**M.B.M Engineering College, Jodhpur**

**Rajasthan**

Object: On-Line Courses

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**PART –I A). ISRO (Indian Space Research Organization**):-

**1). Introduction:-** “The Indian Space Research Organization” is the primary body for space research under the control of the government of India. Under the guidance of a number of scientists, ISRO has conducted a variety of operations—supported by its launch vehicle fleet—for both Indian and foreign clients. ISRO has several field installations at its disposal and cooperates with the international community as a part of several bilateral and multilateral agreements.

**2). Establishment of ISRO:-** India being a developing economy is confronted with many socio economic problems, which generally receive the first preference. In spite of this Indian Space program has evolved to such a state that it is now second to none. The Indian Space Research Organization in its modern form was created by Vikram Sarabhai in 1969. This body was to take control of all space activities in the Republic of India. Government of India set up Space Commission and Department of Space (DOS) in June 1972. Indian Space Research Organization (ISRO) under DOS executes Space programme through its establishments located in different places in India. The history of ISRO started with the experiments phase in 1970s when experimental satellites like Aryabhatta, Bhaskara, Rohin, Apple were launched. The succes of the programmes lef to the operationalisation of advanced programs like INSAT, IRS were started in 1980s. India has now the world’s largest network of remote sensing satellites.

**3). Aims and Objectives of ISRO:-** The prime objective of ISRO is to develop space technology and its application to various national tasks. The Indian space program was driven by the vision of Dr Vikram Sarabhai, considered as the father of Indian Space Programs Main objective of space program includes development of satellites, launch vehicles, Sounding Rockets and associated ground systems:-

* Experimental phase included Satellite Instructional Television Experiment (SITE), Satellite Telecommunication Experiment (STEP), remote sensing application projects, satellites like Aryabhata, Bhaskara, Rohini and APPLE and launch vehicles, SLV-3 and ASLV.
* Present operational space systems include Indian National Satellite (INSAT) for tele-communication, television broadcasting, meteorology and disaster warning and Indian Remote Sensing Satellite (IRS) for resources monitoring and management.
* Polar Satellite Launch Vehicle (PSLV) used for launching IRS Satellites and Geosynchronous Satellite Launch Vehicle (GSLV), intended for launching INSAT class of satellites.
* Space Science activities include SROSS and IRS-P3 satellites, participation in international science campaigns and ground systems like MST Radar.
* Chandrayaan-1, India’s first spacecraft mission beyond Earth’s orbit, aims to further expand our knowledge about Earth’s only natural satellite the moon.
* ISRO's co-operative arrangements cover several countries and space agencies.
* ISRO provides training in space field to personnel from other countries.
* ISRO's hardware and services available commercially through Antrix Corporation.

**4). Visions of future:-** ISRO plans to launch a number of new-generation Earth Observation Satellites in the near future. It will also undertake the development of new launch vehicles and spacecraft. ISRO has stated that it will send unmanned missions to Mars and Near-Earth Objects.

Indian lunar exploration programme :- Following the success of Chandrayaan-1, the country's first moon mission, ISRO is planning a series of further lunar missions in the next decade, including a manned mission which is stated to take place in 2020.

Chandrayaan -2 is the second unmanned lunar exploration mission proposed by ISRO at a projected cost of Rs. 425 crore (US$ 90 million). The mission includes a lunar orbiter as well as a lander/rover. The wheeled rover will move on the lunar surface and pick up soil or rock samples for on-site chemical analysis. The data will be sent to Earth via the orbiter.

Space exploration :- ISRO plans to carry out an unmanned mission to Mars in this decade. According to ISRO, the Mars mission remains at a conceptual stage but is expected to be finalized shortly. The current version of India's geo-synchronous satellite launch vehicle will be used to loft the new craft into space.

ISRO is designing a solar probe name Aditya. This is a mini-satellite designed to study the coupling between the sun and the earth. It is planned to be launched in 2012.

IRNSS:- The Indian Regional Navigational Satellite System (IRNSS) is an autonomous regional satellite navigation system being developed by Indian Space Research Organization which would be under total control of Indian government. The requirement of such a navigation system is driven by the fact that access to Global Navigation Satellite Systems like GPS are not guaranteed in hostile situations. ISRO plans to launch the constellation of satellites between 2010 and 2012.

Development of new launch vehicles :- ISRO is currently developing two new-generation launch vehicles, the GSLV-Mk3 and the

AVATAR RLV :- These launch vehicles will increase ISRO's present launch capability and provide India with a greater share of the global satellite launch market.

**B). RRSSC (Regional Remote Sensing Service Centre)**

**1). Introduction:-**  Recognizing the need and importance of natural resources management in the country, Government of India has set-up the National Natural Resources Management System (NNRMS). NNRMS is an integrated approach for management of natural resources, optimally utilizing the advantages of conventional systems and the information derived through remote sensing. Department of Space (DOS) is the nodal department in Government of India for evolution, establishment of NNRMS and all remote sensing related activities.

**2). Establishment and Centers across the country:-** With a view to have optimum use of space technology for national development it was felt necessary to create facilities for analyzing remote sensing data to derive planning related inputs on natural resources of our country. Towards this, DOS has established five Regional Remote Sensing Service Centers (RRSSCs) in the country for speedy operationalization of remote sensing as an integral component of natural resources inventory, monitoring and management. RRSSCs enable the use of remote sensing technology at a reasonable cost to derive necessary information on various aspects related to natural resources. These centers are located at Jodhpur (Western Region), Dehradun (Northern Region), Kharagpur (Eastern Region), Nagpur (Central Region) and Bangalore (Southern Region) and function under RRSSC, Central Management Office, ISRO Headquarters, Antariksh Bhawan, Bangalore.

**3). Aims and objectives:-**

* Provide facilities for digital image analysis and Geographic Information System (GIS) to the users
* Guide / assist users in application of digital image analysis techniques and GIS
* Develop and demonstrate techniques in the new area of applications
* Train scientists of user agencies in Remote Sensing Application, digital techniques, GIS and theme based applications
* Provide support service to execute national projects and promote remote sensing applications

**4). Area of activities :-**

* National Missions related to natural resource management
* User application projects
* Application validation projects and Technology Development Projects under Remote Sensing Application Missions (RSAM)
* Software development and customization
* Training and education
* Expert advice / Consultancy towards promotion of technology in the country

**5). As a service providers for Image Processing and GIS:-** RRSSC provides services for image processing of Remote Sensing data for natural resources management. The state-of-art hardware and software facilities enable to deliver the outputs demanded by applications and the users. Remote Sensing forms one of the major input for GIS. The auxiliary data along with these inputs helps in solving the crucial problems of various application domain using GIS. RRSSC are solution based service providers and provide end-to-end support for these activities.

IMAGE PROCESSING:-

* Geometric & radiometric corrections
* Multi-layer modeling & multi-spectral analysis
* Terrain analysis & FLY
* DEM generation & ortho rectification
* Raster & vector utilities
* Digital cartography & map production
* Data import/export facilities

GIS:-

* Database design and management
* Input, editing & updation of geographic data
* Visualition of geographic information
* Geometric transformations and data integration
* Map publishing with custom layouts on various scale and media
* Advanced tools- buffering, spatial modeling, 3-D, network and dynamic segmentation
* Query and retrieval
* Data import/export.

**C). REMOTE SENSING :-**

**1). Introduction:-** Remote Sensing is the science and art of acquiring information (spectral, spatial, temporal) about material objects, area, or phenomenon, without coming into physical contact with the objects, or area, or phenomenon under investigation. Without direct contact, some means of transferring information through space must be utilized. The term Remote Sensing is commonly restricted to methods that employ electromagnetic energy (such as light, heat, microwaves) as means of detecting and measuring target characteristics.

**2). Basic principles of remote sensing:-** Remote Sensing to a great extent relies on the interaction of electromagnetic energy with the matter (object). It refers to the sending of EM radiation, which is reflected, scattered or emitted from the object. Electromagnetic Radiation – Interaction Mechanism: EM energy that encounters matter (object) is called Incident Radiation. Interaction with matter can change following properties of incident radiation: - Intensity, Direction, Wavelength, Polarization, Phase The science of Remote Sensing basically detects and records these changes.

Energy balance equation for radiation at a given wavelength (λ) can be expressed as:-

EI = ER + EA + ET

Incident = reflected + absorbed + transmitted

Proportion of each fraction (ER/EA/ET) will vary for different materials depending upon composition and condition. Within a given feature type, these proportions will vary at different wavelengths thus helping in discrimination of different objects. The incident radiation (EI) may be: -

a) Reflected / Scattered:- It is returned from the surface of material which is strongly dependent on the wavelength of incident radiation well as molecular composition of material and its condition.

b) Absorbed:- Giving up its energy largely in heating the matter which leads to emission of radiation at different wavelengths. Spectral emission from objects depends on the surface characteristics and temperature.

c) Transmitted:- Passed through the substance. Transmission through media’s of different densities such as from air into water.

**3). Classification of Remote Sensing System**

On the basis of energy source:

1. Passive Remote Sensing: Makes use of sensors that detect the reflected or emitted electro-magnetic radiation from natural sources.

2. Active remote Sensing: Makes use of sensors that detect reflected responses from objects that are irradiated from artificially-generated energy sources, such as radar.

On the basis of wavelength region: Remote Sensing is classified into three types in respect to the wavelength regions:

1. Visible and Reflective Infrared Remote Sensing.

2. Thermal Infrared Remote Sensing.

3. Microwave Remote Sensing.

**4). Role of atmosphere in Remote Sensing:-** All the electromagnetic radiation (detected by the sensor from the object of interest) has to pass through atmosphere. The water vapor, oxygen, ozone, CO2, aerosols present in the atmosphere influence electromagnetic radiations through the mechanism of scattering and absorption.

i). Scattering: It is unpredictable diffusion of radiation by particles present in the atmosphere. It reduces the image contrast and changes the spectral signature of ground objects. Scattering influences – direction of radiation, intensity of radiation, wavelength and spectral distributions.

ii). Absorption : In contrast to scattering, atmospheric absorption results in the effective loss of energy as a consequence of the attenuating nature of atmospheric constituents viz. molecules of ozone, CO2 and water vapor. In order to minimize the effect of atmosphere, it is essential to choose the regions with high transmittance. These regions are called Atmospheric Windows and are used to acquire Remote Sensing Data. Typical atmospheric windows are in the following regions of EM spectrum: 0.3 – 0.7 μm, 0.8 – 1.1 μm, 1.2 – 1.3 μm, 2.0 – 2.5 μm, 3.0 – 5.5 μm, 8.0 – 14 μm, 10 mm – 1 cm.

**5). Microwave Remote Sensing(MRS):-** The microwave portion of the spectrum covers the range from approximately 1cm to 1m in wavelength. Because of their long wavelengths, compared to the visible and infrared, microwaves have special properties that are important for remote sensing.

Longer wavelength microwave radiation can penetrate through cloud cover, haze, dust, and all but the heaviest rainfall as the longer wavelengths are not susceptible to atmospheric scattering which affects shorter optical wavelengths. This property allows detection of microwave energy under almost all weather and environmental conditions so that data can be collected at any time.

Microwave Remote Sensing can be classified broadly into:

a). Passive microwave remote sensing:- All objects emit microwave energy of some magnitude, but the amounts are generally very small. A passive microwave sensor detects the naturally emitted microwave energy within its field of view. This emitted energy is related to the temperature and moisture properties of the emitting object or surface. Passive microwave sensors are typically radiometers or scanners and operate in much the same manner as systems discussed previously except that an antenna is used to detect and record the microwave energy.

b). Active microwave remote sensing:- Active microwave sensors provide their own source of microwave radiation to illuminate the target. The most common form of imaging active microwave sensors is RADAR. It is an acronym for Radio Detection And Ranging, which essentially characterizes the function and operation of a radar sensor. The sensor transmits a microwave (radio) signal towards the target and detects the backscattered portion of the signal. The strength of the backscattered signal is measured to discriminate between different targets and the time delay between the transmitted and reflected signals determines the distance (or range) to the target. As with passive microwave sensing, a major advantage of radar is the capability of the radiation to penetrate through cloud cover and most weather conditions. Because radar is an active sensor, it can also be used to image the surface at any time, day or night. These are the two primary advantages of radar: all-weather and day or night imaging.

**D). DIGITAL IMAGE PROCESSING**

**1). Image and Digital Number**:- Image consists of equal area pictures elements called Pixels arranged in a regular row and column fashion. The position of a pixel is determined on a xy co-ordinate system and each pixel has an associated numerical value called Digital Number (DN), which represents the intensity of EM energy measured from ground resolution cell.

**2). Digital Image Processing:-** The data recorded by Remote Sensing Satellite Sensors are analogue electrical signals with voltage variations measured in different spectral bands, which are then transformed into digital values. The processing of the digital format data for various applications is known as Digital Image Processing (DIP) or simply Image Processing. The simplest form of DIP employs a microprocessor that converts the digital data into image. At the other extreme, it involves sophisticated interactive manipulation of data to extract and highlight specific information.

**3). Methods employed in Image Processing:-** Image processing methods may be grouped into three major functional categories:

i). Image Restoration

ii). Image Enhancement

iii). Information Extraction.

i) Image Restoration:- Restoration Processes are designed to recognize and compensate for errors, noise and geometric distortions introduced into the data during scanning, transmission and recording processes. Image restoration produces a corrected image that is as close as possible (both in radiometry and geometry) to the radiant energy characteristics of original scene.

ii) Image Enhancement:- Enhancement is the modification of an image to improve the appearance of an image for better human visual analysis. Generally, enhancements alter the original DN value; therefore, these are not performed until the image restoration processes are completed. Image enhancement can broadly be categorized into:

* Contrast enhancement.
* Edge enhancement / detection.
* Image sharpening / smoothening.

a).Contrast enhancement: It is desirable and possible to utilize the entire brightness range of display medium, thereby improving the appearance of the image. Contrast enhancement expands the original DN values to make use of full display range. To perform linear contrast enhancement, minimum and maximum DN value of the image is considered and output DN value is calculated. Other categories under contrast enhancement are: -

**―**Logarithmic stretch ―Enhancement was greater impact on the DN values found in the lower range.

**―**Experimental stretch ― Enhancement has greater impact on the DN values found in the higher range.

b). Edge enhancement/detection: Edges are formed by a sharp/sudden change in DN values between adjacent pixels. Some edges may have pronounced difference in the brightness and are easily identifiable, but some may have subtle brightness differences and require enhancement. Edge Enhancement delineates edges thereby making image easier to analyze and interpret.

c). Image smoothening / noise removal : Image smoothening and noise removal can be implemented using following two types of filters:

I). Average filter ― Evaluates the input pixel and pixels surrounding it and assign a new DN value to the centre pixel which is average of n pixels. It smoothness the image and removes periodic noise and speckles. However blurring of image occurs specially on edges.

II). Median filter ― The centre pixel is replaced by the median of n pixels. It smoothes the image and at the same time maintain the edges in the images.

iii) Information Extraction: a).Band combinations: Multi-band combination plays an important role in image processing. It has the potential to enhance features of interest to the interpreter. Addition, subtraction and ratios are the three major form of band combination. The information of different bands can be added forming a single image using addition. A difference image derived from two images recorded at different times can be used for monitoring changes like flood, cloud movement, crop growth, urban changes, etc. Few popular indices generated using band combinations are as follows:

* Soil Brightness Index (SBI)
* Green Vegetation Index (GVI)
* Yellowness Such Index (YSI)
* Greenness above bare soil (GRABS)

b). Multi-spectral classification: for each pixel the spectral brightness is recorded in several different wavelength bands. A pixel may be characterized by its spectral signature, which is determined by the relative reflectance in different wavelength. Multi-spectral classification is an information-extraction process that analyses these spectral signatures and then assigns pixels into discrete categories based on their signature. There are two major approaches to multi-spectral classifications ―

* Supervised Classification
* Unsupervised Classification.

**E) GIS (Geographical Information System)**

**1). Introduction:-** GIS is basically an organized collection of computer hardware, software, geographic data (spatial & non-spatial) and people designed to efficiently capture, store, update, manipulate, analyze and display all forms of geographically referenced information.

**2). Objectives of GIS:-**

* Maximize the efficiency of planning and decision making.
* Provide efficient means for data distribution and handling.
* Elimination of redundant database – minimize duplication.
* Capacity to integrate information from many sources.
* Complex analysis / query involving geographical referenced data to generate new information.

GIS is so designed to answer the following five generic question for any given application ―

* Location – What exists at a particular location.
* Condition – Identify location where certain condition exists.
* Trends – What has changed since.
* Patterns – What spatial pattern exists.
* Modeling – What if ….

**3). Components of GIS:-** Following are the major components of any GIS system:-

* Hardware ― Used to store, process and display data. Hardware capabilities affect processing speed, ease of use and type of outputs available.
* Software ― Perform GIS operations. It contains procedures for performing various tasks.
* Expertise ― People who provide the intelligence to use the system, develop procedures and define the tasks of GIS.
* Spatial information ― Represents geographic features (Location and Shape) associated with the real world locations and their relationship to other features.
* Non-spatial information ― Descriptive information about the characteristics of the feature.

**4). Topology as in GIS:-** Geographic data describes object in terms of location, their attributes and spatial relationship with each other. It is a mathematical procedure that determines the spatial relationships of feature.

* Area Definition: Polygons are stored as set of lines, rather than defining polygon as a loop of coordinates. Line coordinates are stored only once, hence reduces the storage space.
* Contiguity: Identification of polygons, which touch each other. It is implemented by finding left and right polygon of each arc and takes care of shared arcs.
* Connectivity: Identification of interconnected arcs. From and To node indicate the direction. Node coordinates are stored only once.

Advantages of Topology:

* Polygon network is fully integrated.
* Optimal storage and free from excessive amount of redundant information.
* Neighbors are identified.
* Polygon in polygon can be represented.

**5). GIS Data Models:-** Geographical variations are infinitely complex and must be represented in terms of discrete objects. Conversion of real world geographical variation into discrete objects is done through data models. It represents the linkage between the real world domain of geographic data and computer representation of these features.

1). Raster data model:

- Divides the entire area into rectangular grid cells.

- Each cell contains a single value and every location corresponds to a cell.

- One set of cells and associated values is a LAYER.

2).Vector Data model:

- Uses discrete line segments or points represented by their explicit xy coordinates to identify locations.

- Discrete objects (boundaries, streams) are formed by connecting line segments.

- Area is defined by set of line segments.

**F). GPS (Global Positioning System)**

**1). Introduction:-** The Global Positioning System (GPS) is the only fully functional Global Navigation Satellite System (GNSS). Utilizing a constellation of at least 24 Medium Earth Orbit satellites that transmit precise microwave signals, the system enables a GPS receiver to determine its location, speed, direction, and time. Developed by the United States Department of Defense, GPS is officially named NAVSTAR GPS. L – band of the microwave region (1-2 GHz) is being used by the GPS system.

**2). Basic Operation Method of GPS:-**

- A typical GPS receiver calculates its position using the signals from four or more GPS satellites. Four satellites are needed since the process needs a very accurate local time, more accurate than any normal clock can provide, so the receiver internally solves for time as well as position. In other words, the receiver uses four measurements to solve for 4 variables - x, y, z, and t. These values are then turned into more user-friendly forms, such as latitude/longitude or location on a map, and then displayed to the user.

- Each GPS satellite has an atomic clocks, and continually transmits messages containing the current time at the start of the message, parameters to calculate the location of the satellite (the ephemeris), and the general system health (the almanac). The signals travel at a known speed - the speed of light through outer space, and slightly slower through the atmosphere. The receiver uses the arrival time to compute the distance to each satellite, from which it determines the position of the receiver using geometry and trigonometry.

-Although four satellites are required for normal operation, fewer may be needed in some special cases. For example, if one variable is already known (for example, a sea-going ship knows its altitude is 0), a receiver can determine its position using only three satellites.

**3). Applications of GPS:-** The Global Positioning System, while originally a military project is considered a dual-use technology, meaning it has significant applications for both the military and the civilian industry.

Military

- Navigation: GPS allows soldiers to find objectives in the dark or in unfamiliar territory, and to coordinate the movement of troops and supplies.

-Target tracking: Various military weapons systems use GPS to track potential ground and air targets before they are flagged as hostile. These weapon systems pass GPS co-ordinates of targets to precision-guided munitions to allow them to engage the targets accurately. Military aircraft, particularly those used in air-to-ground roles use GPS to find targets

-Missile and projectile guidance: GPS allows accurate targeting of various military weapons including ICBMs, cruise missiles and precision-guided munitions.

-Search and Rescue: Downed pilots can be located faster if they have a GPS receiver.

Civilian

-Many civilian applications benefit from GPS signals, using one or more of three basic components of the GPS: absolute location, relative movement, and time transfer.

-The ability to determine the receiver's absolute location allows GPS receivers to perform as a surveying tool or as an aid to navigation. The capacity to determine relative movement enables a receiver to calculate local velocity and orientation, useful in vessels or observations of the Earth.

-GPS enables researchers to explore the Earth environment including the atmosphere, ionosphere and gravity field. GPS survey equipment has revolutionized tectonics by directly measuring the motion of faults in earthquakes.

**PART -II**

**Online Courses**

**A). Introduction:**

**1.) Purpose:** The purpose of this web application is that any person standing in front of Internet (may be student, or one who want to learn something about a particular subject) can get information he/she wants; all he/she has to do is just open up the web-site and choose the subject he/she is looking for (i.e. user friendly to use).

The content of web-site is updated by any authorized user time to time. This involve the term Dynamic in the Web-site.

**2.) Scope:**

- Create different system users and assign different roles with related permissions.

- Manage all the Information about Authorized use and the level of Authentication.

- Manage the details of registered user.

- Maintain the services provided to the user.

- Activities like updation, creations done in the system by the system users will be maintained in the form of logs for auditing and maintaining the integrity of the system.

**3) Abbreviations:**

Contact details:Details of contact persons associated with the Administrator.

a.)PHP :

- PHP stands for “personal home page hypertext preprocessor”.

- PHP is a “server side scripting language”.

- PHP scripts are executed on server.

- PHP is an open source software.

- PHP is free to download and use.

b.)HTML: **“**Hypertext Markup Language” is a markup language used to design static web pages.

c.)HTTP: “Hypertext Transfer Protocol” is a transaction oriented client/server protocol between web browser & a Web Server.

d.)HTTPS: **“**Secure Hypertext Transfer Protocol” is a HTTP over SSL (secure socket layer).

e.)TCP/IP: **“**Transmission Control Protocol/Internet Protocol”, the suite of communication protocols used to connect hosts on the Internet. TCP/IP uses several protocols, the two main ones being TCP and IP.

**4) References:**

- IEEE SRS Format

- Problem Definition (Provided by ISRO)

**5) Technologies:**

- PHP : Application Architecture

- MYSQL: Database

- APACHE: Web-Server

- Relational Database: Design Tool

**B) Overall Description:** Describe the general factors that affect the product and its requirements.

**1) Product Perspective:**

- The web pages (HTML/PHP) are present to provide the user interface on customer client side. Communication between customer and server is provided through HTTP/HTTPS protocols.

- The Client Software is to provide the user interface on system user client side and for this TCP/IP protocols are used.

- On the server side web server is for APACHE and database server is for storing the information.

|  |  |  |
| --- | --- | --- |
| Application | Client-side | Server-Side |
| Web-technology | HTML | PHP |
| Server | --------- | Apache |
| Database | ---------- | MYSQL |

**2) Software Interface:**

Client on Intranet:Client Software, Web Browser, OS(any)

Web Server:Apache, Operating System (any)

Data Base Server:MYSQL, Operating System (any)

Development End:PHP, HTML,OS (Windows), Apache Web Server.

**3) Communication Interface:**

- Client on Internet will be using HTTP/HTTPS protocol.

- Client on Intranet will be using TCP/IP protocol.

**4) User Characteristics:** Every user should be comfortable of working with computer and net browsing. He must have basic knowledge of English too.

**On-Line Courses Blue-Print**

**Public web-site Staff-area**

**Main Web-Site**

**-navigation**

**-page content**

**Login**

**-username**

**-password**

**Menu**

**-Manage content**

**-Add-user**

**-Logout**

**Logout**

* **Do logout**
* **Back to login page**

**Manage content**

**Navigation**

**Subject CRUD**

**Page CRUD**

**Add user**

* **user CRUD**

**5) Constraints:**

- GUI is only in English.

- Login and password is used for identification of Authorized User.

- This system is working for single server.

- There is no maintainability of back up so availability will get effected.

- Limited to HTTP/HTTPS.

**6) USE CASE DIAGRAM**

Delete & Update

Web contents

Delete & Add New Authorized User

Create & Read

Web contents

View Online

Web contents

Over all view:-

**Administratr**

**(Level - 1)**

**Web Viewer**

**Staff Area (Level - 2)**

Administrator:Responsible for managing system users, viewing logs and managing standard groups of the system.

Manage System Users:The Administrator will create different roles. The system users will be created and will be assigned with the different roles. More than one task and permissions can be

granted or revoked from the system users.

**FLOW CHART**

After Successful Login

Select

Select either page or subject

Select

Add Subject

Add Page?

Add Page

Edit Page

Edit Subject

A

A

A

Logout?

A

A

A

Logout?

Yes

No

Select either page or subject

Select?

Add New Subject Edit

Add Subject

A

A

A

Edit Subject

Edit Page

A

Add Page?

Add Page

Add New

Page

No

Page Subject

Yes

**7) Database Design:-**

Description: **-** For Designing the Database for online course we follow the traditional Relational database management Technique.

The data is Organized in form of Tables and the relationship between them is also represented by tables.

Tables and their Structure: -

I.)Table Name:- User

This Table Consists the Information about all the Authorized Users When a person wants to make some changes in the Web application he/she should first go threw an authorization process. If he/she is authorized then he /she can come to the staff area page elsewhere he/she is thrown out and particular action should be take.

Structure:-

|  |  |
| --- | --- |
| Id | Auto Increment number |
| Username | String |
| Password | Encoded(String) |

The table should also be used to create new authorized users; When a new user is created he/she must be given some privileges.

II.)Table Name:- Subject

Our this table contain the subject’s header that we use to teach public throw our web site like java, C++, C, Visual-basic , Dot-net etc.

Structure:-

|  |  |
| --- | --- |
| Id | Auto increment number |
| Subject | String |
| Position | Number |
| Visible | Boolean |

III.)Table Name:-Page

This table consists the content of the subject .The subject id field of the table works as a foreign key to the subject table.

Structure:-

|  |  |
| --- | --- |
| Id | Auto increment number |
| Sub\_id | Subject id related to table subject |
| Page-name | String |
| Position | Number |
| Visible | Boolean |
| Page content | Text |

**\*\*\*** In this next figure; we are representing the relationship between Subject and Page table. Here arrow between Subject and Page table on Id and Subject Id; representing that both are same. i.e. We will communicate with Subject and Page table throw this common attribute**.**

|  |
| --- |
| **PAGE** |
| Id |
| Subject Id |
| Page Name |
| Position |
| Visible |
| Content |

|  |
| --- |
| **SUBJECT** |
| Id |
| Subject Name |
| Position |
| Visible |

E-R Model :-

User

Foreign Key:- Referencing Subject

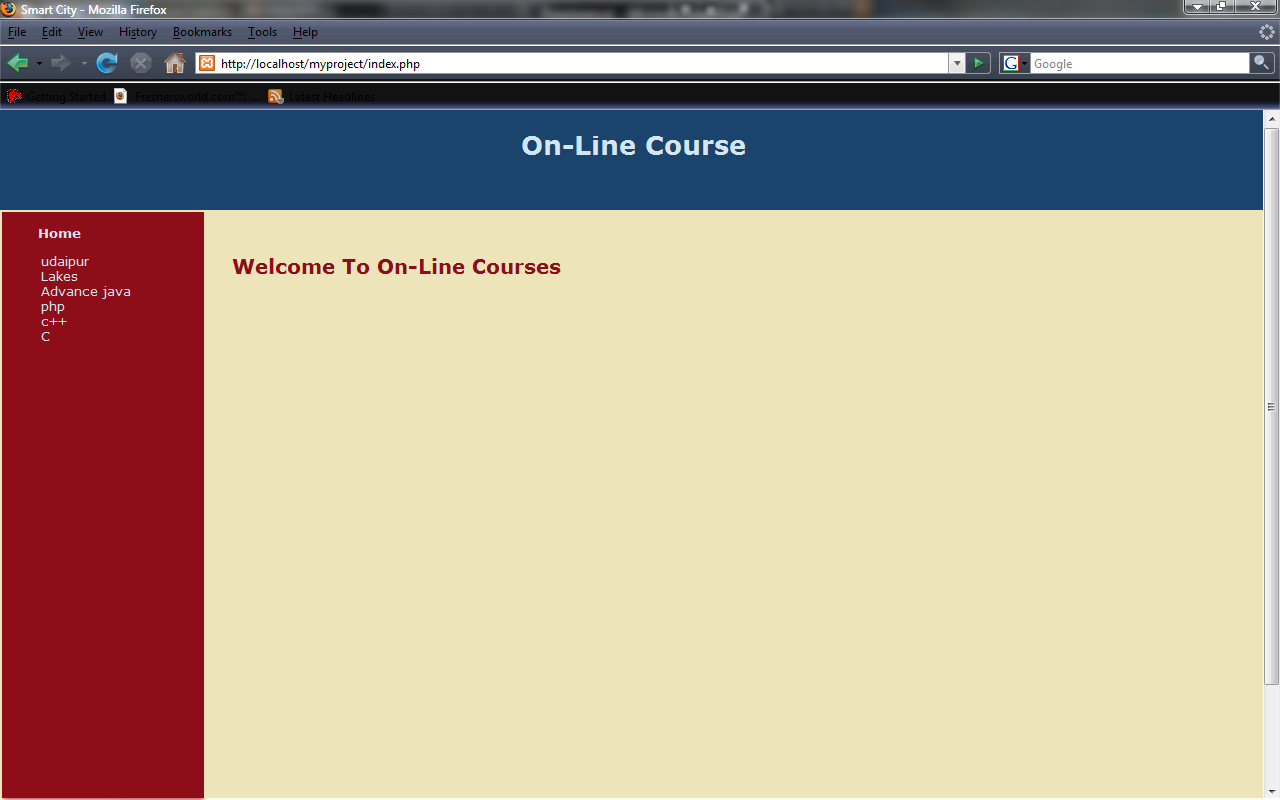
**Subject**

**Sub\_Page**

**Page**

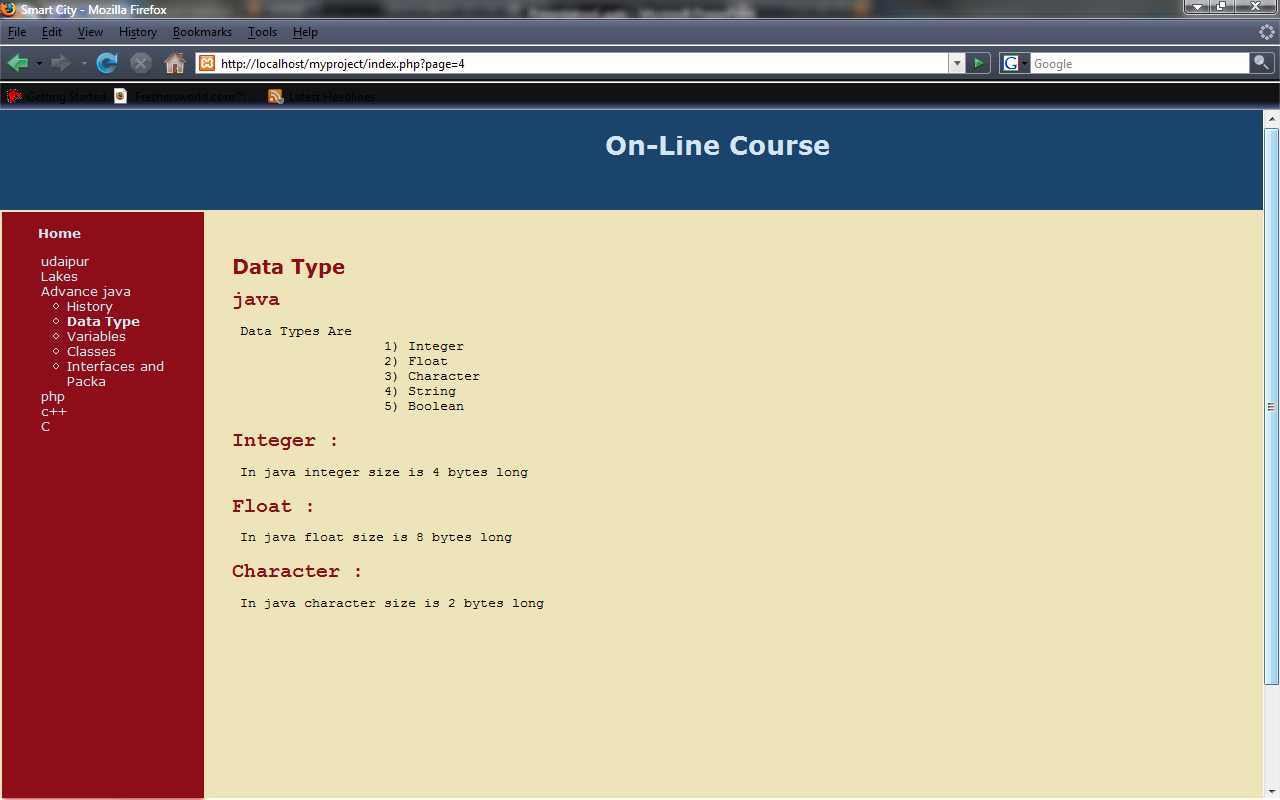
**8) Snap shots of Website:-**

This is first page of website (user view).



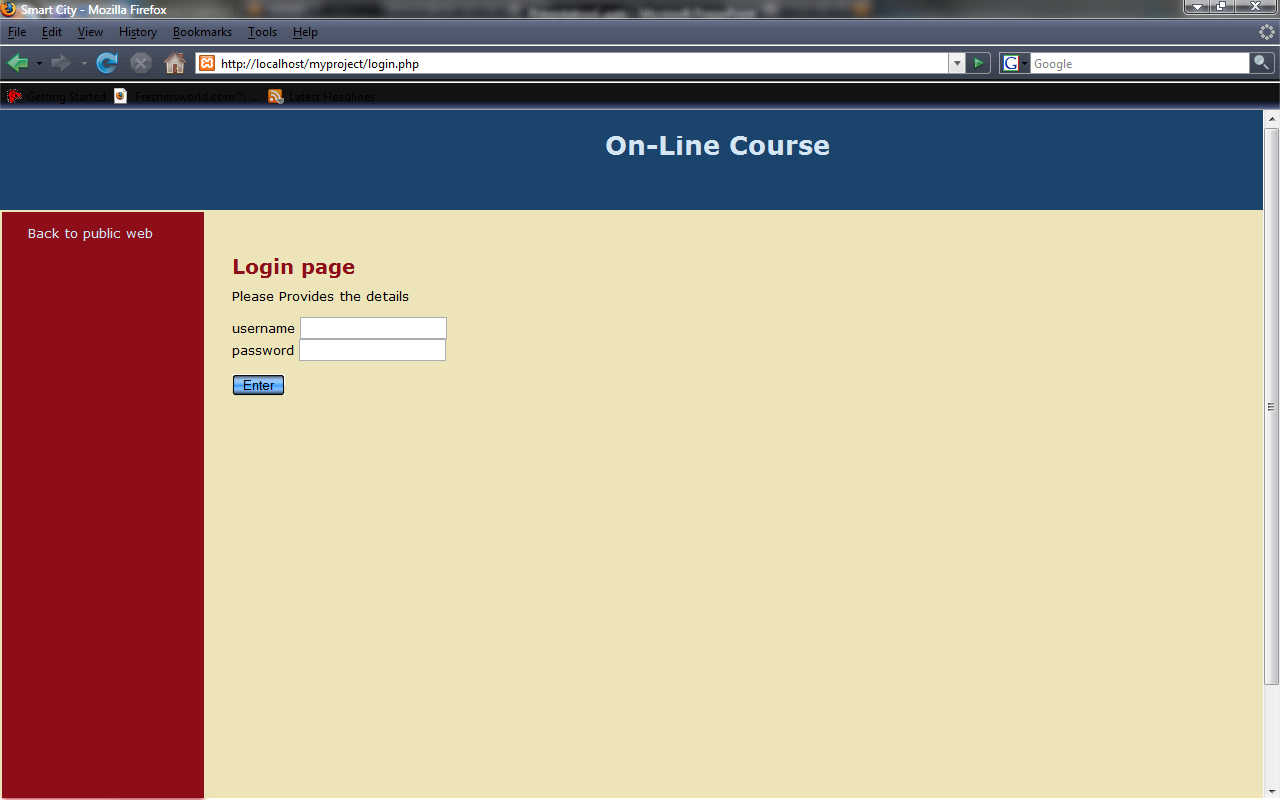
This snapshot shows that as user selects any subject (from navigation panel) for study. Its related articles of that particular subject will display.

like here; as user selects Java (subject) its corresponding articles will display.



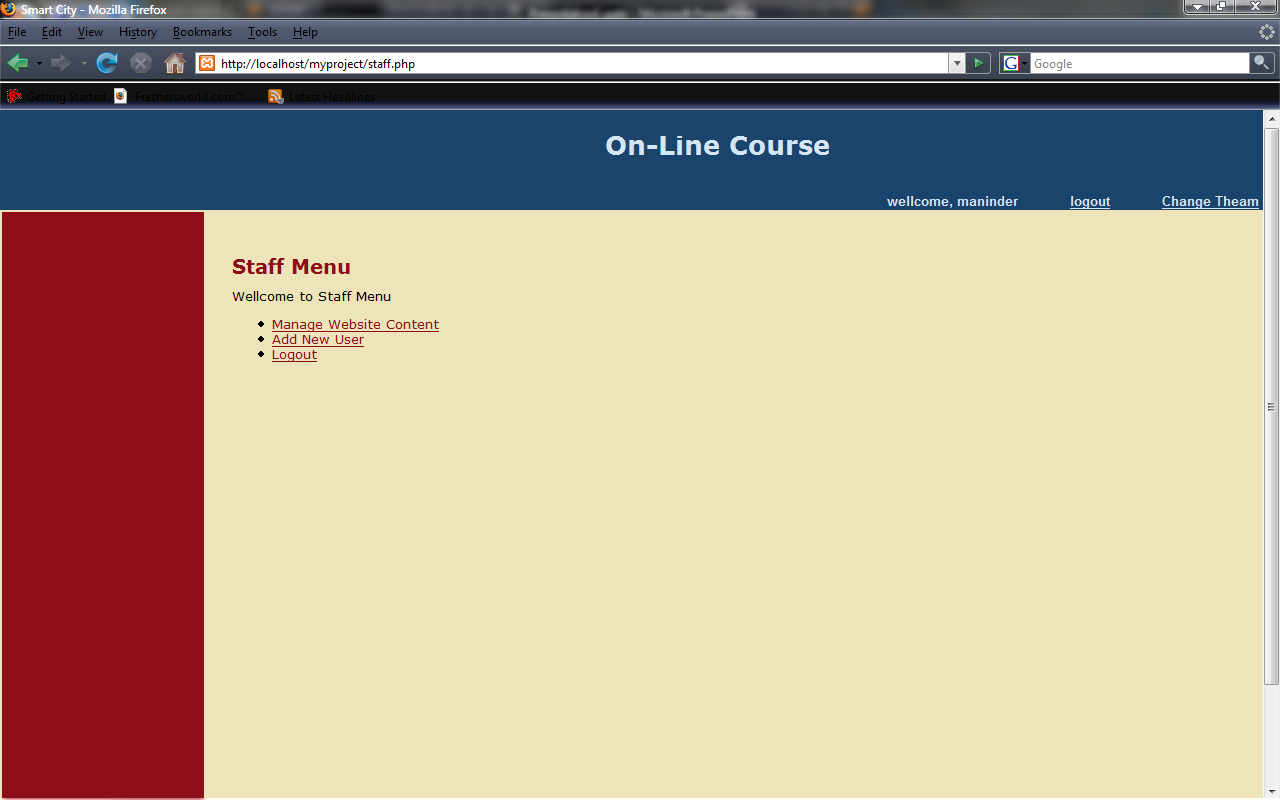
This is the login page for the Administrator. Which requires User name & password for authentication.

As Administrator provides his/her correct User Name and Password. He/she will redirected into the staff area.

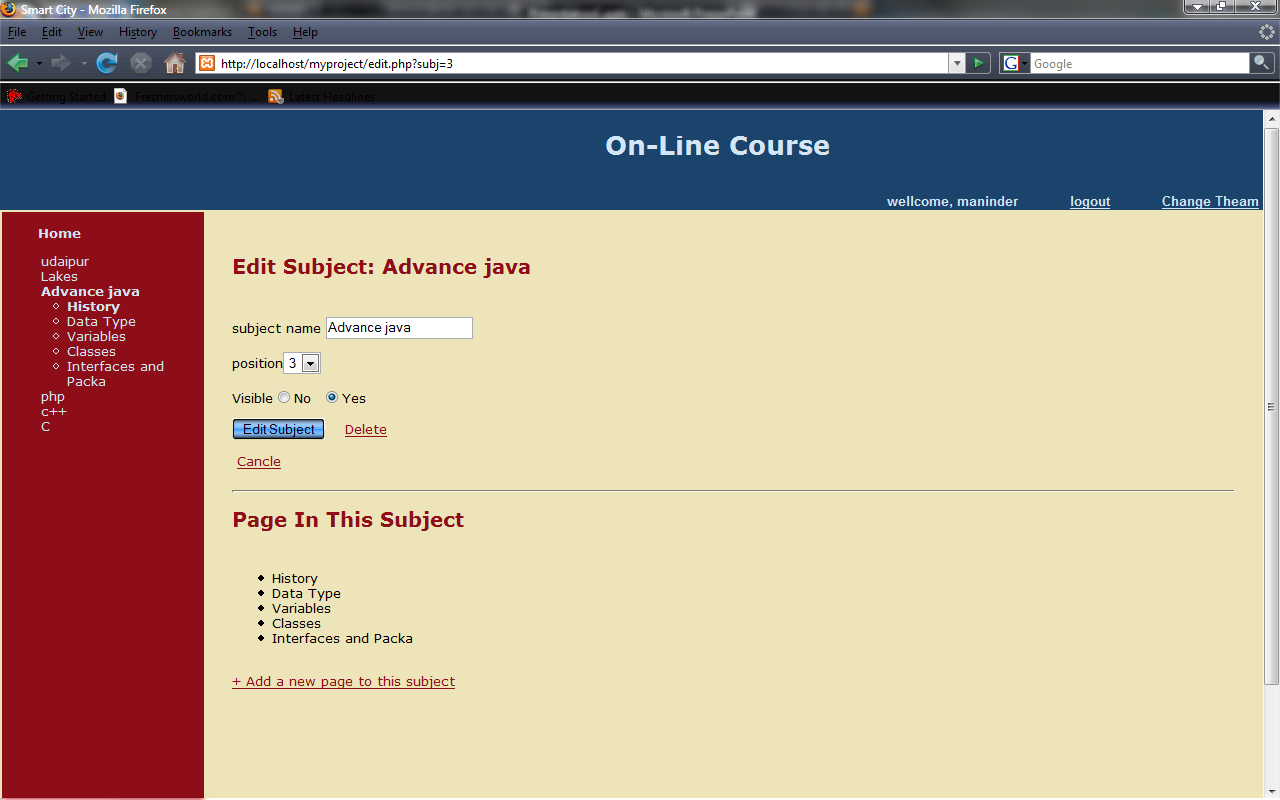


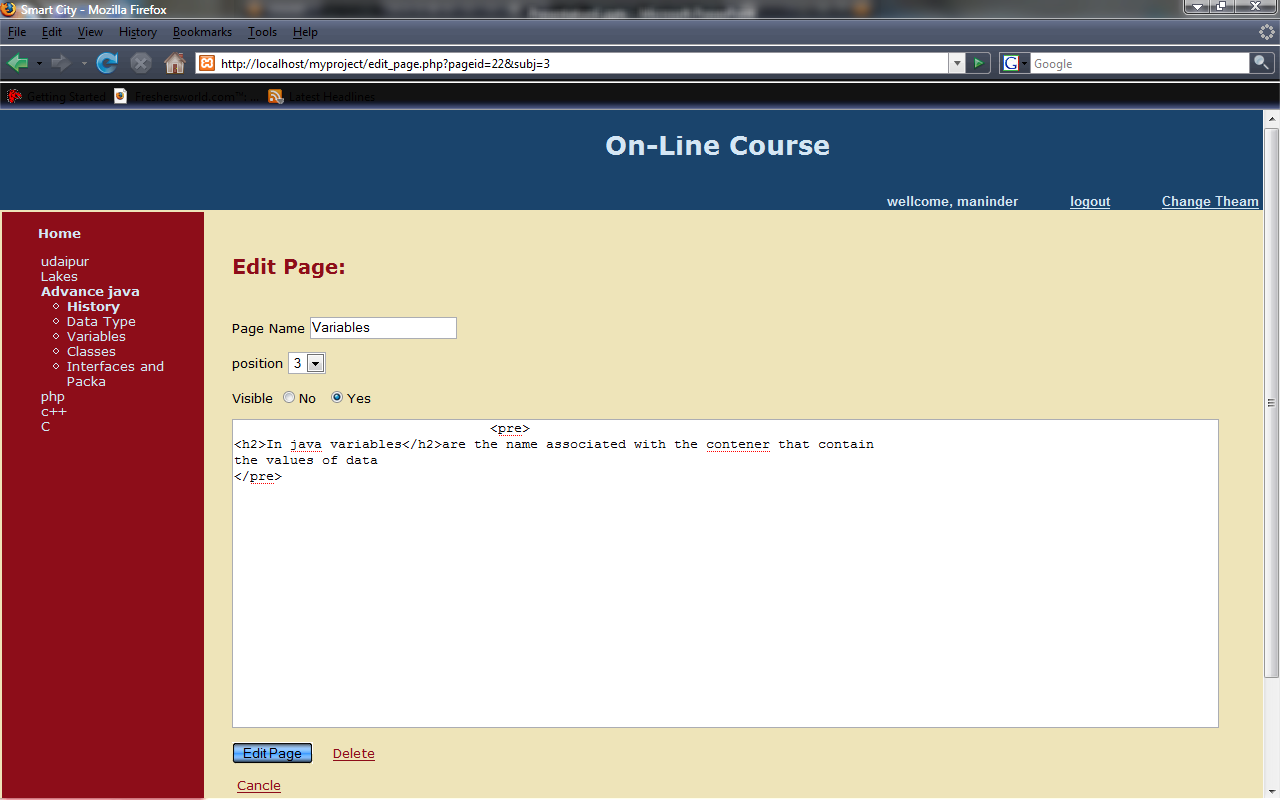
In staff area; he/she will get three option

* Manage contents : To add, delete, update new subject or page.
* Add new user : To add new user(who also get power as administrator)
* Logout : To break his/her session.



As mentioned before; here administrator can edit any subject



As mentioned before here administrator edit/delete the articles. 

**9) Coding:-**

CSS (cascading style sheet):- For providing the attractive user interface(UI) CSS files are used in any web document. It is an essential part in “designing phase” of a project.

html { height: 100%; width: 100%;}

body

{

height: 100% ;

width: 100% ;

background: #D4E6F4;

margin: 0px;

padding : 0px;

border: 0px;

font-size: 13px;

line-height: 15px;

font-family: Verdana,Arial,Helvetica,sans-serif;

}

#page

{

padding: 2em;

vertical-align:top;

background: #EEE4B9;

}

#page h2

{

color: #8D0D19;

margin-top: 1em;

}

table,tr ,td

{

font-size: 13px;

line-height:15px;

vertical-align: top;

boder-collapse: collapse;

}

#page h3

{

color: #8D0D19;

}

a

{

color: #8D0D19;

}

#header

{

height: 100px ;

background: #1A446C;

color: #D4E6F4;

padding :0px;

margin: 0px;

text-align: left;

}

#header h1

{

padding: 1em;

margin: 0px;

}

#header a

{

color: #D4E6F4;

}

#main

{

height: 600px auto;

width:100%;

background: #EEE4B9;

padding: 0px;

margin: 0px;

}

#footer

{

height: 80px;

text-align: center;

padding: 1em;

color: #D4E6F4;

background:#1A446C;

}

#structure

{

height :600px;

width: 100%;

}

#navigation

{

width: 150px;

background: #8D0D19;

padding:1em 2em;

color: #D4E6F4;

}

#navigation a

{

color: #D4E6F4;

text-decoration: none;

}

ul.subject

{

list-style:none;

padding-left: 1em;

}

ul.page

{

list-style:circle;

padding-left: 2em;

}

.sel

{

font-weight: bold;

}

#log .logout

{

margin-left:70%;

vertical-align:top;

margin-top:5px;

}

#log

{

color:#D4E6F4;

margin-left:70%;

font-size:12px;

font-weight:bold;

font-family:sans-serif,fantasy;

vertical-align:top;

margin-top:5px;

}

**INCLUDE FILES**

**1. Connection.php**

Browser Apache

Contain PHP Source Code

Server

PHP Engine

Data base

Return Plane HTML

to Browser

<?php

$link=mysql\_connect("localhost","root","");

mysql\_select\_db("govind",$link);

?>

1. **Close.php**

<?php

mysql\_close($link);

?>

1. **Footer.php**

<div id="footer"><h2>Copy right 2009</h2></div>

</body>

</html>

1. **Functions.php**

<?php

**function work\_on\_slash($input)**

{

$magic\_quotes\_active=get\_magic\_quotes\_gpc();

$newverson=function\_exists("mysql\_real\_escape\_string");

if($newverson)

{

if($magic\_quotes\_active)

{

$input=stripcslashes($input);

$input=mysql\_real\_escape\_string($input);

}

else

{

if(!$magic\_quotes\_active)

$input=addcslashes($input);

}

return $input;

}

**function get\_subject($public=true)**

{

global $link;

$query="select \* from subject";

if($public)

$query.= " WHERE visible=1 ";

$query.=" order by position asc";

$result=mysql\_query($query,$link);

if(confirm\_query($result))

return $result;

}

**function confirm\_query($var)**

{

if(!$var)

{

die("query operation faild".mysql\_error());

return false;

}

else return true;

}

**function get\_page()**

{

global $link;

$query="select \* from page order by position asc";

$result=mysql\_query($query,$link);

if(confirm\_query($result))

return $result;

}

**function get\_page\_by\_id($sub\_id,$public=true)**

{

global $link;

$query="select \* from page where sub\_id={$sub\_id}";

if($public)

$query.=" AND visible=1 ";

$query.=" order by position asc";

$result=mysql\_query($query,$link);

if(confirm\_query($result))

return $result;

}

**function get\_sub\_by\_id($subj\_id)**

{

global $link;

$query="select \* from subject where id={$subj\_id} LIMIT 1";

$r=mysql\_query($query,$link);

if($rr=mysql\_fetch\_array($r))

{

return $rr;

}

else return null;

}

**function get\_page\_th\_id($page\_id)**

{

global $link;

$query="select \* from page where id={$page\_id} LIMIT 1";

$r=mysql\_query($query,$link);

if($rr=mysql\_fetch\_array($r))

return $rr;

else return null;

}

**function get\_default\_page($subj)**

{

$pageset=get\_page\_by\_id($subj);

if($firstpage=mysql\_fetch\_array($pageset))

return $firstpage;

else NULL;

}

**function getnavigation()**

{

global $sel\_page;

global $sel\_subj;

if(isset($\_GET['subj']))

{

$sel\_subj=get\_sub\_by\_id($\_GET['subj']);

$sel\_page=get\_default\_page($sel\_subj['id']);

}

elseif(isset($\_GET['page']))

{

$sel\_subj=NULL;

$sel\_page=get\_page\_th\_id($\_GET['page']);

}

else

{

$sel\_page=NULL;

$sel\_subj=NULL;

}

}

**function navigation($sel\_subj,$sel\_page)**

{

echo "&nbsp;&nbsp;<a href=\"content.php\"><b>Home</b></a>";

echo "<ul class=\"subject\">";

$result=get\_subject(false);

while($row=mysql\_fetch\_array($result))

{

echo "<li ";

if($row["id"]==$sel\_subj['id'])

echo "class=\"sel\" ";

echo "><a href=\"edit.php?subj=".urlencode($row["id"]).

"\">{$row["menu"]}</a></li>";

if($row['id']==$sel\_subj['id']||$sel\_page['sub\_id']==$row['id'])

{

$page\_set=get\_page\_by\_id($row["id"],false);

echo "<ul class=\"page\">";

while($page\_row=mysql\_fetch\_array($page\_set))

{

echo "<li ";

if($page\_row["id"]==$sel\_page['id'])

{

echo "class=\"sel\" ";

}

echo "><a href=\"pageinfo.php?page=".urlencode($page\_row["id"]).

"\">{$page\_row["menu"]}</a></li>";

}

echo "</ul>";

}

}

echo "</ul>";

}

**function publicnavigation($sel\_subj,$sel\_page)**

**{**

echo "&nbsp;&nbsp;<a href=\"index.php\"><b>Home</b></a>";

echo "<ul class=\"subject\">";

$result=get\_subject();

while($row=mysql\_fetch\_array($result))

{

echo "<li ";

if($row["id"]==$sel\_subj['id'])

{

echo "class=\"sel\" ";

}

echo "><a href=\"index.php?subj=".urlencode($row["id"]).

"\">{$row["menu"]}</a></li>";

if($row['id']==$sel\_subj['id']||$sel\_page['sub\_id']==$row['id'])

{

$page\_set=get\_page\_by\_id($row["id"]);

echo "<ul class=\"page\">";

while($page\_row=mysql\_fetch\_array($page\_set))

{

echo "<li ";

if($page\_row["id"]==$sel\_page['id'])

{

echo "class=\"sel\" ";

}

echo "><a href=\"index.php?page=".urlencode($page\_row["id"]).

"\">{$page\_row["menu"]}</a></li>";

}

echo "</ul>";

}

}

echo "</ul>";

}

?>

1. **Header.php**

<html>

<head>

<title>Smart City</title>

<link type="text/css" href="stylesheets/public.css" rel="stylesheet" />

</head>

<boby>

<div id="header">

<h1><marquee behaviour="alternate" >On-Line Course</marquee></h1></div>

1. **Header1.php**

<html>

<head>

<title>Smart City</title>

<link type="text/css" href="stylesheets/public.css" rel="stylesheet" />

</head>

<boby>

<div id="header">

<h1><marquee behaviour="alternate" >On-Line Course</marquee></h1>

<table id="log">

<tr>

<td>wellcome, <?php $name=$\_SESSION['name'];

echo $name;?>

</td>

<td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

</td>

<td><a href="logout.php">logout</a></td>

<td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

</td>

<td><a href="theam.php">Change Theam</td>

</tr>

</table>

</div>

**7. Session.php**

<?php

session\_start();

function confirm\_login()

{

if(!isset($\_SESSION['name']))

{

header("Location: login.php");

exit;

}

}

?>

**MAIN FILES:-**

1. **Client Perspective File**---------------------------------------------------------------
2. **Index.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php getnavigation(); ?>

<?php include("includes/header.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<?php publicnavigation($sel\_subj,$sel\_page); ?> <br/>

</td>

<td id="page">

<?php

if(!is\_null($sel\_page))

{

echo "<h2>{$sel\_page['menu']}</h2>";

echo "{$sel\_page['about']}";

}

else

echo "<h2>Welcome To On-Line Courses<h2>";

?>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php"); ?>

<?php include("includes/close.php") ?>

1. **Administrator Perseptive Files**-----------------------------------------------------
2. **Login.php**

Input (login name & Password)

Matching

Found?

Database

No

Yes

<?php include("includes/connections.php")?>

<?php include("includes/functions.php")?>

<?php require\_once("includes/session.php");?>

<?php if(isset($\_POST['submit']))

{

$username=$\_POST['username'];

$password=$\_POST['password'];

$query="select \* from user where username='{$username}' and password='{$password}' ";

$row=mysql\_query($query);

if(mysql\_num\_rows($row)==1)

{

$\_SESSION['name']=$username;

header("Location: staff.php");

exit;

}

else

$msg="you have entered wrong usename or password please check<br/> CAPSLOCK is on or off";

}

?>

<?php include("includes/header.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<a href="index.php">Back to public web</a></td>

<td id="page">

<h2>Login page</h2>

<p> Please Provides the details</p>

<form method="POST" action="login.php">

username <input type="text" name="username" value="" /><br/>

password <input type="password" name="password" /><br/>

<p><input type="submit" value="Enter" name="submit" /></p><br/>

<?php echo $msg; ?>

</form>

</td>

</tr>

</table>

</div>

<?phpinclude("includes/footer.php");?>

1. **Adduser.php**

<?php include("includes/connections.php")?>

<?php include("includes/functions.php")?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php if(isset($\_POST['submit']))

{

if(empty($\_POST['username'])||empty($\_POST['password']))

$msg="none of username or password is left empty";

else

{

$username=$\_POST['username'];

$password=$\_POST['password'];

$query="INSERT into user (username,password) values ('$username','$password') ";

mysql\_query($query,$link);

$msg="user successfully created";

}

}

?>

<?php include("includes/header1.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<a href="staff.php">Back to Staff page</a></td>

<td id="page">

<h2>Add new user</h2>

<p> Please Provides the details</p>

<form method="POST" action="adduser.php">

username <input type="text" name="username" value="" /><br/>

password <input type="password" name="password" /><br/>

<p><input type="submit" value="Create User" name="submit" /></p><br/>

<?php echo $msg; ?>

</form>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php");

?>

1. **Content.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php getnavigation(); ?>

<?php include("includes/header1.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<?php navigation($sel\_subj,$sel\_page); ?>

<br/>

<a href="newsubj.php">+ Add a New Subject</a>

</td>

<td id="page">

<h2>Content Area:</h2>

<?php

if (!is\_null($sel\_subj))

echo "{$sel\_subj['menu']}";

elseif(!is\_null($sel\_page))

{

echo "{$sel\_page['about']}";

echo "<p/>";

echo "<a href=\"edit\_page.php\">Edit Page Content</a>";

}

else

echo "Select a Subject or Page to Edit";

?>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php"); ?>

<?php include("includes/close.php") ?>

1. **Deletepage.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php

$id=$\_GET['pageid'];

//echo $id;

$query="DELETE FROM page WHERE id={$id} LIMIT 1";

mysql\_query($query,$link);

if(mysql\_affected\_rows()==1)

{

header("Location: content.php");

exit;

}

else

{

echo "<p>page deletion error.mysql\_error().</p>";

echo "<a href=content.php>Return to main page</a>";

}

?>

<?php include("includes/close.php") ?>

1. **Deletesubj.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php

$id=$\_GET['subj'];

//echo $id;

$query="DELETE FROM subject WHERE id={$id} LIMIT 1";

mysql\_query($query,$link);

if(mysql\_affected\_rows()==1)

{

header("Location: content.php");

exit;

}

else

{

echo "<p>subject deletion error.mysql\_error().</p>";

echo "<a href=content.php>Return to main page</a>";

}

?>

<?php include("includes/close.php") ?>

1. **Edit.php**

<?php ob\_start(); ?>

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php

if(isset($\_POST['submit']))

{

//$id=($\_GET['subj']);

// echo $id;

$error=array();

$requir\_field=array("menu","position");

foreach($requir\_field as $a)

{

if(!isset($\_POST[$a])||empty($\_POST[$a]))

$error[]=$a;

}

if(empty($error))

{

$id=($\_GET['subj']);

//echo $id;

$menu=($\_POST['menu']);

//echo $menu;

$position=$\_POST['position'];

//echo $position;

$visible=$\_POST['visible'];

$query="UPDATE subject SET menu='{$menu}',position={$position},visible={$visible}

WHERE id={$id}";

$result=mysql\_query($query,$link);

if(confirm\_query($result))

{ }

else

{

echo "updation faild";

}

}

}

?>

<?php getnavigation(); ?>

<?php include("includes/header1.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<?php navigation($sel\_subj,$sel\_page); ?>

</td>

<td id="page">

<h2>Edit Subject:<?php echo " ".$sel\_subj['menu']; ?></h2>

<br/>

<form action="edit.php?subj=<?php echo urlencode($sel\_subj['id']); ?>"method="POST">

<P>subject name <input type="text" name="menu" value="<?php echo $sel\_subj['menu'];?>" /></P>

<P>position<select name="position">

<?php $s=get\_subject();

$sub\_count=mysql\_num\_rows($s);

for($count=1;$count<=$sub\_count+1;$count++)

{

echo "<option value=\"{$count}\"";

if($sel\_subj['position']==$count)

echo "selected";

echo ">{$count}</option>";

}

?>

</select>

</p>

<p>Visible<input type="radio" value="0" name="visible"

<?php if($sel\_subj['visible']==0) {echo "checked";}?>/>No

&nbsp;<input type="radio" value="1" name="visible"

<?php if($sel\_subj['visible']==1) {echo "checked";}?>/>Yes

</p>

<input t ype="submit" name="submit" value="Edit Subject"/>

&nbsp;&nbsp;

<a href="deletesubj.php?subj=<?php echo urlencode($sel\_subj['id']); ?>" onClick="return confirm('Are you sure?');">

Delete</a>

</form>

&nbsp;<a href="content.php">Cancle</a>

<br/>

<br/>

<hr/><h2>Page In This Subject</h2>

&nbsp;&nbsp;

<?php

$query="select \* from page where sub\_id={$sel\_subj['id']} order by position asc";

$row=mysql\_query($query,$link);

echo "<ul>";

while($r=mysql\_fetch\_array($row))

{

echo "<li>";

echo $r[2];

echo "</li>";

}

echo "</ul>";

?>

<br/>

<a href="new\_page.php?subj=<?php echo urlencode($sel\_subj['id']); ?>">+ Add a new page to this subject</a>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php"); ?>

<?php include("includes/close.php") ?>

<?php ob\_end\_flush(); ?>

1. **Edit\_page.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php

if(isset($\_POST['submit']))

{

$error=array();

$requir\_field=array("menu","position","about");

foreach($requir\_field as $a)

{

if(!isset($\_POST[$a])||empty($\_POST[$a]))

$error[]=$a;

}

if(empty($error))

{

$id=($\_GET['pageid']);

$sub\_id=($\_GET['subj']);

//echo $sub\_id;

$menu=work\_on\_slash($\_POST['menu']);

$position=$\_POST['position'];

$visible=$\_POST['visible'];

$about=work\_on\_slash($\_POST['about']);

//echo $about;

$query="UPDATE page SET sub\_id={$sub\_id},menu='{$menu}',position={$position},

visible={$visible},

about='{$about}' WHERE id={$id}";

$result=mysql\_query($query,$link);

if(confirm\_query($result))

{

header("Location:content.php");

exit;

}

else

{

echo "Updation faild";

}

}

}

?>

<?php getnavigation(); ?>

<?php include("includes/header1.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<?php navigation($sel\_subj,$sel\_page);?>

<?php $pageid=$\_GET['pageid'];

$sub\_id=$\_GET['subj'];

$subjinfo=get\_sub\_by\_id($sub\_id);

$pageinfo=get\_page\_th\_id($pageid);

//echo $pageinfo['menu'];

?>

</td>

<td id="page">

<h2>Edit Page:<?php //echo " ".$sel\_subj['menu']; ?></h2>

<br/>

<form action="edit\_page.php?pageid=<?php echo urlencode($pageinfo['id']);?>&

subj=<?php echo urlencode($subjinfo['id']);?>" method="POST">

<p>Page Name <input type="text" name="menu" value="<?php echo $pageinfo['menu'];?>" /></p>

<p>position

<select name="position">

<?php $s=get\_page\_by\_id($subjinfo['id']);

$sub\_count=mysql\_num\_rows($s);

for($count=1;$count<=$sub\_count;$count++)

{

echo "<option value=\"{$count}\"";

if($pageinfo['position']==$count)

echo "selected";

echo ">{$count}</option>";

}

?>

</select>

</p>

<p>Visible

<input type="radio" value="0" name="visible"

<?php if($pageinfo['visible']==0) {echo "checked";}?>/>No

&nbsp;<input type="radio" value="1" name="visible"

<?php if($pageinfo['visible']==1) {echo "checked";}?>/>Yes

</p>

<p>

<textarea name="about" cols=120 rows=18>

<?php echo $pageinfo['about'];?>

</textarea>

</p>

<input type="submit" name="submit" value="Edit Page"/>

&nbsp;&nbsp;

<a href="deletepage.php?pageid=<?php echo urlencode($pageid); ?>" onClick="return confirm('Are you sure?');">

Delete

</a>

</form>

&nbsp;<a href="content.php">Cancle</a>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php"); ?>

<?php include("includes/close.php") ?>

1. **Logout.php**

<?php

session\_start();

session\_destroy();

header("Location: login.php");

exit;

?>

1. **New\_page.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php

if(isset($\_POST['submit']))

{

$error=array();

$requir\_field=array("menu","position","about");

foreach($requir\_field as $a)

{

if(!isset($\_POST[$a])||empty($\_POST[$a]))

$error[]=$a;

}

if(empty($error))

{

$id=($\_GET['subj']);

$menu=work\_on\_slash($\_POST['menu']);

$position=$\_POST['position'];

$visible=$\_POST['visible'];

$about=work\_on\_slash($\_POST['about']);

$query="INSERT into page(sub\_id,menu,position,visible,about) values($id,'$menu',$position,$visible,'$about')";

$result=mysql\_query($query,$link);

if(confirm\_query($result))

{

header("Location:content.php");

exit;

}

else

{

echo "can not add new page";

}

}

}

?>

<?php getnavigation(); ?>

<?php include("includes/header1.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<?php navigation($sel\_subj,$sel\_page); ?>

</td>

<td id="page">

<h2>Adding New Page:</h2>

<br/>

<form action="new\_page.php?subj=<?php echo urlencode($sel\_subj['id']);?>" method="POST">

<P>Page Name <input type="text" name="menu" value="" /></P>

<P>position

<select name="position">

<?php $s=get\_page\_by\_id($sel\_subj['id']);

$sub\_count=mysql\_num\_rows($s);

for($count=1;$count<=$sub\_count+1;$count++)

{

echo "<option value=\"{$count}\"";

if($sel\_subj['position']==$count)

echo "selected";

echo ">{$count}</option>";

}

?>

</select>

</p>

<p>Visible<input type="radio" value="0" name="visible"

<?php if($sel\_page['visible']==0) {echo "checked";}?>/>No

&nbsp;<input type="radio" value="1" name="visible"

<?php if($sel\_page['visible']==1) {echo "checked";}?>/>Yes

</p>

<p>Page Content<textarea name="about" cols=120 rows=18 value="" ></textarea></p>

<input type="submit" name="submit" value="Add Page"/>

</form>

&nbsp;<a href="content.php">Cancle</a>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php"); ?>

<?php include("includes/close.php") ?>

1. **News.php** //for new subject.

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php

$error=array();

if(!isset($\_POST['menu'])||empty($\_POST['menu']))

$error[]='menu';

if(!isset($\_POST['position'])||empty($\_POST['position']))

$error[]='position';

//if(!isset($\_POST['visible'])||empty($\_POST['visible']))

//$error[]='visible';

if(!empty($error))

{

header("Location: newsubj.php");

exit;

}

?>

<?php

$menu=work\_on\_slash($\_POST['menu']);

$position=$\_POST['position'];

$visible=$\_POST['visible'];

?>

<?php

$query="insert into subject (menu,position,visible) values('$menu',$position,$visible)";

if(mysql\_query($query))

{

header("Location: content.php");

exit;

}

else

echo "an error occurs";

?>

<?php include("includes/close.php") ?>

1. **Newsubj.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php getnavigation(); ?>

<?php include("includes/header1.php"); ?>

<?php $subjid=$\_GET['subj'];

echo $subjid;

?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<?php navigation($sel\_subj,$sel\_page); ?>

</td>

<td id="page">

<h2>Add Subject:</h2>

<br/>

<form action="news.php" method="POST">

<P>subject name <input type="text" name="menu" value="" /></P>

<P>position<select name="position">

<?php $s=get\_subject();

$sub\_count=mysql\_num\_rows($s);

for($count=1;$count<=$sub\_count+1;$count++)

{

echo "<option value=\"{$count}\">{$count}</option>";

}

?>

</select>

</p>

<p>Visible<input type="radio" value="0" name="visible">No

&nbsp;<input type="radio" value="1" name="visible">Yes

</p>

<input type="submit" name="submit" value="Enter"/>

</form>

&nbsp;<a href="content.php">Cancle</a>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php"); ?>

<?php include("includes/close.php") ?>

1. **Pageinfo.php**

<?php include("includes/connections.php") ?>

<?php include("includes/functions.php") ?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php getnavigation(); ?>

<?php include("includes/header1.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<?php navigation($sel\_subj,$sel\_page); ?>

<br/>

<a href="newsubj.php">+ Add a New Subject</a>

</td>

<td id="page">

<h2><?php echo $sel\_page['menu']; ?> </h2>

<?php

if (!is\_null($sel\_subj))

echo "{$sel\_subj['menu']}";

elseif(!is\_null($sel\_page))

{

//$id=$\_GET["page"];

//echo $id;

echo "{$sel\_page['about']}";

echo "<p/>";

$q="select sub\_id from page where id={$sel\_page['id']}";

$r=mysql\_query($q);

$subj=mysql\_fetch\_array($r);

//echo $subj['sub\_id'];

echo "<a href=\"edit\_page.php?pageid=".urlencode($sel\_page['id'])."&subj=".urlencode($subj['sub\_id'])."

\">Edit Page Content</a>";

}

else

echo "Select a Subject or Page to Edit";

?>

</td>

</tr>

</table>

</div>

<?php include("includes/footer.php"); ?>

<?php include("includes/close.php") ?>

**13. Staff.php**

<?php include\_once("includes/session.php"); ?>

<?php confirm\_login(); ?>

<?php

include("includes/header1.php");

?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

&nbsp;</td>

<td id="page">

<h2>Staff Menu</h2>

<p> Wellcome to Staff Menu</p>

<ul>

<li><a href="content.php">Manage Website Content</a></li>

<li><a href="adduser.php">Add New User</a></li>

<li><a href="logout.php">Logout</a>

</td>

</tr>

</table>

</div>

<?php

include("includes/footer.php");

?>

1. **Theme.php**

<?php include("includes/connections.php")?>

<?php include("includes/functions.php")?>

<?php require\_once("includes/session.php");?>

<?php confirm\_login(); ?>

<?php if(isset($\_POST['submit']))

{

$theam=$\_POST['theam'];

$query="select \* from user where username='{$username}' and password='{$password}' ";

$row=mysql\_query($query);

}

?>

<?php include("includes/header1.php"); ?>

<div id="main">

<table id="structure">

<tr>

<td id="navigation">

<td id="page">

<h2>Select theam</h2>

<p></p>

<form method="POST" action="theam.php">

most wanted <input type="radio" name="theam" value="public" /><br/>

light <input type="radio" name="theam" value="public1"/><br/>

<p><input type="submit" value="Enter" name="submit"/></p><br/>

<?php echo $msg; ?>

<form>

</td>

</tr>

</table>

</div>

<?php

include("includes/footer.php");

?>

**10. Enhancement:-**

**-** Authorization level could be more strict.

- Practice Exercise.

- Link must be provided of the other educational website so the area become wide.

- Availability of Dictionary specially for English Subject.

- Provide Video & Audio tutorials.

- Maps & Pictures; specially for Geographical Subject.

**FLOW CHART**

After Successful Login

Select

Select either page or subject

Select

Add Subject

Add Page?

Add Page

Edit Page

Edit Subject

A

A

A

Logout?

A

A

A

Logout?

Yes

No

Select either page or subject

Select?

Add New Subject Edit

Add Subject

A

A

A

Edit Subject

Edit Page

A

Add Page?

Add Page

Add New

Page

No

Page Subject

Yes