Introduction

Skill_Certified offers practice exercises, instructional videos, and a personalized learning dashboard that empower learners to study at their own pace in and outside of the classroom. We tackle with computational exams and provide well recognised certificates from very well known institutes all over India. We focus on skill mastery to help learners establish strong foundations, so there's no limit to what they can learn next!

Our membership and certification holders span the full range of technology companies from established Fortune 500 leaders to small and medium-sized tech businesses that help customers solve real business problems around the world; and emerging tech-service innovators that support the implementation and management of the latest technology solutions.

We routinely engage with individual technology professionals as the largest vendor-neutral credentialing program for technology workers. CompTIA has awarded more than 2.5 million certifications in areas such as cyber security, networking, cloud computing and technical support.

Skill_Certified also maintains a robust partner program around the world with thousands of academic institutions, not-for-profits, job corps centres and other organizations. Together we are educating, training and certifying new generations of technology workers.

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Recognition of Need

The concept of traditional education has changed radically within the last couple of years. Being physically present in a classroom isn't the only learning option anymore — not with the rise of the internet and new technologies, at least. Nowadays, you have access to a quality education whenever and wherever you want, as long as you have access to a computer. We are now entering a new era — the revolution of online education.

There's no need to discount the skepticism surrounding education through the internet. It's hard to understand the notion of leaving behind the conventional classroom, especially if it's to face this vast space called The Internet.

Advantages of online education:

1. It's flexible.

Online education enables the teacher and the student to set their own learning pace, and there's the added flexibility of setting a schedule that fits everyone's agenda.

2. It offers a wide selection of programs.

In a space as vast and wide as the internet, there are infinite skills and subjects to teach and learn.

3. It's accessible.

Online education enables you to study or teach from anywhere in the world. This means there's no need to commute from one place to another, or follow a rigid schedule.

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4. It allows for a customized learning experience.

There's often access to very diverse material such as videos, photos, and eBooks online as well, and tutors can also integrate other formats like forums or discussions to improve their lessons.

5. It's more cost-effective than traditional education.

Unlike in-person education methods, online education tends to be more affordable. There's also often a wide range of payment options let you pay in instalments or per class.

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Existing System and Limitations

Education is a light that has the power to bring a drastic change in our life. Studying is most essential for attaining a good education. The teaching and learning process is continued from ancient times. Earlier there were gurukuls as the centers of attaining education. These gurukuls today have been modified as schools. The ancient teaching and learning methods have modified greatly.

Nowadays there are various teaching methods applied in education. I am sure that many of us appreciate the offline or traditional way of teaching. Every new evolving method has tried to replace the traditional way of teaching and learning.

Few Drawbacks of offline classes:

- -Expensive
- -Travelling
- -Time Consuming
- -Limited Knowledge.

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Proposed system and Advantages

Although many people still consider traditional universities as the best way to achieve knowledge and get a diploma, online learning proves to be a great alternative. Students have the chance to study in their own time and especially for free. It represents a great way to study many fields and to boost the level of self-motivation. Online learning is so effective because students can finish their homework quickly, and there is more time left for hobbies or for finding a job.

An access to all resources of a traditional course helps participants learn wherever they are, leaving them the freedom to choose the time for study. With basically an Internet connection, a person can attend different courses.

Advantages:

- Online courses are convenient.
- Online courses offer flexibility.
- Online courses bring education right to your home.
- Online courses offer more individual attention.
- Online courses help you meet interesting people.
- Online courses give you real world skills.
- Online courses promote life-long learning.
- Online courses have financial benefits.
- Online courses teach you to be self-disciplined.
- Online courses connect you to the global village.

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Working

Process/Working of that website it's very simple and user friendly, when we open the website page it shows which contains information like new courses available, Best courses, Featured courses and menu(contain information about categories) along with options like login and registration.

After click on any one menu an associative page will be show which provides information about sub-category.

When click on login option an login pop up will be shown for make any members of that website.

This is an abstract scenario of that website

This website contain three different kinds of phases like:

- **1.** Administrator
- 2. Registered User
- **3.** Non-Register User

5.1 Working of Administrator

- Courses(add/edit/delete/view).
- User details(view/delete/edit)
- Profile(view/edit/recover).

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5.2 Working of Registered User

- Courses(view/buy/access)
- Certification(view)
- Profile(view,edit,delete, recover)
- Login

5.3 Working of Non-Registered User

- Register
- View Website
- Check available courses

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Feasibility Study

"Feasibility Analysis" is used to determine whether it is feasible to develop the new system or not.

A feasibility study is undertaken to determine the possibility of either improving the existing system or developing a completely new system.

This study helps to obtain an overview of the problem and to get rough assessment of whether feasible solutions exist. Since feasibility study may lead to the commitment of large resources, it is important that it is conducted competently and that no fundamental errors of judgment are made.

"Feasibility studies are used as a basis for deciding whether to proceed with, postpone or cancel the project".

The purpose of feasibility study is to determine whether the requested project is successfully realizable.

There are three aspects of feasibility study:

- 1. Technical Feasibility
- 2. Economic Feasibility Operational Feasibility

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6.1 Technical feasibility

Technical feasibility centres on the required existing computer system (Hardware /Software) and to what extent it can support the proposed application.

"Technical feasibility is concerned with specifying equipment's and software that will successfully support the required task".

6.1.1 Hardware Requirement

Server

Processor: Intel(R) P-IV (or above)

RAM: 512 MB (or above)

Disk Space: 2 GB (or more)

Client

Processor: Celeron 500 MHz (or more)

RAM: 512 MB (or more)

Disk Space: 500 MB

6.1.2Software Requirement

Operating System: Windows XP (or above)

Web Server: IIS Server

Web Browser: IE 4 or upwards

Development Tool: ASP.NET, C#, HTML

Database: Microsoft SQL server 2005

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6.2 Economic feasibility

Economic feasibility study is the most frequently used method for evaluating the effectiveness of a system. Cost-benefit analysis is performed to determine the benefits and savings that are expected from the new system and compare them with costs. If benefits outweigh costs, then the description is made to design and implement the new system.

6.2.1 Cost Benefit Analysis

Cost benefit analysis is necessary to determine economic feasibility; the primary objective of cost benefit analysis is to find out whether it is economically worthwhile to invest in the project. If the returns on the investments are good, and then the project is considered economically worthwhile.

First listing all the cost associated with the project performs this analysis. Cost consists of both direct cost and indirect cost. And then benefits are calculated. A comparison is made to see economic feasibility.

So as considering our proposed system, by using an entirely computerized system for generating of reports and maintaining user records it reduces the load of paper works like maintaining files which makes it easy to store and manage records and saves time and costing. On the other hand the user also, does not to travel no further to learn a new skill and maintain and manage notes and lectures in papers, which saves travelling expense and stationary expense.

It does not require a specific person to handle it; any person can easily understand and work on it.

Hence this project is very inexpensive in overall terms and it is profitable with respect to cost and time.

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6.3 Operational feasibility

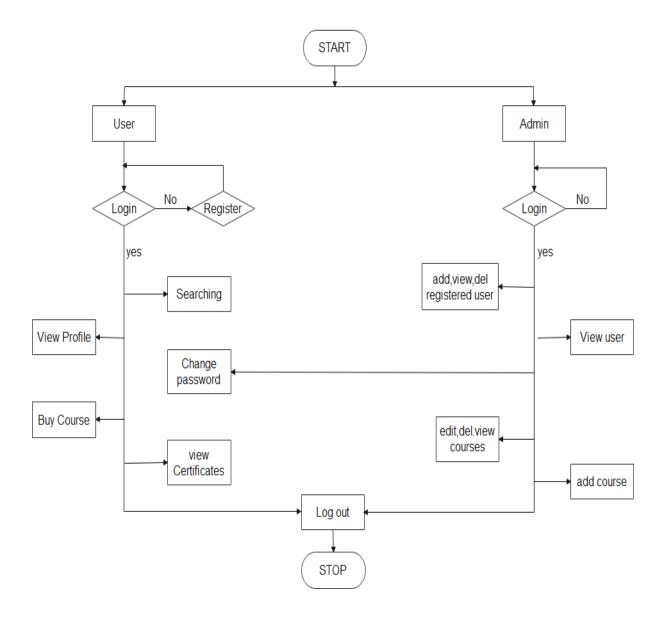
Normally, the project requests are not rejected simply because of the need of operation feasibility but such recommendations are likely to critically affect the nature and scope of the occurred recommendation. This feasibility study is conducted by a small group of people who are expert of information system techniques. These people know the parts of the business that are useful to the project and are skilled in system analysis and design process.

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System Flow Diagram

Flow diagram is a collective term for a diagram representing a flow or set of dynamic relationships in a system. The term flow diagram is also used as a synonym for flowchart, and sometimes as a counterpart of the flowchart.

Flow diagrams are used to structure and order a complex system, or to reveal the underlying structure of the elements and their interaction.

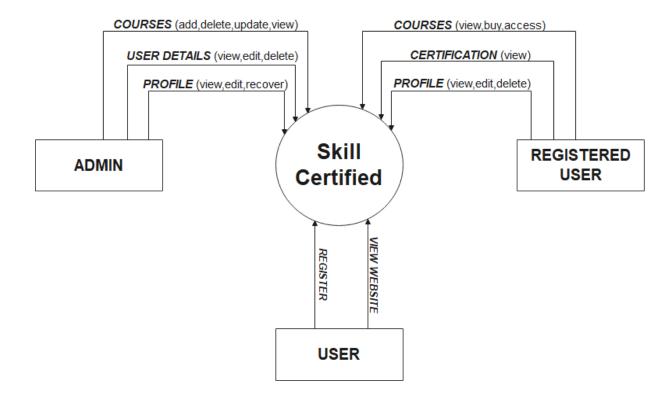


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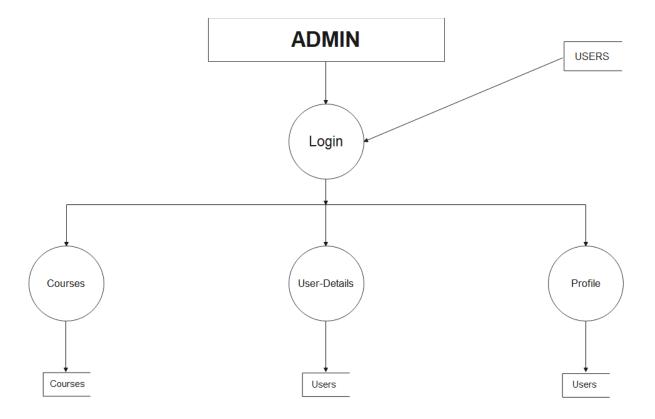
Data Flow Diagrams

Context Level Diagram:



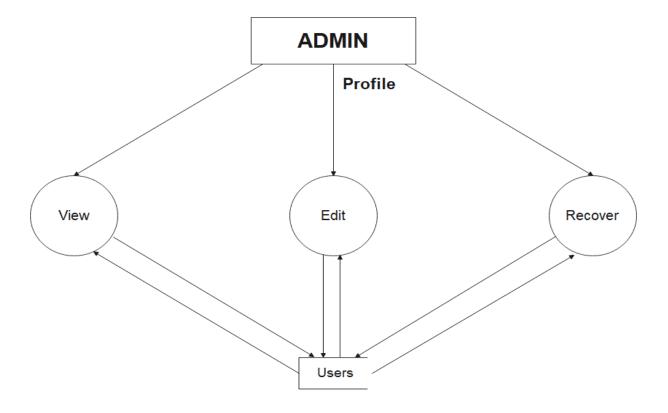
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First Level DFD for Admin:



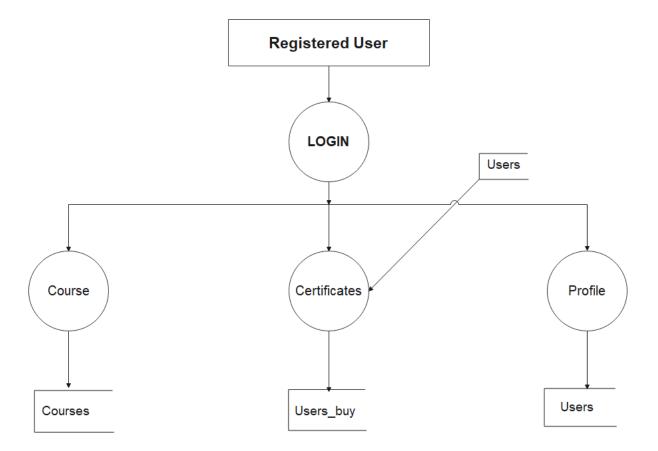
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Second Level DFD of Category Details For Admin:



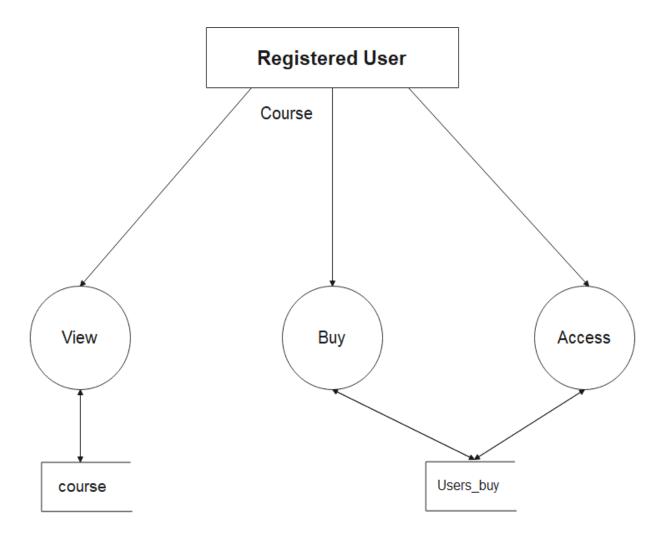
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First Level DFD for Registered User:



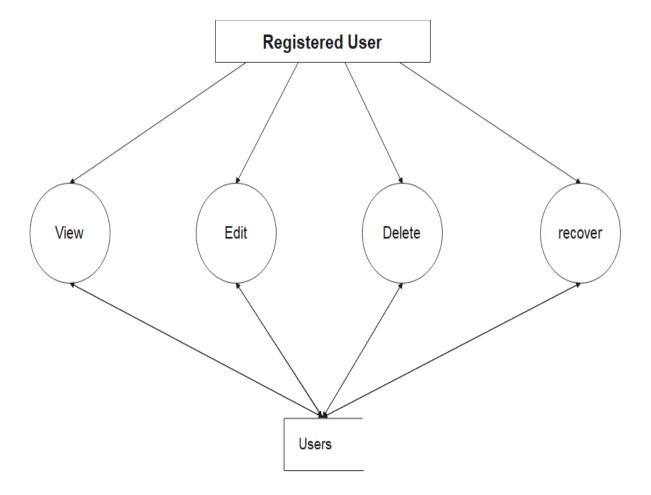
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Second Level DFD For Registered user:



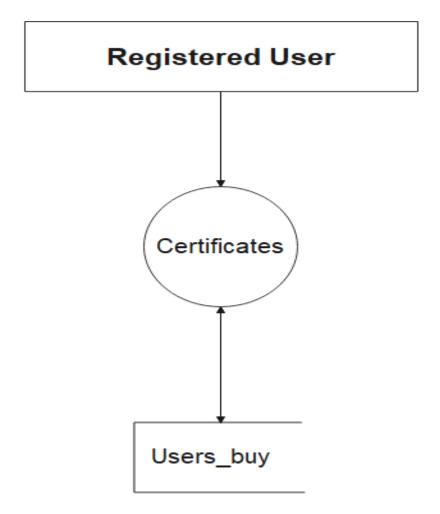
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Second Level DFD of Profile for Registered user:



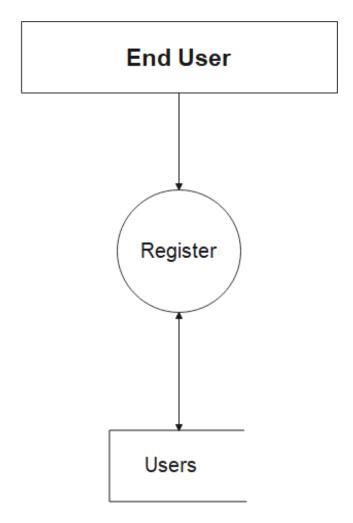
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Second Level DFD of Certificates for Registered user:



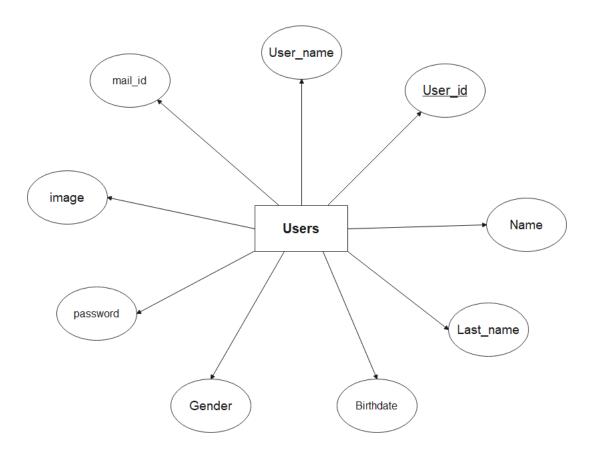
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First Level DFD for End User:



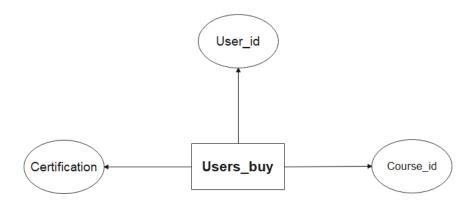
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user Table:

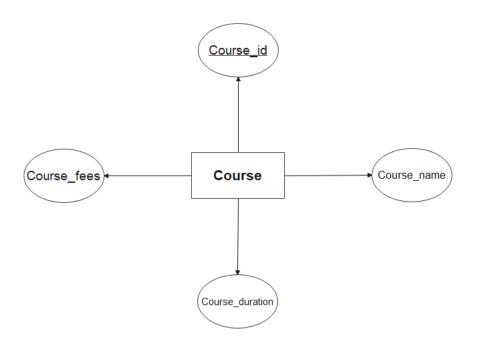


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users_buy Table:

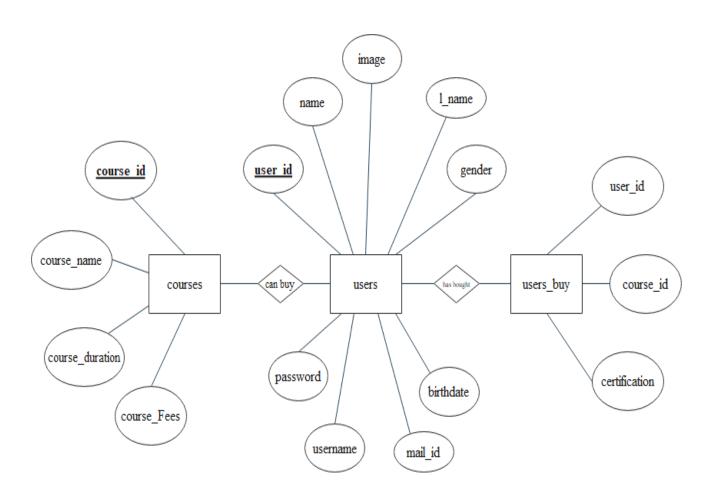


Courses Table:



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ER Diagram:



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Chapter 9:

Data Tables

• "users" Table :

Primary key : user_id

name	l_name	gender	birthdate	mail_id	username	password	l im
Hardik	Purohit	Male	10-08-1999	hardikpurohit 10@gmail.com	admin@hardik	hardikadmin	images/t
Jaya	Vyas	Female	18-10-2000	jayavyas0291@gmail.com	admin@jaya	jayaadmin	images/t
Nenaram	Choudhary	Male	08-01-1998	nenaram 9441@gmail.com	admin@nenaram	ınenaramadmi	nimages/t
Lalit	Panwar	Male	21-08-2000	lalitpanwar@gmail.com	lalit	123	
Nikita	Lohiya	Female	16-03-2000	nikita@gmail.com	nikku	1234	
Ashish	Dadhich	Male	17-02-2002	ashishdadhich 9798@gmail.com	n ashish	12345	image
Parth	Vyas	Male	23-07-2004	xyz@abc.com	parth	parth	

• "course" Table :

Primary key : course_id

course_id	course_name	course_duration	course_fee
1	SCPU	5 Months	20000
2	SCNE	5 Months	40000
3	SCPT	5 Months	50000
4	SCLE	5 Months	30000
5	SCCE	5 Months	40000

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• "users" Table:

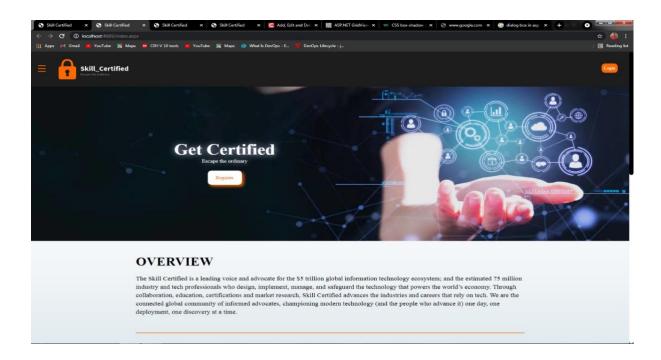
Foreign key: user_id(users), course_id(course)

user_id	course_id	certification
52	1	
52]	
52]	
52	1	
52	5	
52	5	
52	4	
52	4	

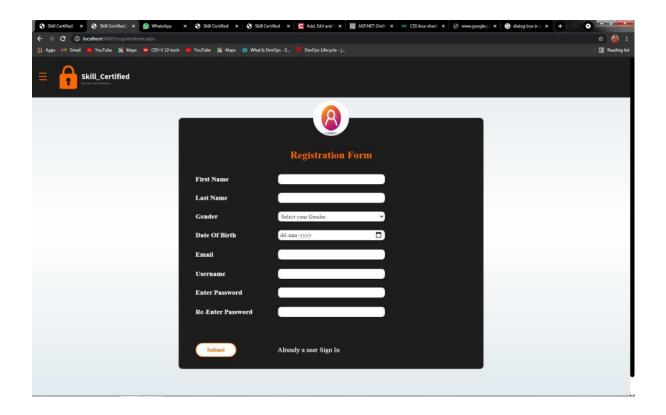
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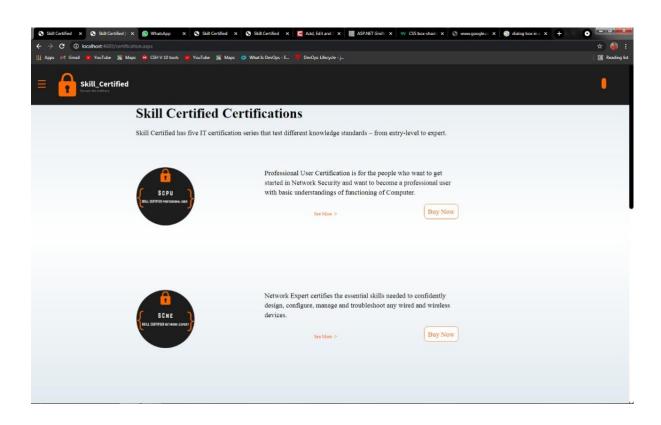
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Project Design

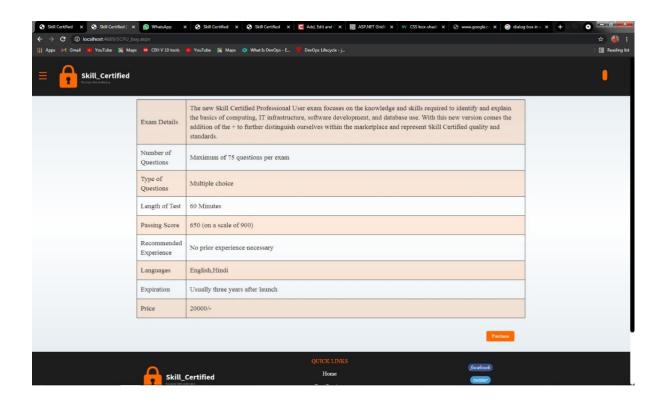


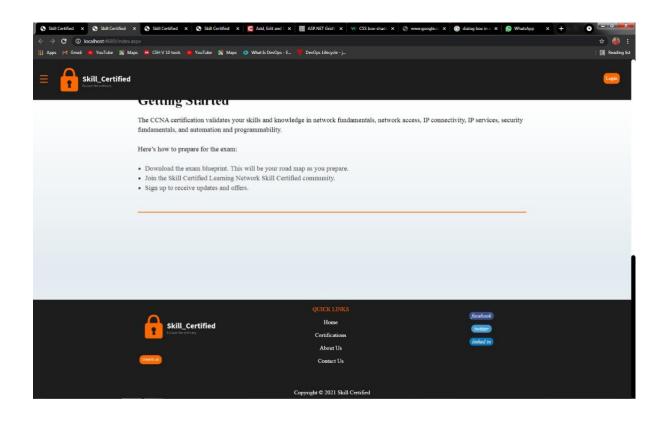
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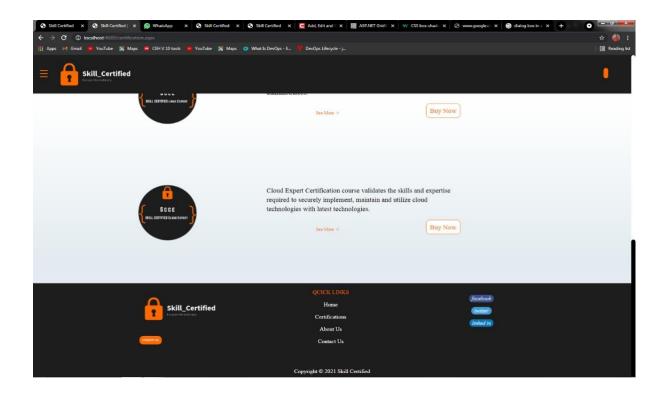


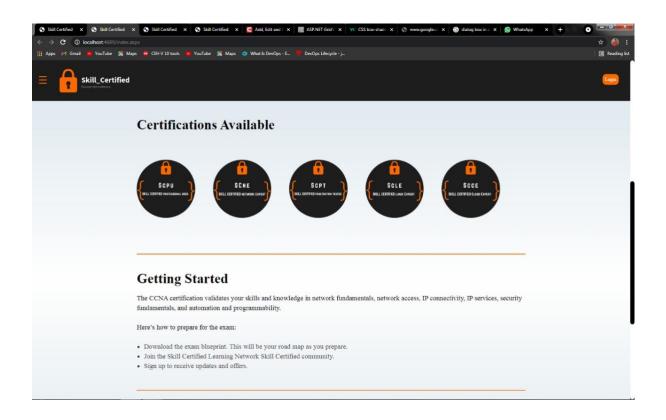
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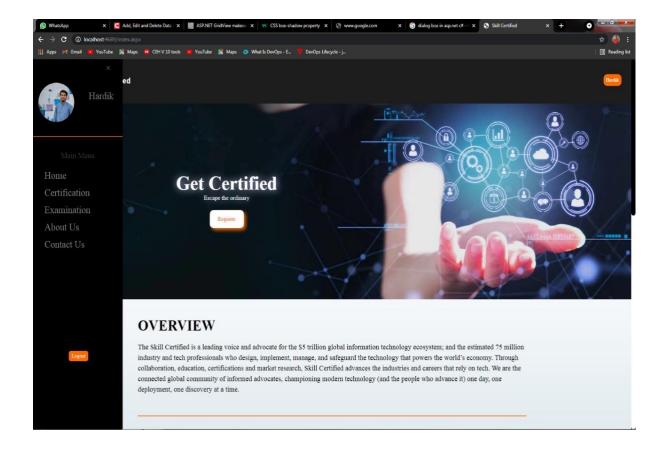


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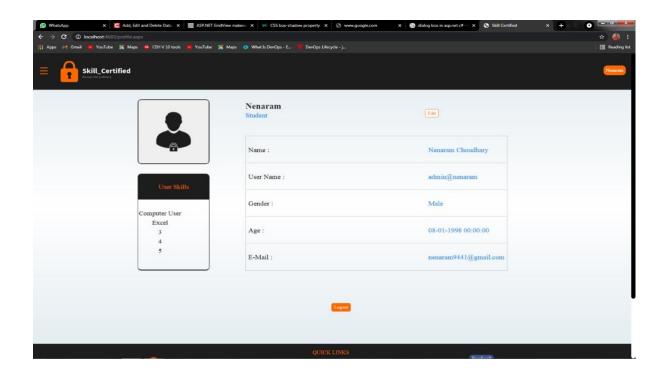


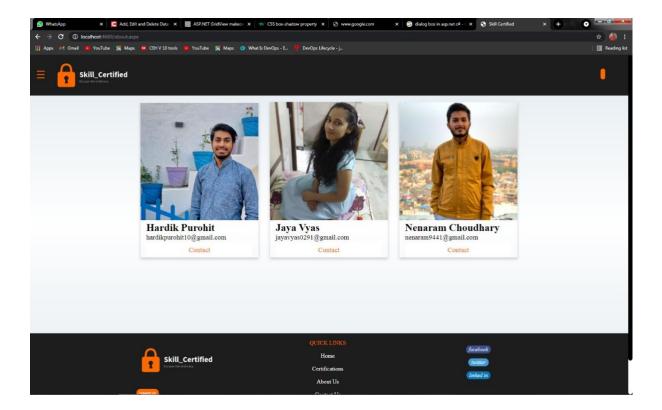


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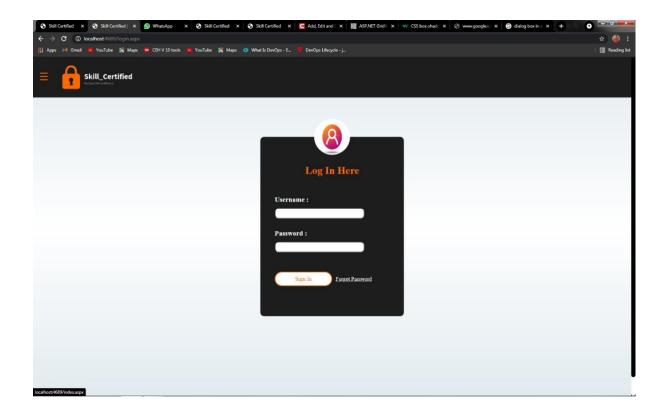


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Chapter 11:

Coding

Login page:

```
using System;
 using System.Collections.Generic;
using System.Linq;
 using System.Web;
 using System.Web.UI;
 using System.Web.UI.WebControls;
 using System.Data.SqlClient;
 using System.Data;
 public partial class loginform : System.Web.UI.Page
              protected void Page_Load(object sender, EventArgs e)
                            if (Session["username"] != null)
 Response.Redirect("profile.aspx");
                            }
               protected void Unnamed3_Click(object sender, EventArgs e)
              {
                                                                                                                                                                   (SqlConnectionsqlCon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SqlConnection(@"Data
                            using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 new
 Source = (LocalDB) \setminus MSSQLLocalDB; AttachDbFilename = D: \setminus HARDIK \setminus BCA \setminus BC
 3\PROJECT\Skill\_Certified\App\_Data\skill\_certified.mdf; Integrated\ Security=True"))
 sqlCon.Open();
                                          string QUERY = "SELECT COUNT(1) FROM USERS WHERE USERNAME=@username AND password=@password";
 SqlCommandsqlCmd = new SqlCommand(QUERY, sqlCon);
 sqlCmd. Parameters. Add With Value ("@username", login\_username. Text. Trim());\\
 sqlCmd. Parameters. Add With Value ("@password", login\_password. Text. Trim());\\
                                         int COUNT = Convert.ToInt32(sqlCmd.ExecuteScalar());
                               if (COUNT == 1)
                                         Session["username"] = login_username.Text.Trim();
                                         if (login\_username.Text == "admin@hardik" \ || \ login\_username.Text == "admin@jaya" \ || \ login\_username.Text == "admin@hardik" \ || \ login\_username.Te
 Response. Redirect ("index.aspx");\\
                                         }
                                          else
                                         {
 Response.Redirect("index.aspx");
                                         }
                               else
 incorrect.Visible = true;
```

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```
login_username.Text = "";
login_password.Text = "";
}

protected void login_Click(object sender, EventArgs e)
{
   if (Session["username"]!= null)
   {

Response.Redirect("profile.aspx");
   }
   else
   {

Response.Redirect("login.aspx");
   }
}
```

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Register page:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
using System.Data;
public partial class registerform : System.Web.UI.Page
{
  protected void Page_Load(object sender, EventArgs e)
 {
    if (Session["username"] != null)
Response.Redirect("index.aspx");
   }
    else
   }
 protected void Unnamed9_Click(object sender, EventArgs e)
    using (SqlConnection con = new SqlConnection(@"Data Source = (LocalDB)\MSSQLLocalDB; AttachDbFilename = D:\HARDIK\BCA\BCA
{\tt 3\PROJECT\Skill\_Certified\App\_Data\skill\_certified.mdf; Integrated Security = True"))}
    {
      /* string name = Convert.ToString(f_name.Text) + " " + Convert.ToString(l_name.Text);*/
SqlCommandsqlCmd = new SqlCommand("INSERT INTO users (name,l_name,gender,birthdate,mail_id,username,password) VALUES (@name, @l_name,
@gender, @birthdate, @mail_id, @username, @password)", con);
con.Open();
sqlCmd. Parameters. Add With Value ("@name", f\_name. Text);\\
sqlCmd.Parameters.AddWithValue("@l_name", l_name.Text);
sqlCmd. Parameters. Add With Value ("@gender", gender. Selected Item. Text);\\
sqlCmd. Parameters. Add With Value ("@mail\_id", email. Text);\\
sqlCmd.Parameters.AddWithValue("@birthdate", TxtDob.Text);
SqlCommand sqlCmd01 = new SqlCommand("SELECT COUNT(1) FROM users WHERE username = @username1", con);
      sqlCmd01. Parameters. Add With Value ("@username1", reg\_username. Text);\\
      int COUNT = Convert.ToInt32(sqlCmd01.ExecuteScalar());
      if (COUNT != 1)
      {
sqlCmd. Parameters. Add With Value ("@username", reg\_username. Text);\\
sqlCmd. Parameters. Add With Value ("@password", password 2. Text);\\
        int i = Convert.ToInt32(sqlCmd.ExecuteNonQuery());
        if (i != 0)
        {
f_name.Text = I_name.Text = TxtDob.Text = email.Text = username.Text = password1.Text = password2.Text = "";
                                                                                                                     Response.Redirect("login.aspx");
```

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```
    else
    {
    submit_result.Visible = true;
    submit_result.Text = "Submission Failed";
    }
    else
    {
        username_validate2.Text = "Please Enter any other username";
    }
    }
    protected void Unnamed10_Click(object sender, EventArgs e)
    {
        Response.Redirect("login.aspx");
    }
}
```

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Chapter 12:

Testing:

S.No	Testing Module	Action	Estimated Result	Original Result	Description	Testing Result	Developer Review
1.0	Login User	Click on Login Button	Login Page should open	Login Page Opened	Admin Or Normal User can Login	Login page opened successfully	
1.1		Click on Login After Entering Credentials	Validations should be checked on both fields	Validation Error (If available)	Validation for security.	Please enter Username and Password to login.	
1.2		Enter Username	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error	
1.3		Enter Password	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error	
1.4		Click on Sign In	User should be redirected to Index page.	User Logged in successfully.	For logging User into their account.	User successfully logged in and redirected to Index page.	
2.0	Register User	Click On Register button.	Register page should open.	Register page opened	Only new user can register	Register page opened successfully.	
2.1		Enter First Name	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error	
2.2		Enter Last Name	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error	
2.3		Select your gender	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error	

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2.4		Enter Date of Birth	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error
2.5		Enter Username	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error
2.6		Enter password	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error
2.7		Enter Password for confirmation.	Validation should be checked	Validation is checked.	Validation for security.	On filling current information: No Error
2.8		Click on Submit Button	On Success of registration, Redirect to login page	Registration is successful	For registering a new user	Registered Successfully and redirected to login page
2.9		Click on Already a user / Sign In	User should be redirected to login page	Redirected to login page	For Already Registered users to login directly	Login page opened
3.0	Dashboard	Click On Dashboard on Navigation menu	User should be redirected to dashboard	Dashboard page successfully opened	For Admin access	Successfully opened Dashboard page
4.0	Courses	Select Course View on Navigation Menu	Course view page should open	Course View page opened	For Admin access	On Course View page Courses Available can be seen
4.1		Select Manage Course on Navigation Menu	Manage Course page should open	Manage Course page opened	For Admin access	We can Add new data, Update and Delete existing courses
4.2		Select User View on Navigation Menu	Users view page should open	Users View page opened	For Admin access	On Users View page Users Available can be seen

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4.3		Select Manage Users on Navigation Menu	Manage Users page should open	Manage Users page opened	For Admin access	We can Add new data, Update and Delete existing users
4.4		Select Database on Navigation Menu	Database page should open	Database page opened	For Admin access	On Database page Users All tables can be viewed
5.0	Certifications	Select Certification on Navigation Menu	Certifications page should open up	Certification Paged opened	For registered User access	On Certifications page certifications courses available are seen
5.1		Click on See More	Respective Certificate Page Should open up	SCPU page will open up if clicked on SCPU	For registered User access	Respective certificate Details should be visible
5.2		Click On Buy Now	Respective Course buy page should open up	Respective Course buy page opened	For registered User access	All the complete course and exam details will be visible
6.0	Buying Certification Course	Click On Purchase	Course should be purchased by the user	Course Purchase is successful	For registered User access	The User was successful to purchase Certification Course
7.0	About us	Select About Us on Navigation Menu	User should be redirected to About us page	About Us page opened up	Everyone can see About Us	All three developer Contact information are available
8.0	Contact Us	Select Contact Us on Navigation Menu	User should be redirected to Contact us page	Contact Us page opened up	Everyone can Contact Us	All the Contact information are available

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Chapter 13:

Future Enhancement:

Although our project automates many requirements of online certification but we want to list some future enhancements for the website:-

- Add more courses.
- Add more payment gateways.
- Adding video lecture.
- Adding achievement board on website.
- Tutorial support/advice/email.
- Brand Integration.

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Chapter 14:

Conclusion

Online Certificates has brought a positive impact in the lives of students and working professionals. It has given an opportunity to take up additional courses along with their studies orjob as per their convenience. The quality of education has improved by online courses and even it has become easy for students to refer the content. In the era of digitalization the scope of online courses increase even more and will be beneficial for students, professionals and also institutions.

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Chapter 15:

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