Chapter 1

INTRODUCTION

1.1 Course objective

- The main objective of this project is to download the video from youtube by its unique URL link.
- It keeps records the details of the user.
- The user can save the downloaded video in his/her wished path in the PC.
- Downloaded stuff can be easily found.
- One of the best advantages of this dowloaded videos is it doesn't depends on the network.

1.2 Problem definition

Now a days people are faceing problems and having some troubleshooting issues while watching for many reasons like network, low battary,human disturbance,pesonal issues etc for such things this project MPEG-4 will help us to download the videos, by the specific link of the particular video which is been selected . So the user can easily download and also can share it to another person so that they can watch the downloaded videos at any place with irrespective to their **network** (offline) . MPEG-4 files with audio and video generally use the standard **.mp4** extension.

1.3 Outcomes of the project

1. User needs to signup first by providing his/her basic credentials like username,mobile number,mailID and password then that data of the user is been stored.
2. Next time if the user visits this application he/she can access by providing the username and password.
3. If the user gets successfully logged in then he/she will be taken to the welcome window where a blank space box is given to paste the Url link of the video which the user have selected.
4. Then if the user pastes the link and press the OK button then the video is been downloded and will be saved in our respective pc.
5. If the user want to see all the videos which are downloded previously then user can go to there stored downloaded list and can take a look in it.

Chapter 2

REQUIREMENTS SPECIFICATIONS

2.1 Hardware Outcomes:

a.Processor: Intel core i5, 8th generation
b.Ram: 2 GB or more

2.2 Software Outcomes:

a.Python having 3.8.5 version(idle,tkinter),PyCharm,Visual Studio.

b. OS: Windows 7 or later
c. Database: MySQL

Chapter 3

3.1 python fundamentals

Python is a popular programming language. It is used for web development. It used for software development.

There are four collection data types in the python language.

3.1.1 Python list

List – it is a collection of ordered and changeable. It allow duplicate member in the list. It can be written in square bracket. We can access the list by giving the index number. We can change the value by giving index number.

Len () - to determine the length of items in list, we can use Len () function.

Append () – to add the items at the end of the list.

Copy () – it returns a copy of the list.

Count () – it gives the number of items with the specified value.

Extend () – it adds the items of a list to the end of the current list.

Insert () – it can add an items at any given position.

Pop () – it can removes the item at the given position.

Reverse () – it can use to reverse a list.

Sort () – it can use to sort the list.

3.1.2 Python set

It is a collection which is unordered and un-indexed in set. Sets in python are written with curly brackets. Sets are not in order so we cannot be sure in which order element will appear. Duplicate items are not allowed.

Ex- set = {“apple”,” banana”}

There is set in-built method that we can use in sets.

Add () – adding an items in sets.

Pop () – we can removes an items from the sets.

Remove () – it is used to remove the specified element.

Discard () – it is used to remove the specified items.

Intersection () – it is used to return a set that is intersection of two other sets.

Intersection update () – it is used to removes the element in the set that are not present in other specified sets.

Difference () – it is used to return a set which contains the difference between two or more set.

Is super set () – it shows whether another set contains this set or not

3.1.3 Python dictionary

It is a collection which is unordered, changeable and indexed it can be written with curly brackets it has keys and value. There is no duplicate element.

Len () – it is used to find the length of dictionary.

Clear () - it is used to removes all the elements I dictionary.

Copy () – it gives the copy of dictionary.

Get () – it is used to get the specified items.

Pop () – it removes the specified elements with the specified keys.

Update () – it is used to update the dictionary by the specified key-value pairs.

3.1.4 Python tuple

It is a collection which is in order way and can change. It can allow duplicate element. It can be written in round brackets. We can get elements by referring to the index number, and inside the square brackets. We cannot change the tuple once it created. It is immutable. We can change the tuple in list and also change the list to tuple.

3.2 database fundamentals

Database – it is a collection of related data. It is also called mini world. It is built for a specific purpose. It represents some aspect of real world. It specifies the data types, structures, and constraints of the data to be stored.

Database management system – it is a collection of programs. It enables users to create database and maintain a database.

Advantage of using the DBMS

- It reduced application development time
- It is flexible.
- There is availability of up-to-date information

3.2.1 DATA MODELS

It is a collection of concepts that describes the structure of a database and provides means to achieve data abstraction.

Categories of data models

- High-level or conceptual data models
- Low-level or physical data models
- Representational data models
- Relational data model
- Object data model

CONCEPTUAL DATA MODEL

Entity

It represents a real world object or concept. For example employee, student, project, hotel etc.

Attribute

It describes the entity like employee name or salary. It also represents some property of interest.

Relationship

It shows relationship among two or more entities. It shows association among entities.

Example: works on

PHYSICAL DATA MODELS

It describes how any data is stored as a file in the system. There is access path and index.

REPRESENTATIONAL DATA MODELS

It can be easily understood by end users. It is also similar to how data organized in computer storage.

OBJECT DATA MODELS

It is kind of similar to conceptual data models

RELATIONAL DATA MODELS

In this model we can use sql standard.

Database schema

It is a description of database.

Schema diagram

It displays selected aspects of schema.

Schema construct

It shows each object in schema.

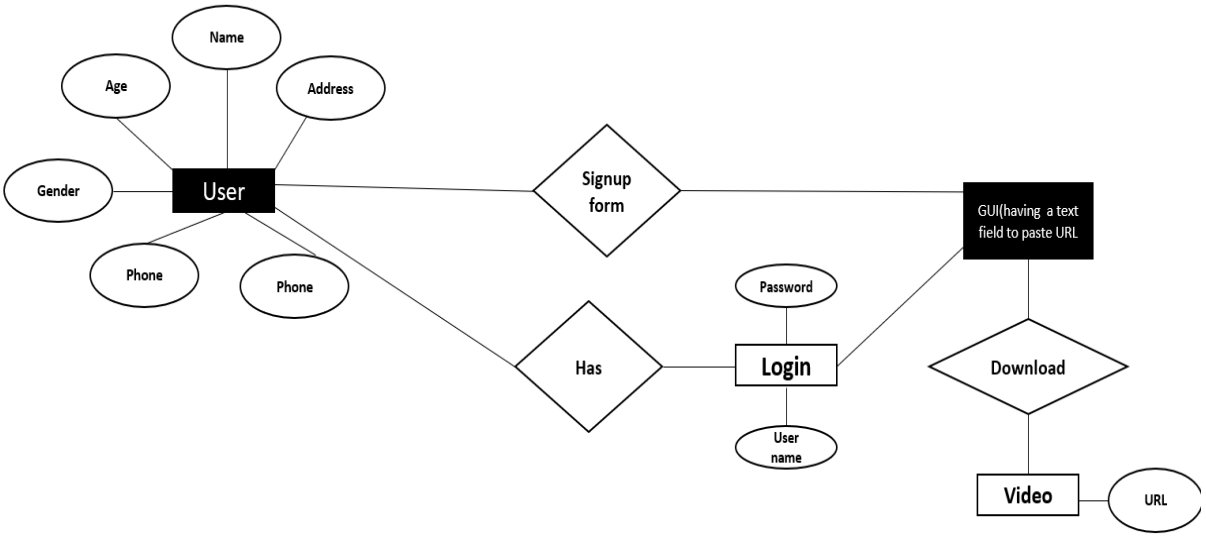
Snapshot

Data will be in database at any specifics moment in time.

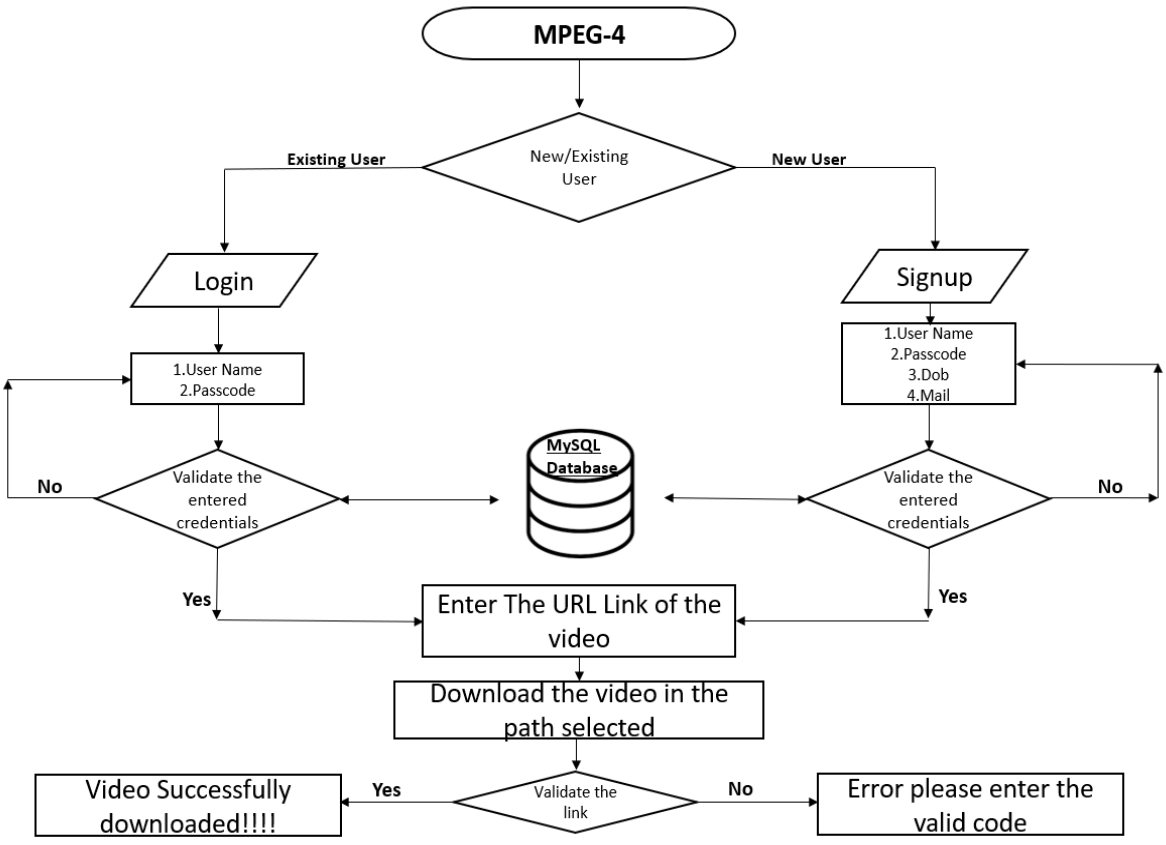
Chapter 4

Database design

ER DIAGRAM



4.1 ER Diagram for MPEG-4



4.2 Flow chart for MPEG-4