

“CODEOSITY INSTITUTE”

Dissertation submitted in partial fulfilment of the requirements

for the award of the

course of

School of coding- certified software test engineer

Project Title – **Codeosity institute**

Submitted By

Payal Thakre

Batch - 7669

Enroll.no. - **EBEON0722634370**

Under the Guidance of

MOHANA PRIYA

Trainer

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1.INTRODUCTION

Project Outline (Purpose And Goal)

By learning with **Codeosity** the unemployed youth to understand their strengths, build tomorrow's skills needed by recruiters and secure employment with them, there by building sustainable careers for our beneficiaries.

This Codeosity is an integrated workforce development organization ,which provide courses in both the ways online/offline .

Codeosity is india's leading workforce development platform that helps learners in building careers with leading corporates through training & other career building services , like internships ,placement assistance ,live projects etc.

The concept of traditional education has changed within the last couple of years being physically present in a classroom isn't the only learning option anymore so , codeosity provide both facility of learning (online/offline) choice is yours - 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 can get online. we are entering a new revolution of online education.

According to the most recent survey research group over 30% of higher education student in the united states are taking at least one distance course

2. SCOPE AND OPPORTUNITIES

Codeosity is india 's leading workforce development platform that helps learners in building careers with leading corporates through training & other career building services

Placement Opportunities in best companies,100k learners placed in more than 300 companies, learn from industry experts through live session, Job oriented online courses in india, job guarantee courses.

In the modern age, access to information is the key to professional success. gone are the days when education and learning were confident to colleges and universities. In the digital age, learning is open to all E-learning is boom to people who face obstacles in getting traditional college education.

Online learning has revolutionized the knowledge economy on a global scale No matter which background one comes from, there are the online courses certification programs that can expand your knowledge and make you better equipped in today's competitive world.

Quality employment generation is the positive outcome of certified online courses quality learning resources, the sky's the limit for those enterprising students from reputed institutions.

With access to skilled teachers and who wish to expand their knowledge repository and land coveted jobs in the public and private sector.

In codeosity 110% money back job guarantee courses are designed to ensure that you are guaranteed a job after successful completion of the training courses, else we refund 110% of the fees.

We provide....

- ❖ Training & certification
- ❖ Placement Assistance
- ❖ Guidance & support
- ❖ Aptitude preparation
- ❖ Internship opportunities

3. REQUIREMENT SPECIFICATION

3.1 Hardware specification

Processors will continue to get faster, smaller and cheaper, whereas memory will continue to get faster, larger and cheaper. The trend is to have a reasonable memory to a powerful processor.

Processor : Intel Core i3 Processor

RAM : 8 GB

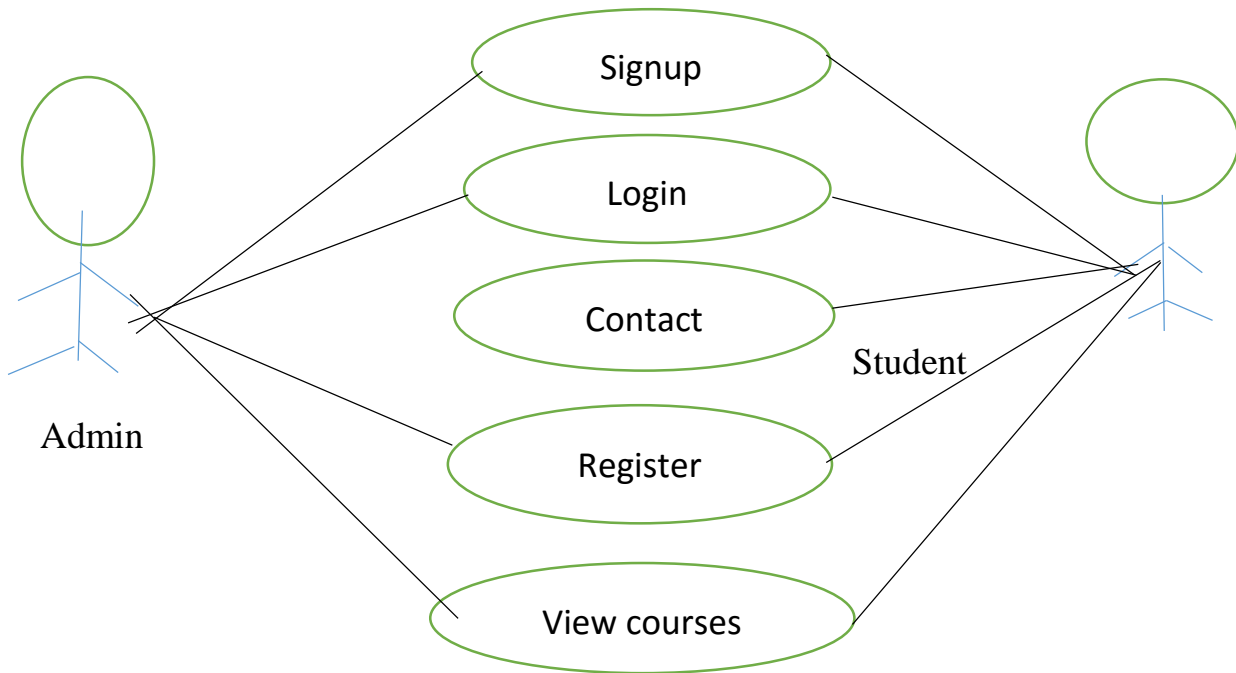
System type : 64-bit OS

3.2 Software specification

When an application project is considered the three basic software requirements are the platform in which the project is developed, the front-end tool that provides the interaction with the users and the backend tool that stores the data.

Operating System : Windows 10

Front-end : Notepad, browser



4. SYSTEM DESIGN

System Design is the process of designing the architecture, components, and interfaces for a system so that it meets the end-user requirements.

4.1 Use case Diagram

Fig 4.1 use case diagram

USECASE EXPLANATION

Use case 001: login

INTORDUCTION: this use case outlines the step that need to be followed in order to login into the system.

ACTOR: Administrator, Student (user)

PRE-CONDITION: user has to have a valid credential

POST-CONDITION : the system display the relevant page

BASIC FLOW: the user enter the user name and password **Scenario:**

ACTOR	SOFTWARE REACTION
User name password	If it is valid user can enter into system If it is invalid user it indicates it is wrong user name or password

ALTERNATE FLOW: the user can enter the reg no

SPECIAL REQUIREMENTS: None

ASSOCIATED USE CASE(S): None

Use case 002: Registration

INTORDUCTION: this use case outlines the step that need to be followed in order to register form

ACTOR: student (user) and admin.

PRE-CONDITION: user has to have a valid credential

POST-CONDITION: the system display the relevant page

BASIC FLOW: the system confirms that the entered details is correct or not.

Scenario:

ACTOR	SOFTWARE REACTION
First name	The system verifies that the above items has been filled out If any data is missing, the system warns the user and the steps continues with software reaction
Last name	
Email id	
Password	
Education	If all data has been entered the system ask the user to view the result.
Course	
Stream	If the user indicate they want to end the scenario here And If the user indicate that their marks are not correct the scenario continues with software reaction.
Contact mode	

ALTERNATE FLOW: None

SPECIAL REQUIREMENTS: None

Use case 003: Contact us

INTORDUCTION: this use case outlines the step that need to be followed in order to fill out the data

ACTOR: student (user)

PRE-CONDITION: user has to have a valid credential

POST-CONDITION: the system display the relevant page

BASIC FOLW: the user enter the details **Scenario:**

ACTOR	SOFTWARE REACTION
-------	-------------------

First name	The system verifies that the above items has been filled out
Last name	If any data is missing, the system warns the user and the steps continues with software reaction
Email id	If all data has been entered the system ask the user to view the result.
	If the user indicate they want to end the scenario here And If the user indicate that their marks are not correct the scenario continues with software reaction.

ALTERNATE FLOW: click the help option

SPECIAL REQUIREMENTS: None

ASSOCIATED USE CASE(S): None

4.2 Data Flow Diagram

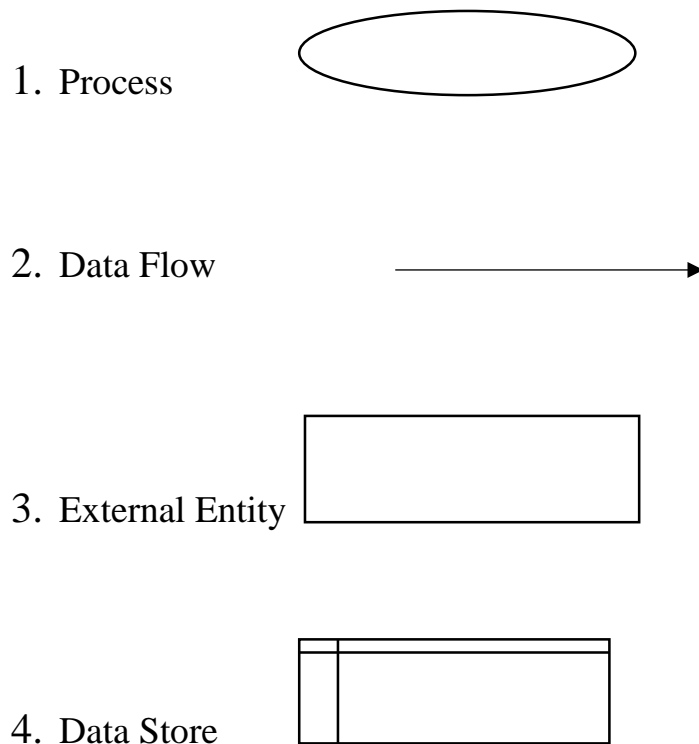
A data flow diagram (DFD) is a graphical model that shows all of the main requirements for an information system in a diagram of input and output, process, and data storage.

A DFD describes what data flows rather than how it is processed. Everyone working on a development project can see all aspects of the system working

Together at once with DFD. That is one of the reasons for its popularity, the DFD is also easy to read because it is a graphical model. The DFD is mainly used during problem analysis. End

DFD with minimal training.

DFD SYMBOL



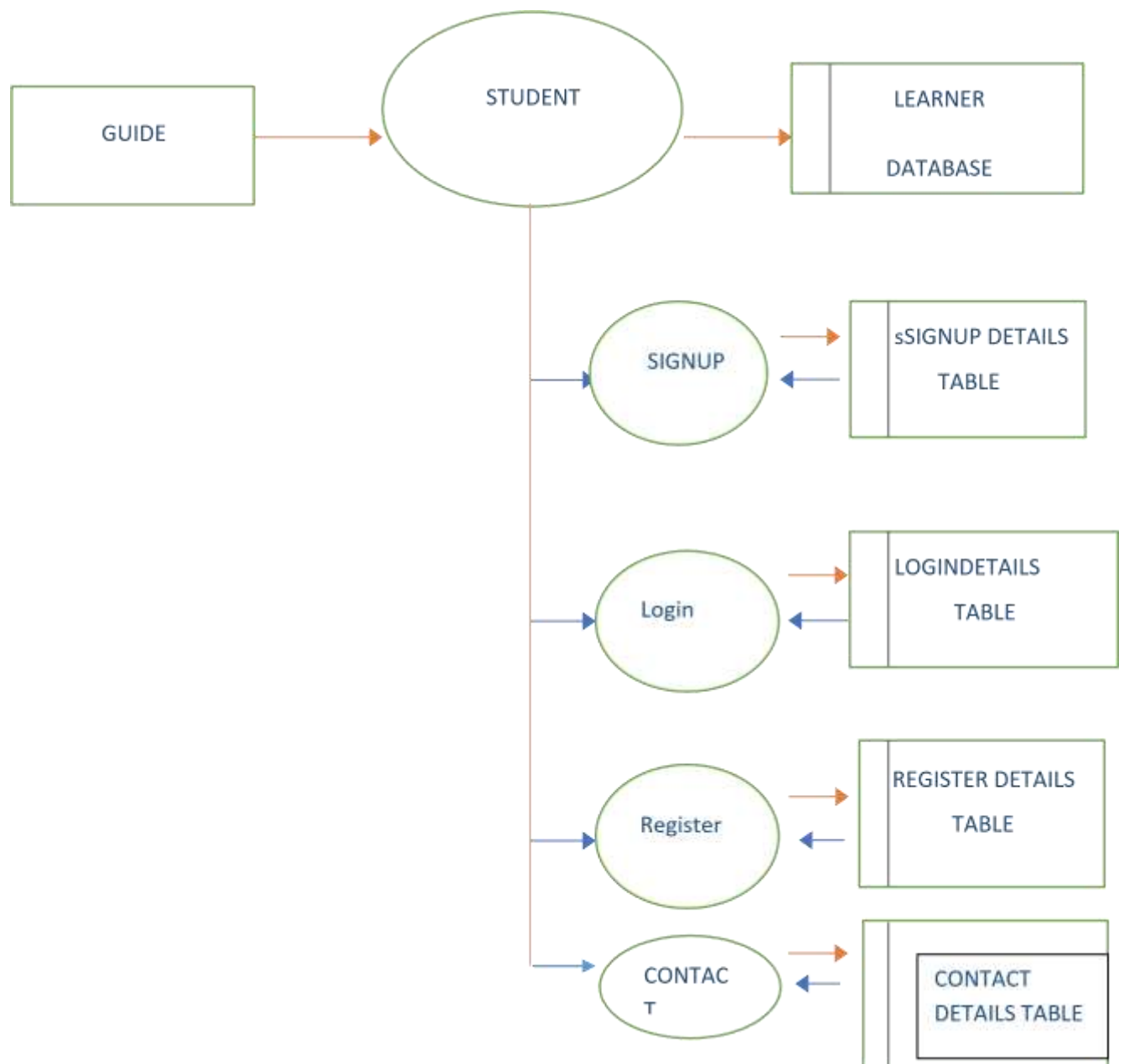


Fig 4.2 Data flow diagram

4.3 E-R Diagram

4.4 Table Structure

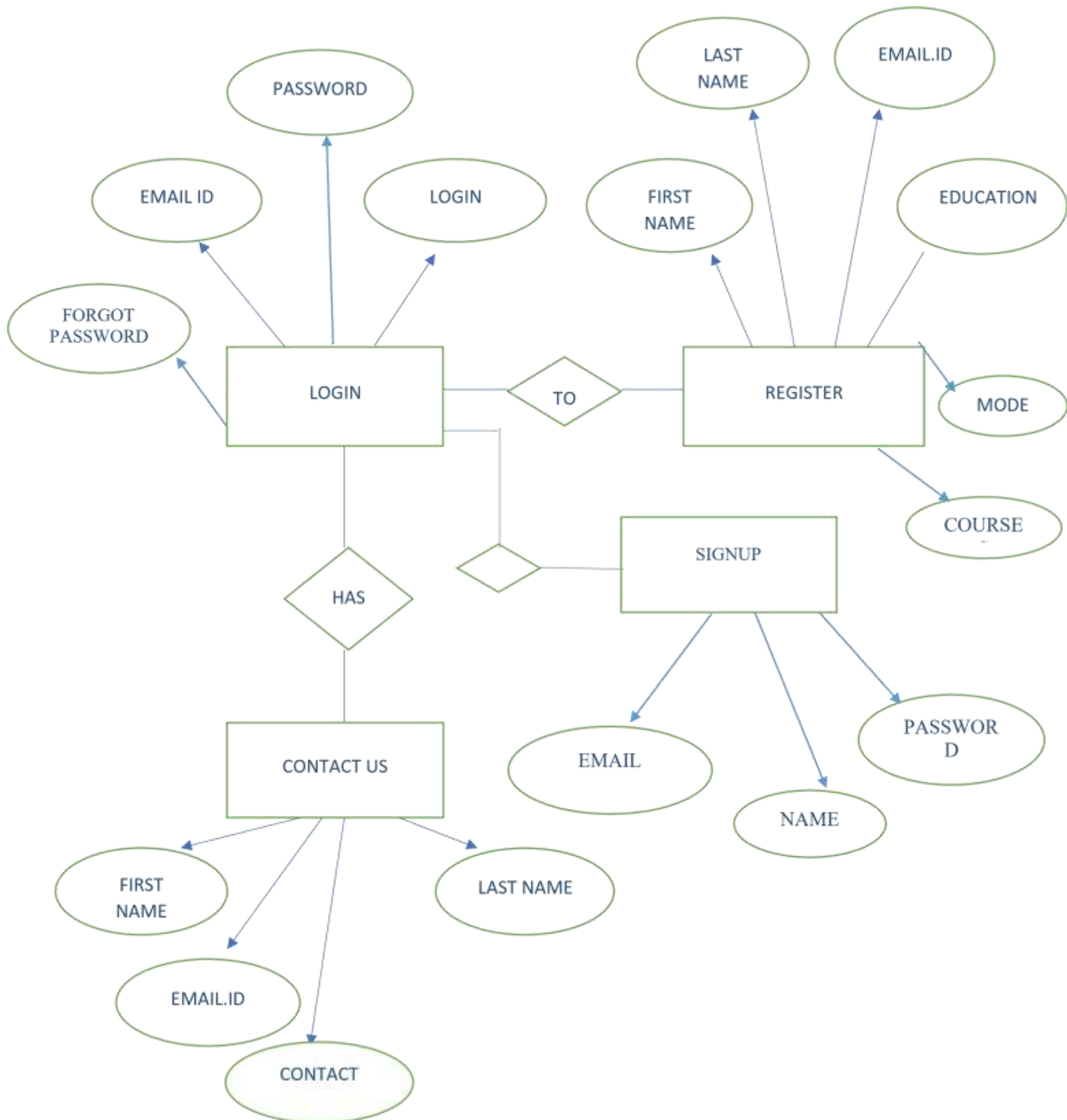


TABLE NAME: SIGNUP

PRIMARY KEY: EMAIL ID

COLUMN NAME	DATA TYPE	DESCRIPTION
NAME	TEXT	NAME
EMAIL	TEXT	EMAIL ID
PASSWORD	NUMBER	PASSWORD

TABLE NAME: LOGIN

PRIMARY KEY: EMAIL ID

COLUMN NAME	DATA TYPE	DESCRIPTION
EMAIL ID	TEXT	EMAIL ID
PASSWORD	NUMBER	PASSWORD

TABLE NAME: REGISTER

PRIMARY KEY: EMAIL ID

COLUMN NAME	DATA TYPE	DESCRIPTION
FIRST NAME	TEXT	FIRST NAME
LAST NAME	TEXT	LAST NAME
EMAIL ID	TEXT	EMAIL ID
EDUCATION	TEXT	QUALIFICATION
COURSE	TEXT	COURSE
CITY	TEXT	CITY

LEARNING MODE	TEXT	ONLINE/OFFLINE
PHONE	NUMBER	PHONE NUMBER
STREAM	TEXT	STREAM

TABLE NAME: CONTACT US

PRIMARY KEY: EMAIL ID

COLUMN NAME	DATA TYPE	DESCRIPTION
FIRST NAME	TEXT	FIRST NAME
LAST NAME	TEXT	LAST NAME
CONTACT	NUMBER	CONTACT
EMAIL ID	TEXT	EMAIL ID

5. IMPLEMENTATION

it is an frontend design or we can say static web page for training institute , if any student or any client wants to join our institute then this webpage will help them to find some info like what kind of courses are available , internship opportunities , trainings and contact details etc .

Language used : **Html ,CSS and javascript .**

The basic structure of an **HTML** page is laid out below. It contains the essential building-block elements (i.e. doctype declaration, HTML, head, title, and body elements) upon which all web pages are created.

Cascading Style Sheets, referred to as **CSS**, is a simply designed language intended to simplify the process of making web pages presentable.

It describes how a webpage should look: it prescribes colors, fonts, spacing, and much more. In short, you can make your website look however you want.

Javascript is both imperative and declarative type of language. JavaScript contains a standard library of objects, like array, date and math, and a core set of language elements like operators, control structures, and statements. **Client-side:**

It supplies objects to control a browser and its Document Object Model (DOM).

Like if client-side extensions allow an application to place elements on an HTML form and respond to user events such as mouse clicks, form input, and page navigation, alert, prompt, confirm.

MODULES

5.1 SIGNUP

Signup page contains name, email and password field , after entering values in each field click on signup button .

After signup you can login to webpage by clicking login button.



Fig. 5.1 signup

Fig.5.1 shows signup page of codeosity

5.2 Login

Enter valid email and password

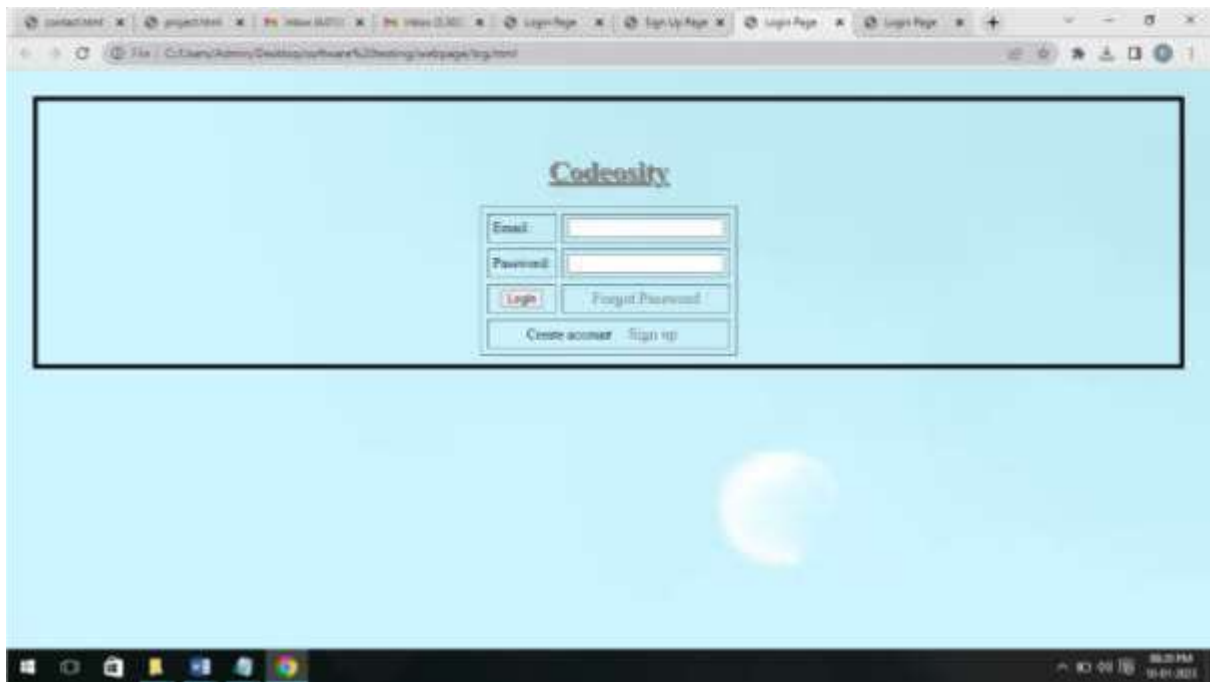


Fig. 5.2 login

Fig.5.2 shows login page of codeosity

5.3: Home page

Home page contains institute slogan at the top , after that there is an digital clock which shows time ,institute logo , some navigation bar and then services provided by institute.



Fig. 5.3 home page

Fig.5.3 shows home page of codeosity

5.4: About page

About page contains information about institute and vision and mission .

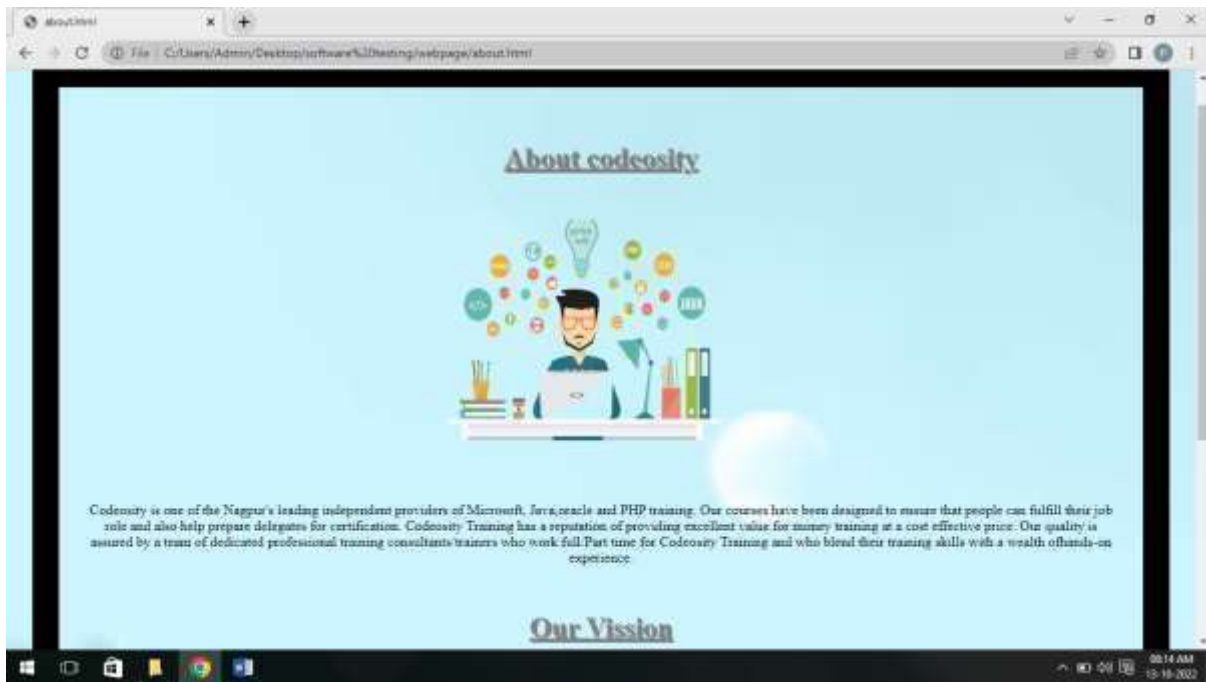


Fig.5.4 About page

Fig 5.4 shows about page of codeosity

5.5: Training page

Here information about training provided by institute is given and if any one is interested to grab the training opportunity then there is an link “Grab the Opportunity”

If we click on that then page will navigate to registration form.



Fig. 5.5 training page

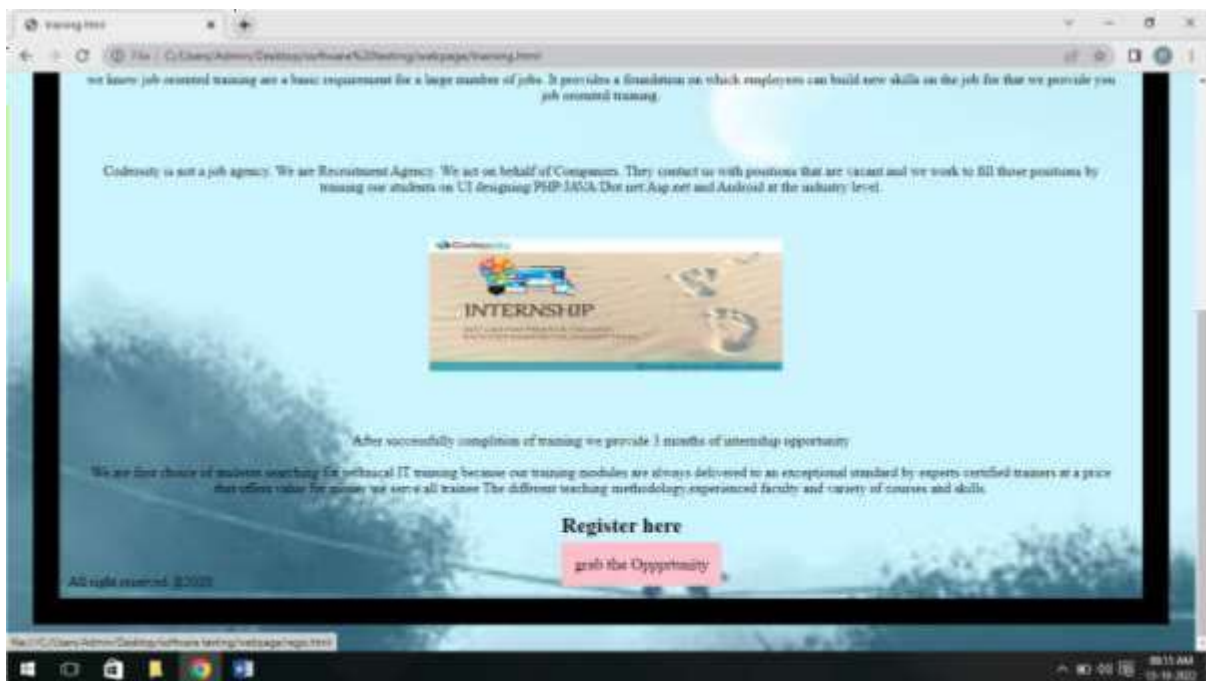
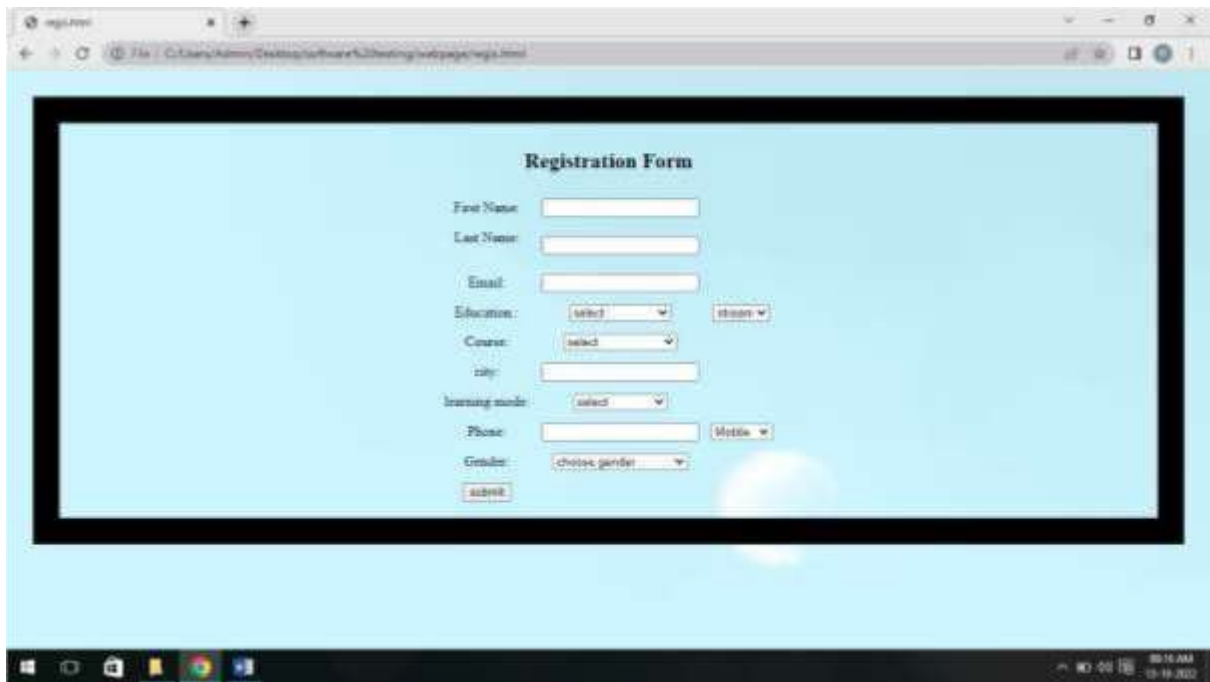


fig. 5.5 training

fig 5.5 shows training page of codeostiy

5.6: Registration form

Registration form contain some fields which collect data from user like name , Education , which course, learning mode , phone number etc .



The screenshot shows a web browser window with a single tab titled 'reg.html'. The address bar displays the file path 'C:\Users\Admin\Desktop\software\2\testing\webpage\reg.html'. The main content area features a registration form with the following fields and controls:

- First Name:** Text input field
- Last Name:** Text input field
- Email:** Text input field
- Education:** Dropdown menu with 'univ' selected and a 'degree' button
- Course:** Dropdown menu with 'select' selected
- City:** Text input field
- Learning mode:** Dropdown menu with 'select' selected
- Phone:** Text input field and a 'Mobile' button
- Gender:** Dropdown menu with 'choose gender' selected
- Submit:** Button

The form is set against a light blue background with a black border. The Windows taskbar at the bottom shows the time as 10:10 AM on 10-10-2022.

Fig. 5.6 Register

Fig .5.6 shows registration page of codeostiy

5.7 : Courses

There is an information about courses available at institute , some scope And details about that courses.

This page contains one small form which collect data from user like name email contact number and email address , and address of the institute .

When we click on submit button it gives popup message that “submitted successfully”.

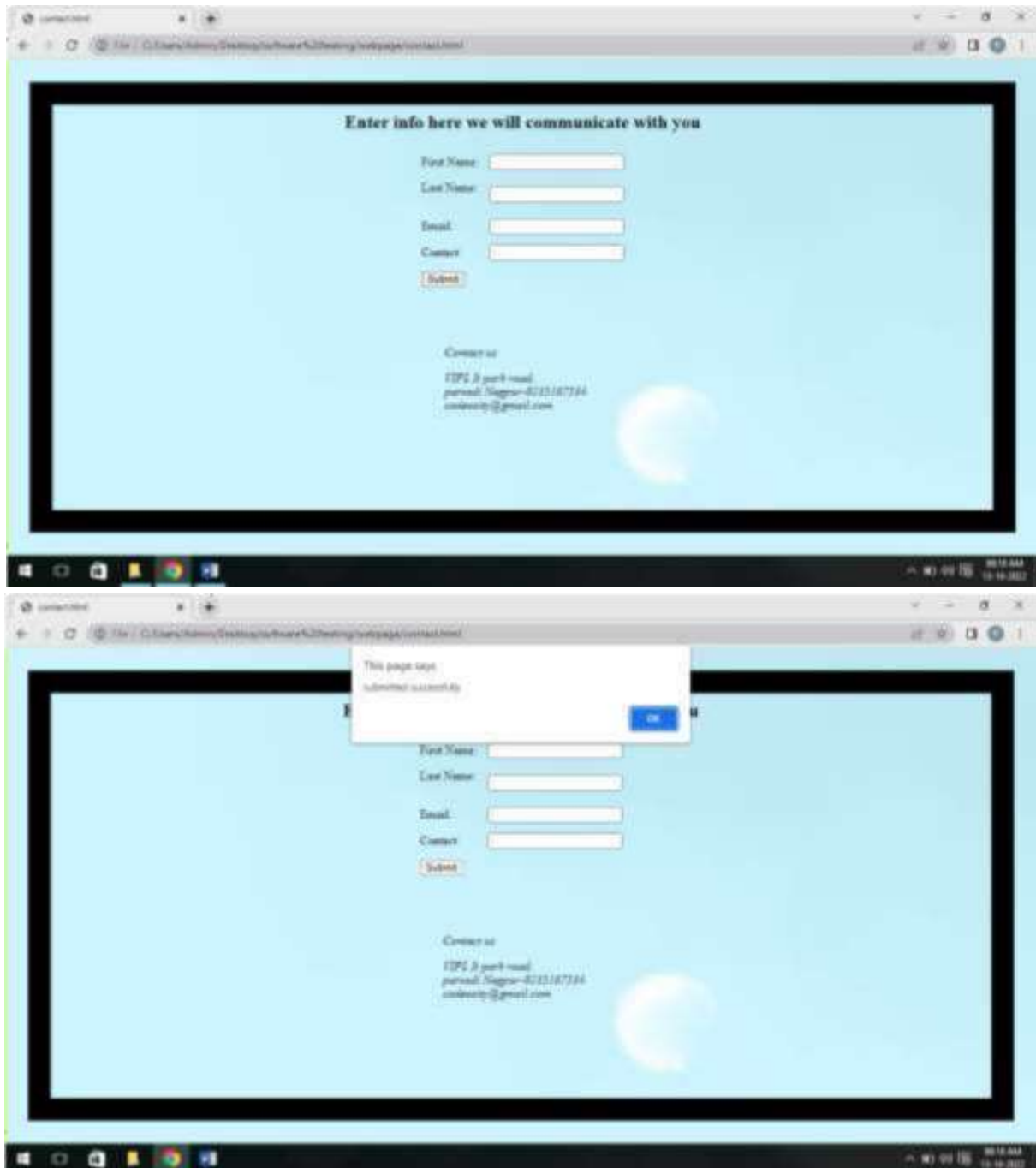


Fig. 5.8 Contact us

Fig.5.8 shows contact form of codeostiy

6 .CODE

6.1 Home page

```
<!DOCTYPE html>
<html> <head>
<link rel="stylesheet" href="pro.css">

</head>

<body>

  <p id="clock"></p>

  <script>

function currentTime()
{
```

```
let date = new Date();

let hh = date.getHours();

let mm = date.getMinutes();

let ss = date.getSeconds();

let session = "AM";

if(hh == 0) {

    hh = 12;

}

if(hh > 12) {

    hh = hh - 12;

    session = "PM";

}

hh = (hh < 10) ? "0" + hh : hh;

mm = (mm < 10) ? "0" + mm : mm;

ss = (ss < 10) ? "0" + ss : ss;

let time = hh + ":" + mm + ":" + ss + " " + session;

document.getElementById("clock").innerText = time;

let t = setTimeout(function(){ currentTime() }, 1000);

}

currentTime();
```

```
</script>
```

```
<h2 id="logo">we think for you</h2>
```

```
<div id="pic">
```

```

```

```
<div id="nav">
```

```
<a href="">Home</a>
```

```
<a href="about.html">About</a>
```

```
<a href="training.html">Training</a>
```

```
<a href="cours.html">Courses</a>
```

```
<a href="contact.html">Contact us</a>
```

```
</div>
```

```
<h1><em>Welcome To Codeosity</em></h1>
```

```
<div id="content">
```

```
<p>At Codeosity Training we are passionate about our training, and we want to take you on this journey with us. Our success is achieved by combining superb, market relevant training with recruitment skills that puts the individual first. This two prolonged approach
```

```
gives us a great insight into making sure our clients benefit from their investment of time and money and get the skills and career that allows them to fulfil their potential.</p>
```

```
</div>
```

```
<div id="im">
```

```

```

```
</div>
```

```
<h1>Our Services</h1>
```

```
<div id="content">
```

```
<p>Our Instructors provide group instruction and one-to-one assistance with a keen ability to transfer knowledge to each and every student of any background. Codeosity offers the following services:</p>
```

```
</div>
```

```
<div id="training">
```

```
<h3>Training</h3>
```

```
<p>We are first choice of students searching for technical IT training because of our training modules.</p>
```

</div>

<div id="training1">

<h3>Internship</h3>

<p>We provide internship of 3-4 months on various software technologies to increase the chances of getting job.</p>

</div>

<div id="training2">

<h3>Mock Interview</h3>

<p>3-4 mock interviews are also conducted by our professionals before giving interview calls to students.</p>

</div>

<div id="training3">

<h3>Live project</h3>

<p>Students will get an opportunity to make LIVE project under the assistance of our professionals.</p>

</div>

</body>

6.2 About page

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="pro.css">

</head>

<body>

<h1>About codeosity</h1>

<div id="im">

</div>

<div id="content">

<p>Codeosity is one of the Nagpur's leading independent providers of Microsoft,

Java,oracle and PHP training. Our courses have been designed to ensure that people can fulfill their

job role and also help prepare delegates for certification. Codeosity Training has a reputation of providing

excellent value for money training at a cost effective price. Our quality is assured by a team of dedicated professional training consultants/trainers who work full/Part time for Codeosity Training and

who blend their training skills with a wealth of hands-on experience.

Our Vision

To become leading brand in training sector, helping the job seeker to make their goal come live through best quality teaching, and guidance also help students to build basic concepts to make them more confident to face any challenges.

Our Mission

We are first choice of students searching for technical IT training because our training modules are always delivered to an exceptional standard by experts certified trainers at a price that offers value for money.

we serve all trainee The different teaching methodology, experienced faculty and variety of courses and skills.

6.3 Training page

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<link rel="stylesheet" href="pro.css">
```

```
</head>
```

```
<body>
```

```
<h1> Training / Internship</h1>
```

```
<div id="im">
```

```

```

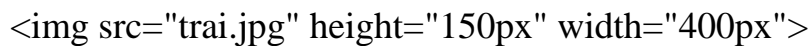
```
</div>
```

```
<div id="content">
```

Today technology has influenced every part of our life so therefore, IT skills are essential for every company today. Therefore, IT training & education has great business potential. As we know job oriented training

are a basic requirement for a large number of jobs. It provides a foundation on which employees can build new skills on the job for that we provide you job oriented training.

Codeosity is not a job agency. We are Recruitment Agency. We act on behalf of Companies. They contact us with positions that are vacant and we work to fill those positions by training our students on UI designing/PHP/JAVA/Dot net/Asp.net and Android at the industry level.



After successfully completion of training we provide 3 months of internship opportunity

We are first choice of students searching for technical IT training because our training modules are always delivered to an exceptional standard by experts certified trainers at a price that offers value for money. we serve all trainee The different teaching methodology, experienced faculty and variety of courses and skills.

Register here

[grab the Oppprtunity](regis.html)

All right reserved @2020

6.4 course page

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="pro.css">
</head>
```

```
<body>
<h1> Courses </h1>
<div id="ph">
<details><summary><h2>PHP</h2></summary>
<p>PHP Training offer to career as web-developer, web programmer, software
developer, web designer, web component developer and application
programmer.
This is an essential course for beginners and IT professional who want to create
programs that
run predominantly on the web, and are accessible either via the public internet
or private intranet in London or elsewhere.<br>
```

Learning to create web applications with PHP/MySQL just
got easier. Create dynamic websites, learn how to manage
users and manage your content.

Right from learning the basics of server-side
scripting and using PHP Scripts to creating dynamic websites, you will learn the
nuances
of PHP programming with real-world examples. The MySQL module will teach
you everything from the principles
of normalization to using MySQL for creating database tables, searching and
optimizing. You will then learn
how to use PHP and MySQL together, in tandem, to create great web
applications </p>
</details>
</div>

```
<div id="ph">
<details><summary><h2>Web Designing</h2></summary>
<p> website design means planning, creation and updating of websites. Website
design also involves information architecture, website structure, user interface,
navigation ergonomics, website layout, colors, contrasts, fonts and imagery
(photography) as well as icons design.
```

If you would like to learn more about modern web design techniques, good website
practices
and web design standards - all in simple and understandable format, then
perhaps it is best to start training in Codeosity which offers simple design
exercises and builds your skills step by step also it offers both ideas and
exercises how to start and build your skills incrementally. </p>
</details>

</div>

<div id="ph">

<details><summary><h2>ASP.Net</h2></summary>

<p>ASP.NET is a web application framework developed and marketed by Microsoft to

allow programmers to build dynamic web sites. It allows you to use a full featured programming language such as C# or VB.NET to build web applications easily.

ASP.NET works on top of the HTTP protocol, and uses the HTTP commands and policies

to set a browser-to-server bilateral communication and cooperation. ASP.NET is a part of Microsoft

.Net platform. ASP.NET applications are compiled codes, written using the extensible and reusable

components or objects present in .Net framework. These codes can use the entire hierarchy of classes in .Net framework.

</details>

</div>

</body>

</html>

6.5 contact page

<html>

<head>

<link rel="stylesheet" href="pro.css">

</head>

<body>

<form style="text-align:center;">

<table align="center" cellspacing="4px" cellpadding="5px">

<h2>Enter info here we will communicate with you</h2>

<tr> <td>First Name:</td>

<td><input type="text" name="fname" value=""></td>

</tr>

<tr>


```

        <td>Last Name:<br><br></td>
        <td><input type="text" name="lname" value=""></td>
    </tr>
    <tr>
        <td>Email:</td>
        <td><input type="text" name="email" value=""></td>
    </tr>

    <tr>
        <td>Contact</td>
        <td><input type="text" name="email" value=""></td>
    </tr>

    <tr>
    <td>
        <button type="button" id="demo">Submit</button>
        <script src="separate.js"></script></td>
    </tr>
    </table>
    </form>
    <br><br>

    <address> <p>Contact us </p> VIPL
    It park road,<br> parsodi Nagpur-
    0235167534.<br>
    codeosity@gmail.com
    </address>
    </body>
    </html>

```

6.6 Registration page

```

<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="pro.css">
</head>
<body>

```

```

<form style="text-align:center;">

    <table align="center" cellspacing="4px" cellpadding="5px">
        <h2>Registration Form</h2>

        <tr> <td>First Name:</td>
        <td><input type="text" name="fname" value=""></td>
        </tr>
        <tr>
            <td>Last Name:<br><br></td>
            <td><input type="text" name="lname" value=""></td>
        </tr>
    </tr>
        <td>Email:</td>
        <td><input type="text" name="email" value=""></td>
    </tr>

    <tr>
        <td>Education :</td>
        <td><select>
            <option>select</option>
            <option>graduate</option>
            <option>under graduate</option>
            <option>post graduate</option>
        </select>
    </td>
        <td><select>
            <option>stream</option>
            <option>B-tech</option>
            <option>BSC</option>
            <option>MCA</option>
            <option>B.E</option>
        </select>
    </td>

    </tr>
    <tr>
        <td> Course:</td>
        <td><select>
            <option>select</option>

```

```

<option>web designing</option>
<option>web development</option>
<option>php</option>
<option>. Net</option>
</select>
</td>
</tr>

<tr>
    <td>city:</td>
    <td><input type="text" name="city" value=""></td>
</tr>
<tr>
    <td>learning mode:</td>
    <td><select>
        <option>select</option>

        <option> online training</option>
        <option>offline training</option>

    </select>
</td>
</tr>
<tr>
    <td>Phone:</td>
    <td><input type="text" name="number" value="">
        <td><select><option>Mobile</option>
            <option>landline</option>

        </select>
</td>
</tr>
<tr>
    <td>Gender:</td>
    <td><select style="padding-right: 40px;">
        <option>choose gender</option>
        <option>male</option>
        <option>female</option>

    </select></td>
</tr>

<tr>
    <td>

```

```

        <input id="sub" type="submit" value="submit"></td>
    </tr>
</table>
</form>
</body>
</html>

```

6.7 signup

```

<!DOCTYPE html>
<html>
<head>
    <title>Sign Up Page</title>
<link rel="stylesheet" href="pro.css">
</head>
<body>
<h1>Codeosity</h1>
<h3>we think for you</h3>

    <form method="post" enctype="multipart/form-data">
        <table align="center" border="3" cellpadding="5"
cellspacing="7">

                                <tr>
                                    <td>Name:</td>
                                    <td>
                                        <input type="text" name="name"
value="">
                                    </td>
                                </tr>
                                <tr>
                                    <td>Email:</td>
                                    <td>

```

```

        <input type="text" name="email"
value="">
        </td>
    </tr>
    <tr>
        <td>Password:</td>
        <td>
            <input type="password"
name="password" value="">
        </td>
    </tr>
    <tr align="center">
        <td colspan="2">
            <input type="submit" name="signup"
value="Sign-Up" >
            <a href="log.html">Login</a>
        </td>
    </tr>
</table>
</form>

</body>
</html>

```

6.8 Login

```

<!DOCTYPE html>
<html>
<head>
    <title>Login Page</title>
    <link rel="stylesheet" href="pro.css">
</head>
<body>

```

```

        <form method="post" enctype="multipart/form-data">
        <table border="1" align="center" cellpadding="5"
cellspacing="7">
            <h1 style="text-align: center;">Codeosity</h1>

            <tr>
                <td>Email:</td>
                <td>
                    <input type="text" name="email">
                </td>
            </tr>
            <tr>
                <td>Password:</td>
                <td>
                    <input type="password" name="password">
                </td>
            </tr>
            <tr align="center">
                <td>
                    <input type="submit" name="login"
value="Login"><a href = "project.html"
                </td>
                <td>
                    <a href="#">Forgot Password </a>
                </td>
            </tr>
            <tr>
                <td colspan="2" align="center">
                    <span>Create account </span><a
href="login.html">Sign up</a>
                </td>
            </tr>
        </table>
    </form>

</body>
</html>

```

CSS CODE

```
body{ margin:30px; border:solid
5px    black;    padding:10px;
background-image:url("bac.jpg");
background-repeat: no-repeat;
background-size:100%;
}
```

```
#nav{      margin-
left:730px;
position:absolute;
top:80px; } a{ text-
decoration:none;
padding:15px; font-
size:18px; color:grey;
}
#logo{ margin-left:1020px;
position:absolute;
top:15px; color:gray; }
a:hover{ color:black;
background-color:pink; }
h1{      text-
decoration:underline; text-
align:center; color:grey;
padding-top:30px; text-
shadow:2px 2px;
} #content{ text-
align:center;
margin:20px;
padding-top:30px;
} #im{ margin-
left:410px;
padding-top:30px;
```

```
}      #training{
padding:10px; border:2px
solid black; border-
radius: 25% 10%;
```

```
margin-right:730px;
margin-left:120px;
text-align:center; box-shadow:10px
10px 20px ;
```

```
} h3{ color: grey; text-
align:center;      }
h3:hover{ background-
color:pink;
}
```

```
#training1
{ padding:10px; border:2px
solid black; border-radius: 25%
10%;      margin-right:280px;
margin-left:680px;      text-
align:center; position:absolute;
top:790px;  box-shadow:10px
10px 20px ;
```

```
} #training2{ padding:10px;
border:2px solid black; border-
radius: 25% 10%; margin-
right:730px;      margin-
left:120px;  text-align:center;
margin-top:25px;      box-
shadow:10px 10px 20px ;
```

```
}
```

```
#training3{
```

```
padding:10px; border:2px
solid black; border-radius:
25% 10%;      margin-
right:280px;      margin-
left:680px;      text-
align:center;
position:absolute;
top:970px;
box-shadow:10px 10px 20px ;
}
```



```
address{ margin-left:510px;  
}
```

```
#reg{ margin-left:560px;  
} #ph{ margin:70px;  
background-color:pink;  
padding:40px; font-  
size:20px; }
```

7. SYSTEM TESTING

System Testing is a level of testing that validates the complete and fully integrated software product. The purpose of a system test is to evaluate the end-to-end system

specifications. Usually, the software is only one element of a larger computer-based system. Ultimately, the software is interfaced with other software/hardware systems. System Testing is defined as a series of different tests whose sole purpose is to exercise the full computer-based system.

Two Category of Software Testing

- Black Box Testing
- White Box Testing

System test falls under the **black box testing** category of software testing.

White box testing is the testing of the internal workings or code of a software application. In contrast, black box or System Testing is the opposite. System test involves the external workings of the software from the user's perspective.

7.1 TESTING METHODOLOGIES

Software Testing Methodology is defined as strategies and testing types used to certify that the Application under Test meets client expectations. Test Methodologies include functional and non-functional testing to validate the

AUT. Examples of Testing Methodologies are Unit Testing, Integration Testing, System Testing, Performance Testing etc. Each testing methodology has a defined test objective, test strategy, and deliverables.

There are tons of methodologies available for software development and its corresponding testing. Each testing technique and methodology is designed for a specific purpose and has its relative merits and demerits.

Selection of a particular methodology depends on many factors such as the nature of a project, client requirement, project schedule, etc.

From a testing perspective, some methodologies push for testing input early in the development life cycle, while others wait until a working model of the system is ready.

7.2 EQUIVALENCE PARTITIONING

Equivalence classes are evaluated for given input conditions. Whenever any input is given, then type of input condition is checked, then for this input conditions, Equivalence class represents or describes set of valid or invalid states.

Let us consider an example of any college admission process. There is a college that gives admissions to students based upon their percentage.

Consider percentage field that will accept percentage only between 50 to 90 %, more and even less than not be accepted, and application will redirect user to an error page. If percentage entered by user is less than 50 % or more than 90 %, that equivalence partitioning method will show an invalid percentage. If percentage entered is between 50 to 90 %, then equivalence partitioning method will show valid percentage.

Percentage

* Accepts Percentage value between 50 to 90

Equivalence Partitioning		
Invalid	Valid	Invalid
≤ 50	50-90	≥ 90

7.3 TESTCASE

Test cases for Codeosity Website. Project

Name: Codeosity Institute

Reference: Project Functionality Requirement Specification

Created By: codeosity team Date of

created: 01-October -2022 Date of

review: 19-January -2023.

Testcase	Test Objective	Precondition	Step:	Test data
TC_EB_01	Login	A Valid Account to Login	Email id: Enter password: Click the login "button":	Payal51@gmail.com 12345
TC_EB_02	Register	A Valid Account to Register	First name: Last name: Email id: Education: Stream: Contact: Mode: Click the register "submit":	Payal Thakare Payal51@gmail.com B.E CSE 7038323581 Online
TC_EB_03	Home	All details	Click the About us	
			Click courses	
			Click training	
			Name: Email: Contact:	Payal Payal51@gmail.com 7038323581

Expected result	Actual result	Post Condition	Result
-----------------	---------------	----------------	--------

Logged Successfully	Same as expected	Login inbox is shown	pass
Registered successfully	Same as expected	registered inbox is shown	pass
It navigate to about us page	Same as expected	Information's are shown	pass
It navigate to courses page	Same as expected	Information's are shown	pass
It navigate to training page	Same as expected	Information's are shown	pass
Contact us form is send successfully	Same as expected	sent inbox is shown	pass

7.4 WEBSITE AUTOMATION TEST

Test Automation Using Selenium

Automation Testing is a software testing technique that performs using special automated testing software tools to execute a test case suite.

On the contrary, Manual Testing is performed by a human sitting in front of a computer carefully executing the test steps.

The automation testing software can also enter test data into the System under Test, compare expected and actual results and generate detailed test reports.

Software Test Automation demands considerable investments of money and resources.

Automation testing process:

Following steps are followed in an Automation Process

Step 1. Test Tool Selection

Step 2. Define scope of Automation

Step 3. Planning, Design and Development

Step 4. Test Execution

Step 5. Maintenance

SELENIUM AUTOMATION

Selenium is a free, open-source automation testing suite for web applications across different browsers and platforms.

It is somewhat similar to HP Quick Test Pro (QTP, currently UFT). However, Selenium focuses on automating web-based applications.

Testing done using Selenium is usually referred to as Selenium testing. Remember, only testing web applications is possible with Selenium. You cannot use it to test desktop applications or mobile applications.

I have created an website for online and offline courses named as Codeosity And I have done test Automation on my project by using selenium and the code for testing my website is given below

SELENIUM

Selenium is one of the most widely used open source Web UI (User Interface) automation testing suite. It was originally developed by Jason Huggins in 2004 as an internal tool at Thought Works.

Selenium supports automation across different browsers, platforms and programming languages.

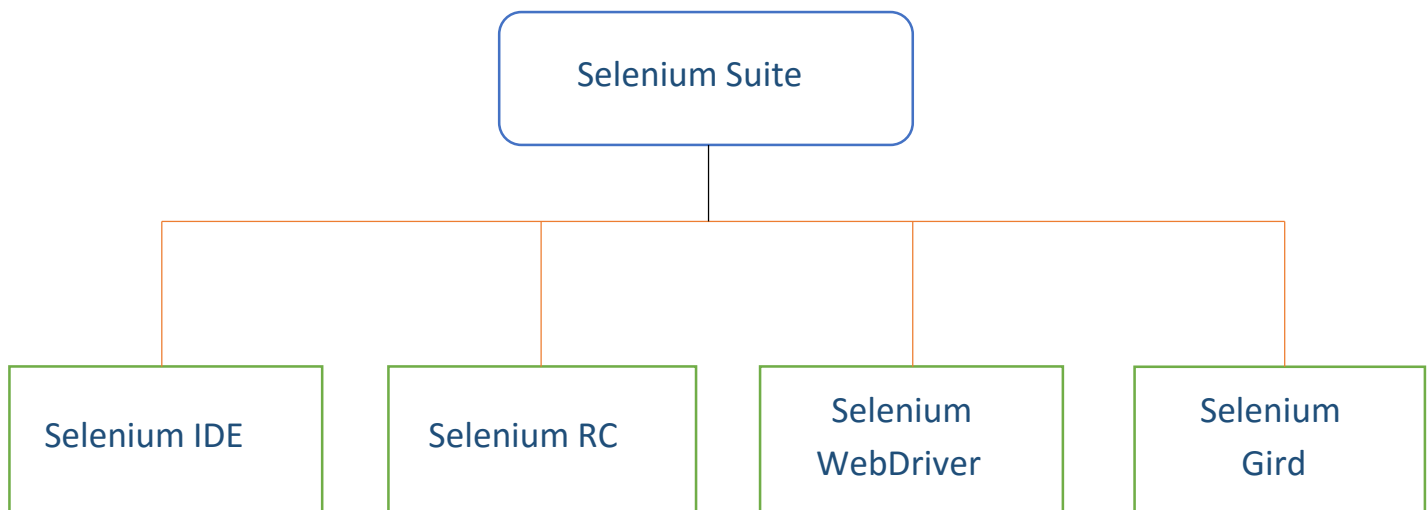
Selenium can be easily deployed on platforms such as Windows, Linux, Solaris and Macintosh. Moreover, it supports OS (Operating System) for mobile applications like iOS, windows mobile and android.

Selenium supports a variety of programming languages through the use of drivers specific to each language.

Languages supported by Selenium include **C#, Java, Perl, PHP, Python** and **Ruby**.

Currently, Selenium Web driver is most popular with Java and C#. Selenium test scripts can be coded in any of the supported programming languages and can be run directly in most modern web browsers.

Browsers supported by Selenium include **Internet Explorer, Mozilla Firefox, Google Chrome** and **Safari**.



Selenium can be used to automate functional tests and can be integrated with automation test tools such as **Maven, Jenkins, & Docker** to achieve continuous testing.

It can also be integrated with tools such as **TestNG, & JUnit** for managing test cases and generating reports

Selenium code for Codeosity Automation Testing

```
package sele1;

import org.openqa.selenium.By;      import
org.openqa.selenium.WebDriver;      import
org.openqa.selenium.chrome.ChromeDriver;      import
org.openqa.selenium.NoAlertPresentException;      import
org.openqa.selenium.Alert;

public class alerthandl {

    public static void main(String[] args) throws
NoAlertPresentException, InterruptedException {

        System.setProperty("webdriver.chrome.driver", "D:\\chromedriver_win32
\\chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();

        // Alert Message handling

driver.get("file:///C:/Users/Admin/Desktop/software%20testing/webpage/projec
t.html");

        //driver.get("file:///C:/Users/Admin/Desktop/Javascript/Javascript/javascr
ipt_dilogbox/confirmation.html");
        // driver.findElement(By.xpath("/html/body/form/input")).click();
        driver.findElement(By.linkText("Contact us")).click();

        driver.findElement(By.name("fname")).sendKeys("Roshni");

        driver.findElement(By.name("lname")).sendKeys("pokharkar");

driver.findElement(By.name("email")).sendKeys("rosh1@gmail.com");
driver.findElement(By.xpath("/html/body/form/table/tbody/tr[4]/td[2]/input"))
.sendKeys("7067067095");
.s
```

```
driver.findElement(By.id("demo")).click();
```

```
// Switching to Alert
```

```
Alert alert= driver.switchTo().alert();
```

```
// Capturing alert message.
```

```
String alertMessage= driver.switchTo().alert().getText();
```

```
// Displaying alert message
```

```
System.out.println(alertMessage);
```

```
Thread.sleep(5000);
```

```
// Accepting alert
```

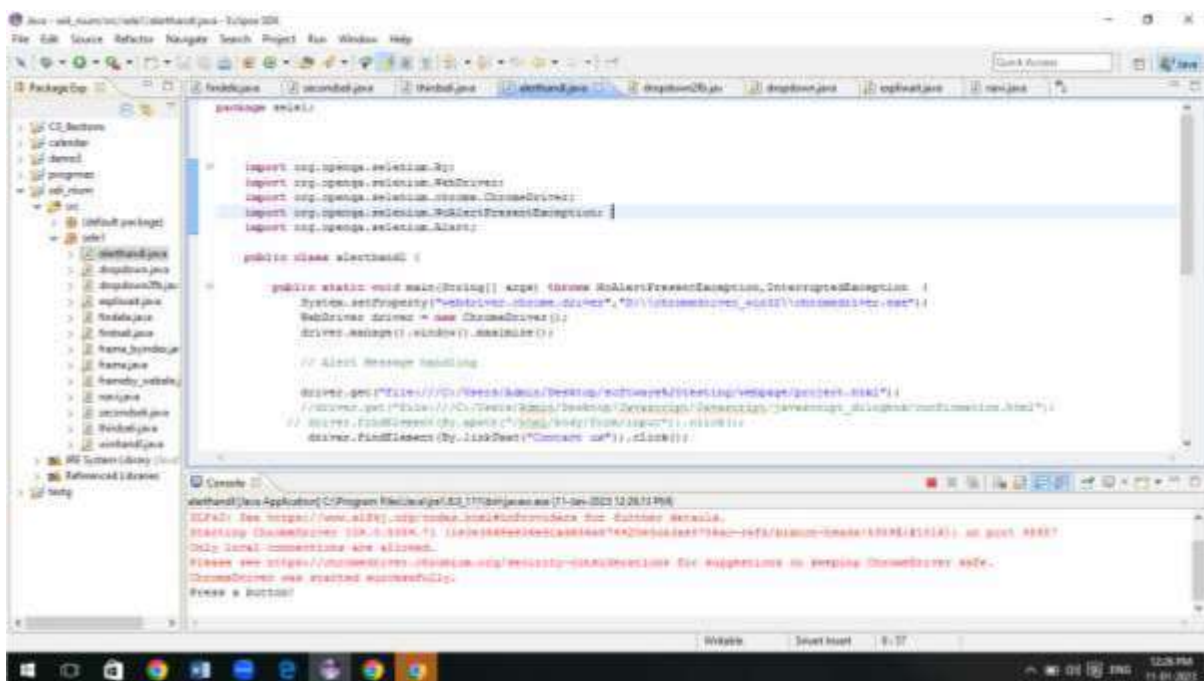
```
alert.accept();
```

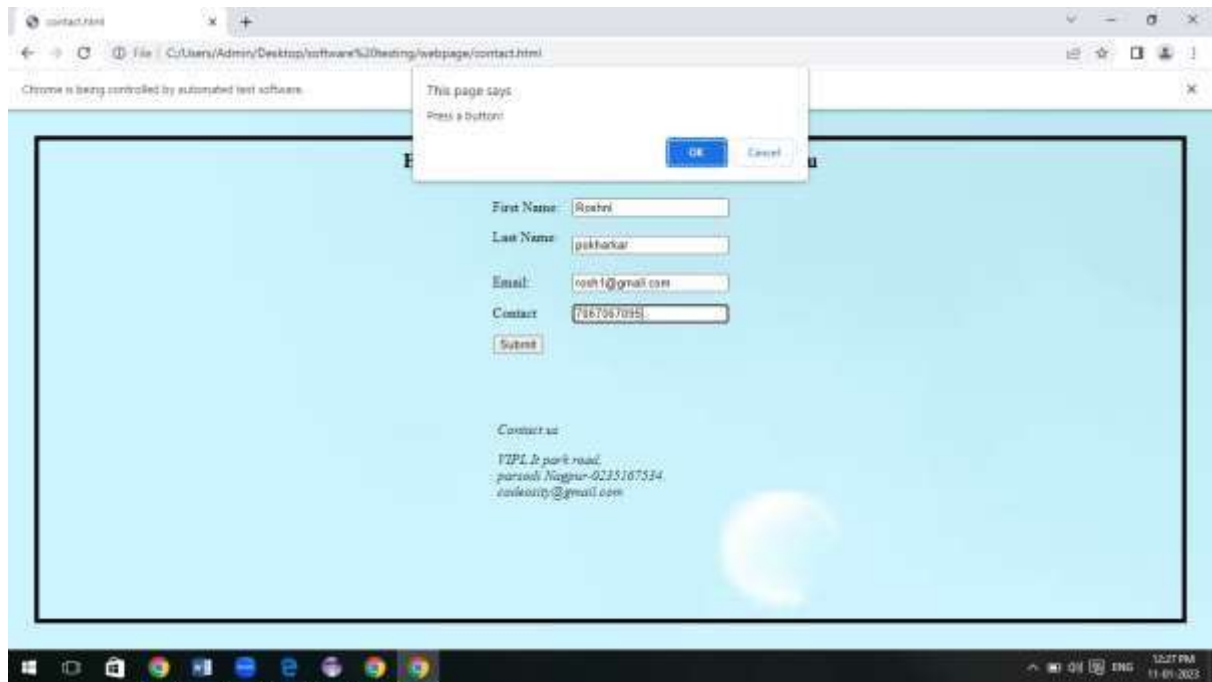
```
driver.quit();
```

```
}
```

```
}
```

OUTPUT





**Done automation testing for amazon Code
for amazon:**

**1) Signin and searching some items package
select;**

```

import org.openqa.selenium.By;      import
org.openqa.selenium.WebDriver;      import
org.openqa.selenium.chrome.ChromeDriver;

public class findele {      public static void
main(String [] args){

    System.setProperty("webdriver.chrome.driver","D:\\chromedriver_win32
\\chromedriver.exe");

        WebDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("https://www.amazon.in");

        //driver.findElement(By.id("nav-cart-count")).click();
        driver.findElement(By.className("nav-line-1-container")).click();

        driver.findElement(By.name("email")).sendKeys("7038323582");

        driver.findElement(By.id("continue")).click();

        driver.findElement(By.name("password")).sendKeys("Uknowit@12345")
;
        driver.findElement(By.id("signInSubmit")).click();

        driver.findElement(By.id("twotabsearchtextbox")).clear();

```

```

driver.findElement(By.id("twotabsearchtextbox")).sendKeys("laptop");
    driver.findElement(By.id("nav-search-submit-button")).click();
    driver.findElement(By.linkText("HP")).click();
    driver.findElement(By.linkText("HP 14s, 11th Gen Intel Core i3-
1115G4, 8GB RAM/256GB SSD 14-inch(35.6 cm) Micro-Edge, Anti-Glare,
FHD Laptop/Alexa Built-in/Win 11/Intel UHD Graphics/Dual Speakers/
MSO 2021/1.41 Kg, 14s-dy2507TU")).click();

driver.findElement(By.className("a-button-input attach-dssatc")).click();

    //driver.navigate().back();


    //driver.findElement(By.id("")).click();
driver.quit();


    //driver.navigate().back();

}

```

2) Drop down code

```
package sele1;
```

```

import java.util.List;
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.support.ui.Select;

public class dropdown {
    public static void main(String [] args) throws InterruptedException{

        System.setProperty("webdriver.chrome.driver","D:\\chromedriver_win32\\chromedriver.exe");
        WebDriver driver = new ChromeDriver();
        driver.get("https://www.amazon.in");
        //Select sr = new
        Select(driver.findElement(By.xpath("//*[@id='searchDropDownBox']")));
        //sr.selectByIndex(2);

        Select list1 = new
        Select(driver.findElement(By.xpath("//*[@id=\"searchDropDownBox\"]")));
        list1.selectByVisibleText("Appliances");

        //System.out.println("Select value is: " +
        sr.getFirstSelectedOption().getText());//here use getFirstSelectedOption();

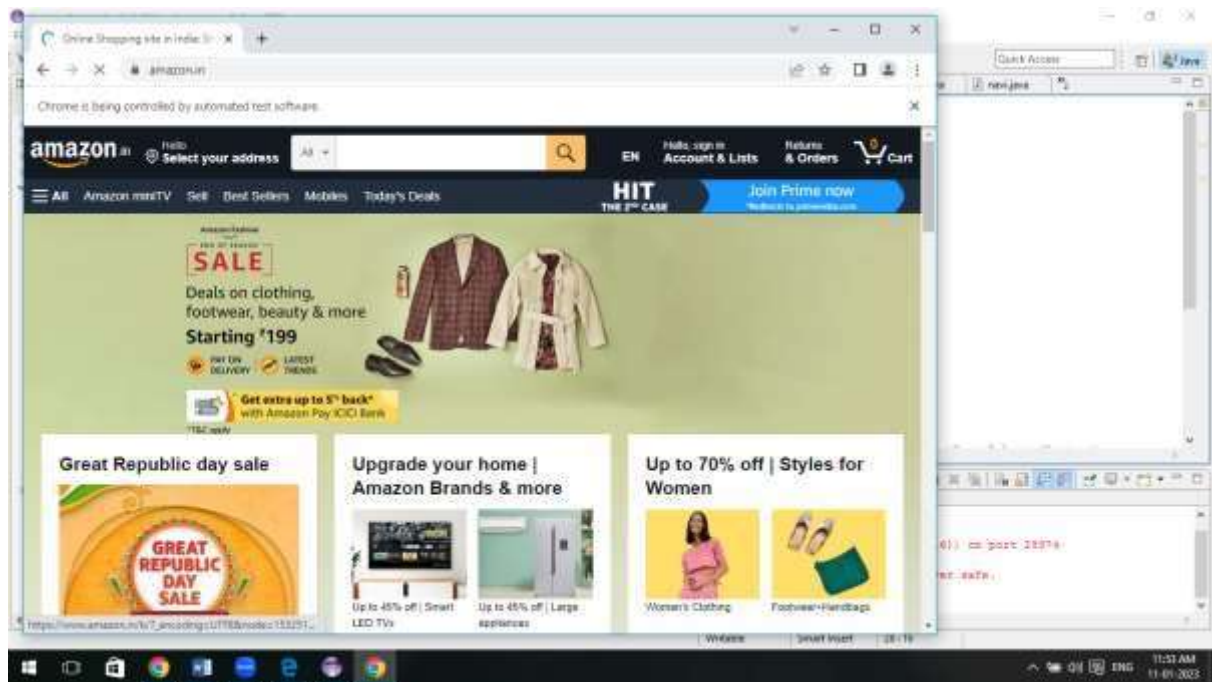
        //List<WebElement> b = sr.getOptions();//getOptions() for getting all
option
        //for(WebElement abc :b){
        //    System.out.println(abc.getText());

        }

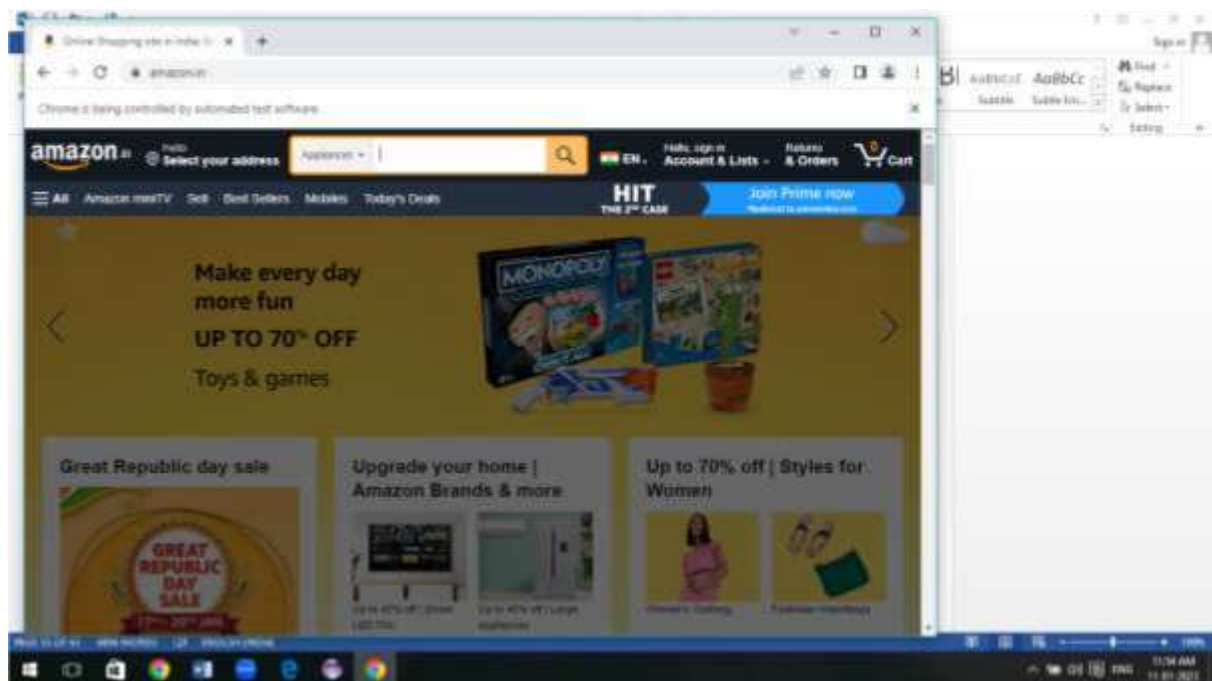
    }
}

```

OUTPUT



amazon.in page open



In dropdown of ALL here Appliances is selected

CONCLUSION

Codeosity has all the basics modules and also it makes online system fully computerized which is very fast and efficient.

Normal in online system we use maximum manual application .it consumes lots of time and paper. there is always a distance between the system and end user.

Now-a-days everything is becoming computerized in order to reduce the distance between the system and the user and bring it to a close relationship as using paper and pens,and for saving time,visitor need not to visit institute ,he/she can gather information through website only,for this Codeosity has been developed.

The owner can enter into the system very easily. The system is totally a user-friendly and timesaving system .it is also cost effective. All the modules are designed in a way that a zone can understand the system very easily.

