.00%**	**16.67%**	**16.67%**	**66.67%**

1-8 Gantt chart



Chapter 2

2-1 Introduction

One of the most important steps of establishing a system is to define the requirements and analyze them accurately so that it helps to understand and contain the system and then it is created in the best form.

2-2 Requirements Analysis

Requirements analysis involves frequent communication with system users to determine specific feature expectations, resolution of conflict or ambiguity in requirements as demanded by the various users or groups of users, avoidance of feature creep and documentation of all aspects of the project development process from start to finish.

2-2-1 Sign-Up requirements

Registration in the forum requires two types of information:

Important information:

Member name.

Password.

Email Address .

Additional information:

Mobile number .

Address .

Gender.

2-2-2 Log in requirements

Log-in requires the user name and password

2-2-3 adding learning resources for exchange

adding learning resources to exchange or sell in the forum requires you to log in with a trusted membership.

2-2-4 exchange or purchasing learning resources Requirements

Require the exchange of learning resources or purchase at the site login using a trusted membership, choose the object to be exchanged, and then click on exchange or purchase

2-2-5 add a comment requirements

Adding a comment on the site requires that you sign in with trusted .membership, choose a specific topic, and then add a comment

2-3 Target segment

The project targets students studying at Majmaah University as well as students wishing to attend university.

Chapter 3

3-1 Requirement Design

Functional **:** Any requirement which specifies what the system should do.

In other words, a functional requirement will describe a particular behaviour of function of the system when certain conditions are met, for example: “Send email when a new customer signs up” or “Open a new account”.

The Functional requirement in our project is Sign-Up requirements add a comment requirements , exchange or purchasing learning resources Requirements , Log in requirements.

Non-functional requirements :

Any requirement which specifies how the system performs a certain function.

In other words, a non-functional requirement will describe how a system should behave and what limits there are on its functionality.

3-2 what is UML?

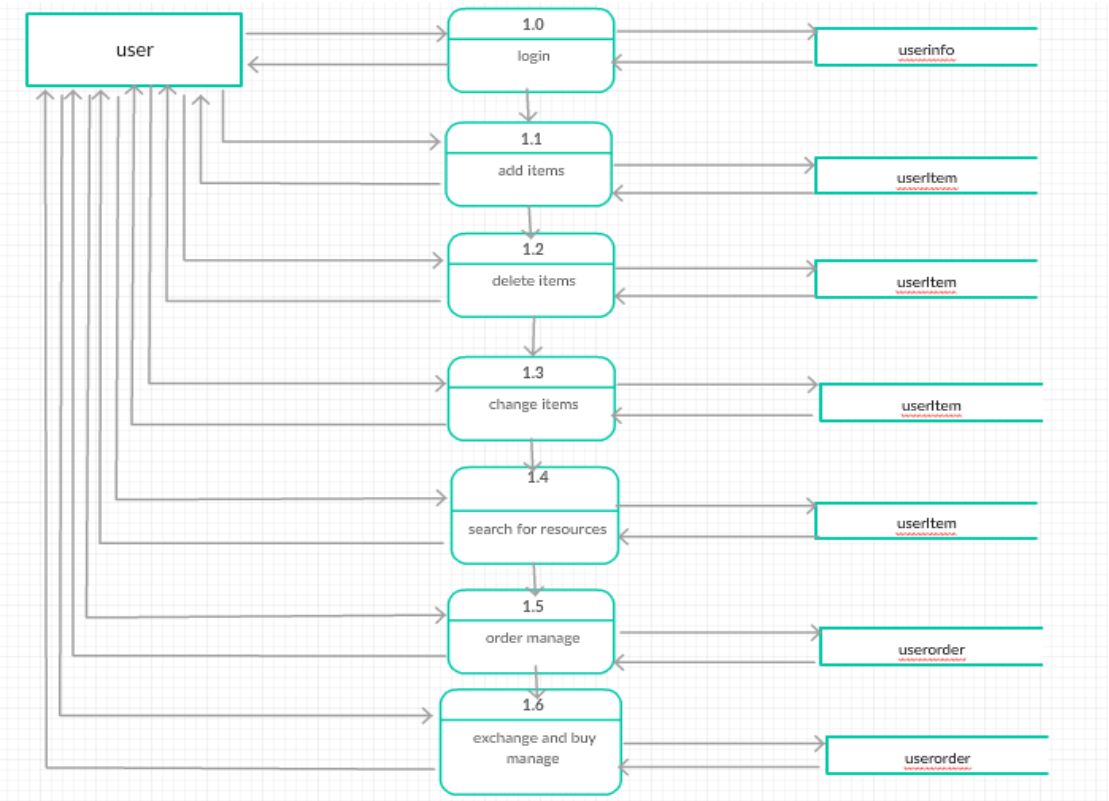
UML, short for Unified Modeling Language, is a standardized modeling language consisting of an integrated set of diagrams, developed to help system and software developers for specifying, visualizing, constructing, and documenting the artifacts of software systems, as well as for business modeling and other non-software systems. The UML represents a collection of best engineering practices that have proven successful in the modeling of large and complex systems.

3-3 Data flow diagram

3-3-1 what is DFD?

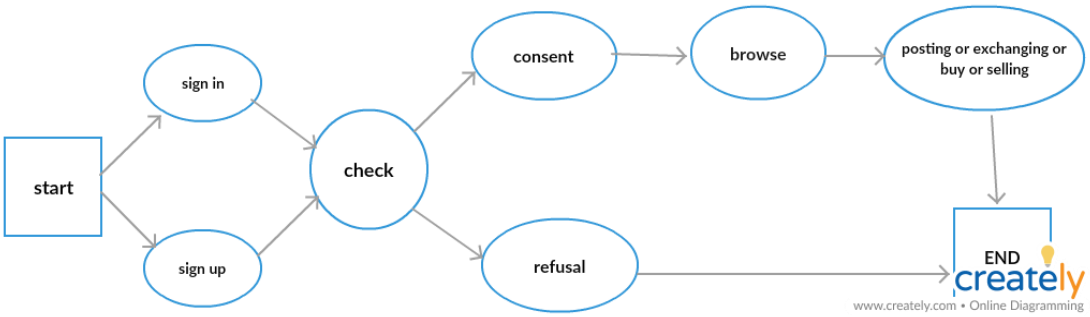
A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination.

3-3-2 Data flow diagram for user

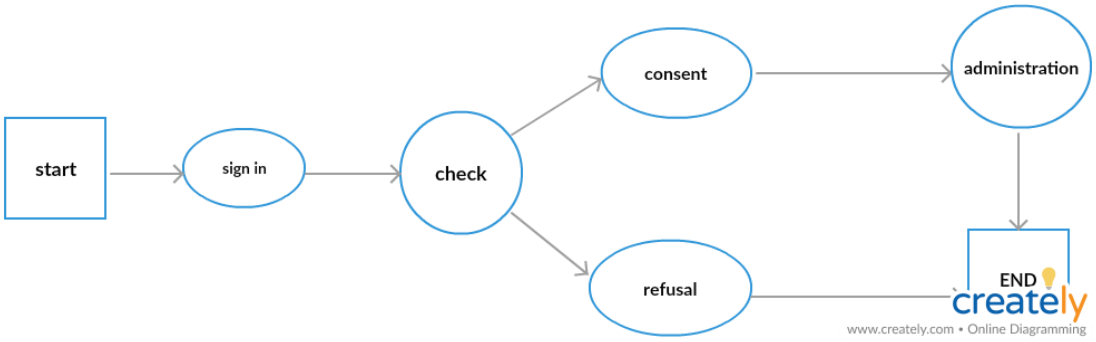


3-4 Processing flow diagrams

3-4-3 Processing flow diagram for user



3-4-3 Processing flow diagram for admin



3-5 Use case diagram

3-5-1 what is use case diagram ?

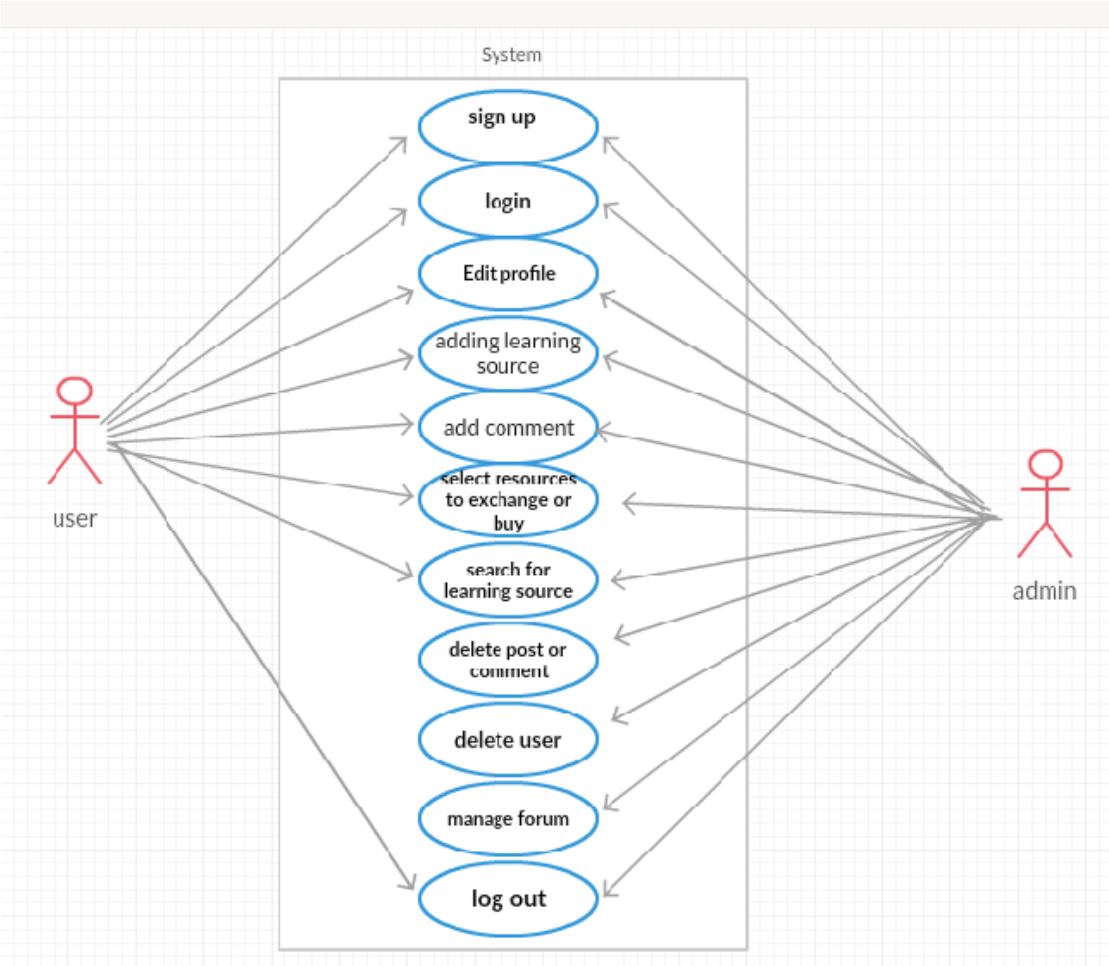
in the Unified Modeling Language (UML), a use case diagram can summarize the details of your system's users (also known as actors) and their interactions with the system. To build one, you'll use a set of specialized symbols and connectors. An effective use case diagram can help your team discuss and represent:

Scenarios in which your system or application interacts with people, organizations, or external systems

Goals that your system or application helps those entities (known as actors) achieve

The scope of your system

3-4-2 Use case diagram for the system

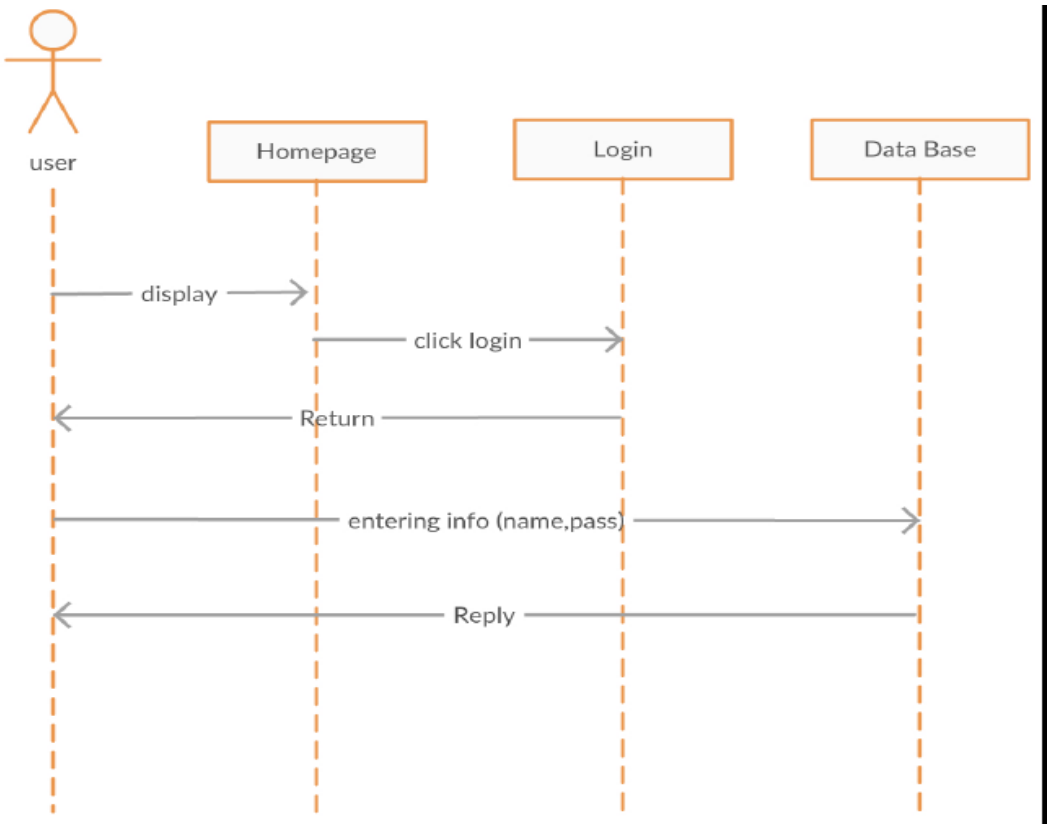


3-6 Sequence diagram

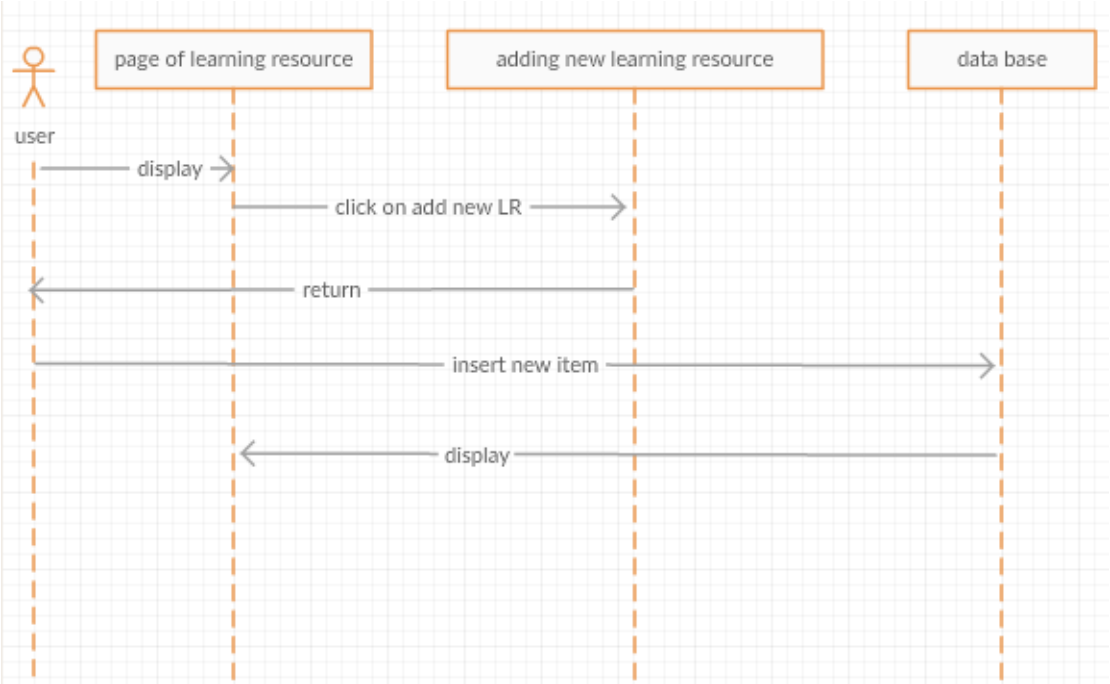
3-6-1 what is Sequence diagram?

Sequence diagrams describe interactions among classes in terms of an exchange of messages over time. They're also called event diagrams. A sequence diagram is a good way to visualize and validate various runtime scenarios. These can help to predict how a system will behave and to discover responsibilities a class may need to have in the process of modeling a new system.

3-6-2 Sequence diagram for login



3-6-3 Sequence diagram for adding new resource

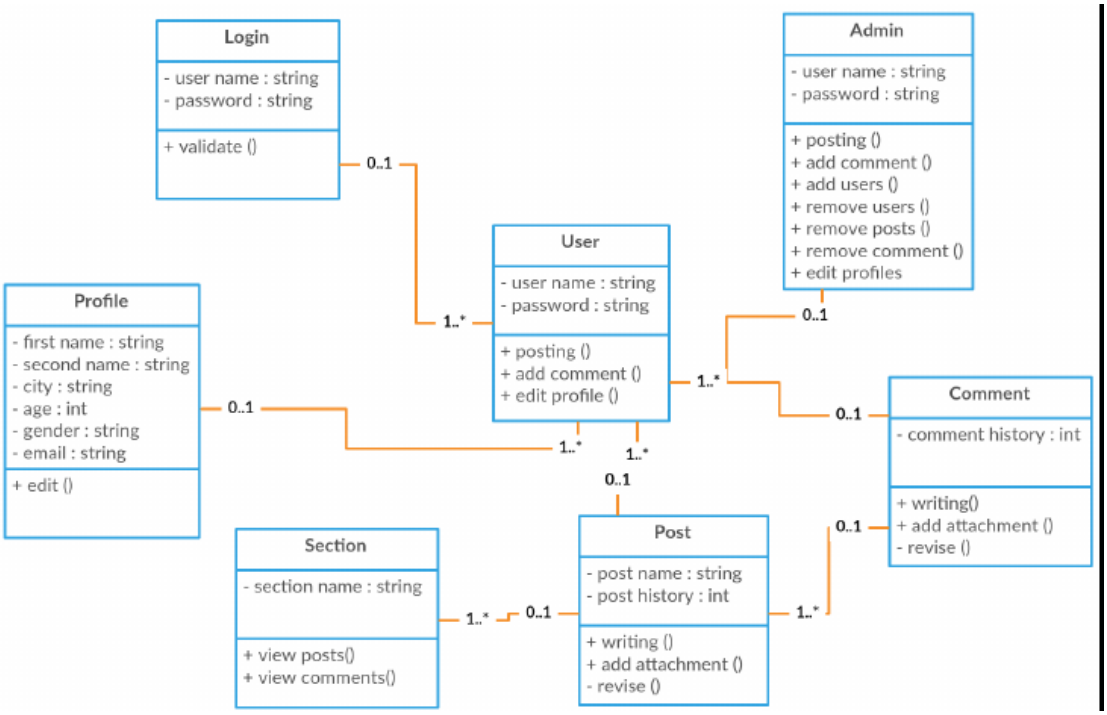


3-7 Class diagram

3-7-1 what is Class diagram?

One of the more popular types in UML is the class diagram. Popular among software engineers to document software architecture, class diagrams are a type of structure diagram because they describe what must be present in the system being modeled.

3-7-2 Class diagram for user

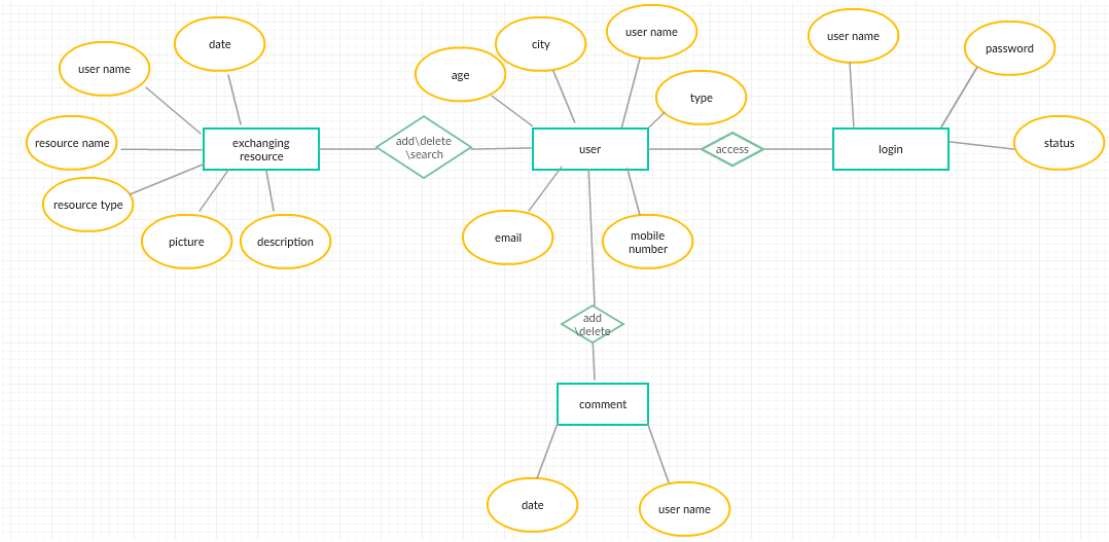


3-8 ER-Diagram

3-8-1 what is ER-Diagram?

An entity relationship diagram (ERD), also known as an entity relationship model, is a graphical representation of an information system that depicts the relationships among people, objects, places, concepts or events within that system.

3-8-2 ER-Diagram for user

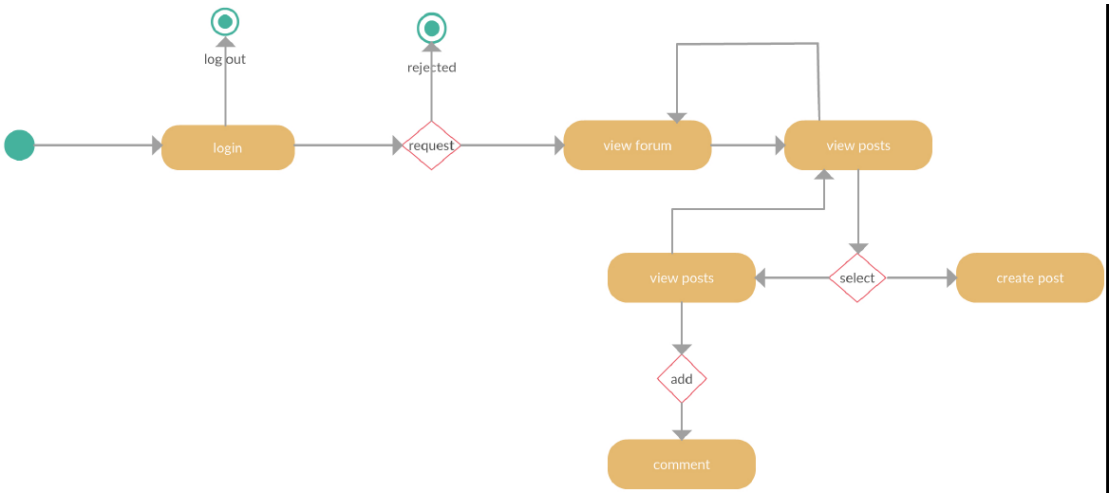


3-9 Activity Diagram

3-9-1 what is Activity Diagram?

Activity diagram is another important behavioral diagram in UML diagram to describe dynamic aspects of the system. Activity diagram is essentially an advanced version of flow chart that modeling the flow from one activity to another activity.

3-9-2 Activity diagram for user of the site



3-10 Interfaces

3-10-1 Home Interface

3-10-2 general page show the learning sources

2-10-3 sign up page

3-10-4 Adding new learning resource