

UNDERSTANDING THE CONCEPT OF SOFTWARE DEVELOPMENT ENGINEER IN TEST

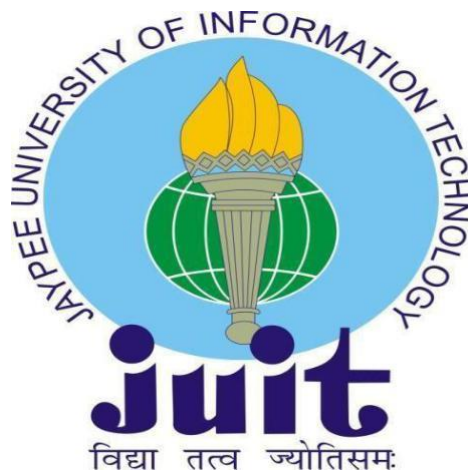
**Internship report submitted in partial fulfillment of the
requirement for the degree of Bachelor of Technology**

In

**Computer Science and Engineering/Information
Technology**

By

GAGANAJEET (171239)



Department of Computer Science & Engineering

**Jaypee University of Information Technology
Waknaghat, Solan-173234, Himachal Pradesh**

An Internship Report with regard to Cognizant Internship.

Acknowledgements

This is a matter of pleasure for me to acknowledge my deep sense of gratitude to Jaypee University and my college, Jaypee university of information technology for giving me an opportunity to explore my abilities via this internship programme. I would like to express my sincere gratitude to our TnP officer, Mr. Pankaj Kumar and our faculty Coordinator, Dr. Nafis U Khan for this opportunity. I also wish to express my gratitude to my internship supervisor, for their valuable guidance and advice in completing this project.

I would like to record my sincere appreciation and gratitude towards all the officials and employees of cognizant, without whose kind assistance, my internship program would not have succeeded. The facts and other vital information provided by them have contributed towards making this report as comprehensive as possible. I am indeed thankful to them.

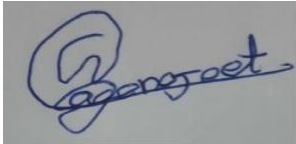
Last but not the least, I would like to express my sincere thanks to all my family members, friends and well-wishers for their immense support and best wishes throughout the internship duration and the preparation of this report.

I believe that this report will be a valuable asset not only for academic institution, but will also be useful for all those who are interested to learn about internship experiences in auditing and consulting firm.

Candidate's Declaration

I hereby declare that the work presented in this report entitled “**UNDERSTANDING THE CONCEPT OF SOFTWARE DEVELOPMENT ENGINEER IN TEST**” “in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology in Computer Science and Engineering/Information Technology** submitted in the department of Computer Science & Engineering and Information Technology, **Jaypee University of Information Technology Wagnaghat** is an authentic record of my own work carried out over a period from Mar 2021 to Aug 2021 under the supervision of Mr. Abhijit Joshi(Trainer at Cognizant).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

A handwritten signature in blue ink, appearing to read 'Gaganajeet', is written over a grey rectangular background.

Gaganajeet (171239)

This is to certify that the above statement made by the candidate is true to the best of my knowledge.

Mr. Abhijit Joshi
Trainer at cognizant
Dated: 20/05/21

Project Report Undertaking

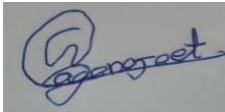
I Mr. Gaganajeet, Roll No.171239, Branch Computer science is doing my internship with Cognizant Technology solutions from _24 Mar 2021 to 16 Aug 2021

As per procedure I have to submit my project report to the university related to my work that I have done during this internship.

I have compiled my project report. But due to COVID-19 situation my project mentor in the company is not able to sign my project report.

So, I hereby declare that the project report is fully designed/developed by me and no part of the work is borrowed or purchased from any agency. And I'll produce a certificate/document of my internship completion with the company to TnP Cell whenever COVID -19 situation gets normal.

Signature:

A handwritten signature in blue ink, appearing to read 'Gaganajeet', is placed over a grey rectangular background.

Name: Gaganajeet Singh

Roll No:171239

Date.20 May 2021

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List of abbreviations

Abbreviations	Full form
1.BU	BUSINESS UNIT
2.XML	EXTENSIBLE MARKUP LANGUAGE
3.SQL	STRUCTURED QUERY LANGUAGE
4.CTS	COGNIZANT TECHNOLOGY SOLUTION

List of Figures, Tables

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Abstract

This Report presents the experience and skills gained during my 6 months internship undertaken at cognizant Technology solutions, Pune though it was online because of covid 19. My Training was on the testing of different simulation software During the period, I acquired practical knowledge and skills in using engineering software, majorly testing and ANSYS; also, times were spent in the workshop to get hands on experience in using the Jenkins tools. I did a lot of learning the new testing techniques and tools. This report discusses the Skills gained and Experience gathered during the period of training, justifying the relevance of the scheme in equipping students with needed technical competence to thrive in the real world.

Chapter I

Organization Profile

1.1 Background:

After the end of 7th semester, various company visited to our college for the placement of the student, one such company was cognizant, due to my good fortune, I was selected for Gen-C profile, after selected as Gen-C, I was offered an internship program by the cognizant before the full time role and completing internship is necessary for the full time role in the cognizant. The internship was of around 19 weeks containing various sessions, webinar, online Udemy courses, assessment and project.

Cognizant is the top IT company in the India, and major IT company in US. Cognizant employees around 3 lakh employee and recruit around 20 thousand fresh people every year from India. Cognizant also hires from different country across the globe.

Cognizant offers various role in the company like develop, Designer, Tester and Manager in the company, but, before becoming the associate every person should complete the intern period and after the intern period there is one year of probation period in the company for the associate to join the company.

Cognizant also provide stipend during the internship period which is around 12 thousand per month to the interns pursuing internship in the internship.

But the total amount comes in persons hand is 10800 only because 1200 get cuts for the purpose related to the tax.

The internship period varies and depends on the roles, which the intern gets, like someone who got developer profile, for them internship period will be of around 4-5 months and for the quality insurance, it might vary from 5-6 month.

The domain allocation is random in the cognizant for the interns, but sometime it depends on the assimilation test also, the person who got higher marks in assimilation test, will have higher chances to get better profile or domain and it also depends on the first come first serve basis.

1.2 Mission, vision, values and objectives

Mission – Cognizant mission is to train every fresh person who got selected in to the cognizant. Cognizant provide internship to every person who got selected in the cognizant.

Every year cognizant train college fresh out student in bulk number before giving them the associate role. This recruit happens from all college over the India.

Cognizant spends much time, effort and money in training the intern before giving them the actual work and before them to work in the real environment.

Vision - The cognizant vision is to train every fresh out student recruited form the college no matter from which college the persons comes.

Values

The values of the organization are as follows:

Valuing People

We accept that our prosperity relies upon individuals. By regarding individuals in all that we do, we will construct and keep up excellent, productive associations with our clients, proficient partners, reference sources, merchants, local area individuals and one another.

- *Building Client Relationships*

We try to accomplish long haul customer reliability by building a profound comprehension of every customer's business and individual objectives, by exhibiting steady dependability and respectability in our work and by filling in as an autonomous and deliberate advisor to our customers.

- *Upholding Quality and Integrity*

We will maintain an environment where a commitment to quality, honesty, respect, justice and good conduct governs the actions and decisions of everyone in our company.

Keys to Success:

- Complete the work with full honesty.
- Complete the work on time.
- Complete the assessment.
- Complete the project within schedule time.
- Try to learn as much as possible from the SME, Trainer, mentor.
- Open to learn anything taught.

Objectives:

The objectives of Cognizant are:

- The general goal is to center the exercises towards its particular administrations and to turn into an innovator in this specialty in the country.
- Development - To broaden the business at a rate that is both trying and sensible, serving the market with headway and adaptability.

1.3. Ice breaker**Week 1:**

- Corporate induction.
- Talent Manager connect.
- Cognizant Agenda session on cores values.
- Leaders Talk (Academy) and many more.

Chapter II

Internship program sequence

2.1 Stage 1 – QEA Basics

I was inducted as a team member in my cohort then this Qea basics consist of the eight weeks in which we have to learn various technology and do various hands -on and assessment during this qea sequence.

Week 1:

- Functional Testing.
- Basics of automation.
- ICT (Integrated Capability Test).

In this week we all have to do is to complete Udemy courses provided by the cognizant during the internship, complete the hands-on, assessment(important), and to complete the integrated capability test also.

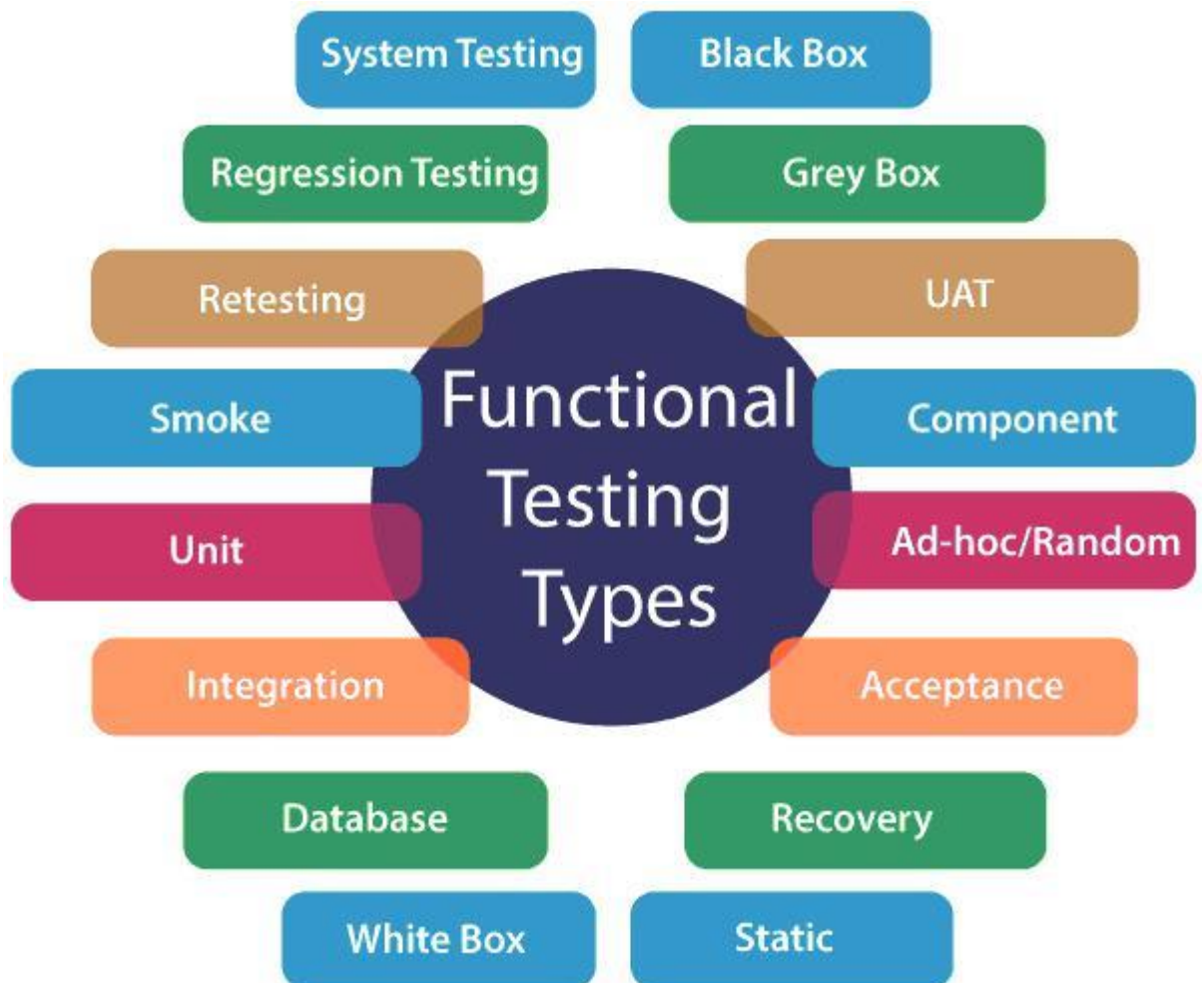
In this week 1 we learned how to make test cases and scenario from scratch in the excel file.

After we completed the online Udemy courses, we did the hands -on and completing the hands- on is mandatory for every intern and then, after completing the hands -on we use to give assessment, a small test whose marks were taken into account, for the calculation of the in the final overall performance.

The most important part of this week was covering all the basis aspects of the manual writing test cases and their scenario.

It also covered the basic type of testing techniques like white box and black, different test methods.

Functional testing: It is a kind of programming testing that supports the item system against the helpful necessities/subtleties. The justification Functional tests is to test every limit of the item application, by giving legitimate data, checking the yield against the Functional necessities.



Automation Testing: Automation Testing is an item testing technique that performs using phenomenal mechanized testing programming instruments to execute an investigation suite. Regardless of what may be generally anticipated, Manual Testing is performed by a human sitting before a PC carefully executing the test steps.

The robotization testing programming can in like manner enter test data into the System Under Test, consider expected and real results and make unequivocal test reports. Programming Test Automation demands broad endeavors of money and resources.

AUTOMATED SOFTWARE TESTING



Agile Testing: It is a trying practice that keeps the standards and standards of dexterous programming improvement. In contrast to the Waterfall strategy, Agile Testing can start toward the beginning of the venture with consistent incorporation among improvement and testing. Agile Testing system isn't successive (in the sense it's executed solely after coding stage) yet nonstop.



Test case: It is a lot of exercises executed to check a particular component or helpfulness of your item application. A Test Case contains test steps, test data, precondition, postcondition created for unequivocal test circumstance to affirm any essential. The examination fuses unequivocal factors or conditions, using which a testing draftsman can differentiate expected and genuine results with choose if an item thing is working as per the requirements of the customer.

Test Scenario: A Test Scenario is characterized as any usefulness that can be tried. It is an aggregate arrangement of experiments which helps the testing group to decide the positive and negative attributes of the task. Test Scenario gives an undeniable level thought of what we need to test.

RTM: Requirement Traceability Matrix (RTM) is a file that guides and follows customer need with tests. It gets all necessities proposed by the client and essential obviousness in a single record, passed on toward the completion of the Software advancement life cycle. The standard inspiration driving Requirement Traceability Matrix is to endorse that all necessities are checked through investigations so much that no value is unchecked during Software testing.

Defect Report: It is otherwise called Bug Report, is a record that recognizes and depicts an imperfection identified by an analyzer. The reason for a deformity report is to express the issue as unmistakably as conceivable so designers can repeat the imperfection effectively and fix it

Below are the sample hands on excel file for hotel booking.

1. Test scenario

A	B	C	D	E
Module	Scenario ID	Scenario Name	Scenario Description	Requirement id
Hotel Booking	HB1	Location of hotel local or International	A customer has to choose hotel location whether its India or International	RID1
Hotel Booking	HB2	Room Selection	A customer should be able to number of rooms .	RID1
Hotel Booking	HB3	Check In /Out	A customer can choose his or her check in or check out date.	RID1
Hotel Booking	HB4	Search available rooms	A customer can search the rooms acc to his filter which he applied	RID1

2. Test cases

E	F	G	H	I	
Steps to execute	Expected results	Actual results	Pass/Fail	Defect id	Remarks
1.click on india in the the radio button 2.select country india in li	The city box should contain with the list of indian city	The citybox contains city like Delhi,Mumbai, etc	Pass		
1.click on "International " radio button. 2.select country drop li	The country list should appear with country like USA,UK etc.	Country list does n't appear .	Fail	DID1	
1.click on india radio button 2. select india country 3. select Delfi Delhi hotels rooms should be displayed		Room of calcutta appeared	Fail	DID2	
1.click on radio button 2.select country. 3.select check in date ai	The number of rooms should be equal to number of rooms	The number of rooms are equal to number of ro	Pass		
1.click on radio button 2.select country. 3.select check in date ai	The room selection should contain two list "adult" and "children"	Two list box appears in room selection	Pass		
1.click on radio button 2.select country. 3.select check in date ai	The room number # is displayed on the basis of number selected	The room number # is displayed on the basis of n	Pass		
1.click on radio button 2.select country. 3.select check in date le	The list of rooms should appeared	The list of rooms appeared	Pass		
1.click on radio button 2.select country. 3.select check in date g	System should throw error about wrong check in and check out tin	The application displays all records	Fail	DID3	
1.click on radio button 2.select country. 3.select check in date le	The web application shows the rooms available with your requiren	The application displays all rooms with your requ	Pass		
1.click on radio button 2.select country. 3.select check in date g	The application must show error of wrong check in and checkout t	The application showed error on next page	Pass		

3. Defect report

A	B	C	D	E	F
Defect id	Description	Reproducible (yes/no)	Steps to reproduce	Severity	
1 DID1	By Clicking international Radio Button, the List Box of country is not displayed	yes	1.Open The Hotel Booking Site. 2.Click the interna	Medium	
2 DID2	Traveler selects the city as "Delhi" and enters all the mandatory fields. On clicking the "Search" button, hote	yes	1.Open The Hotel booking Site. 2.click on india rad	Medium	
3 DID3	Traveler enters Check-In date greater than Check-Out date, fills other details and clicks the "Search" button.	yes	1.Open The Hotel Booking Site. 2.Click any radio b	Critical	

4.Rtm (Requirement Traceability Matrix)

A	B	C	D	E	F	G	H
Serial no	Requirement id	Requirment description	Test scenario id	Test case id	Defect id		
1	RID1	Requirement is about Raj Travels website. It is used to	HB1,HB2,HB3,HB4	TC1,TC2,TC3,TC4,...UPT	DID1,DID2,DID3		

Week 2:

- Programming with Java.
- ICT (Integrated Capability Test).

In this week we all have to do is to compete Udemey courses provided by the cognizant during the internship, complete the hands-on, assessment(important), and to complete the integrated capability test also.

In this week 2 we learned the java part from scratch.

After we completed the online Udemey courses, we did the hands -on and completin g the hands- on is mandatory for every intern and then, after completing the hands -on we use to give assessment, a small test whose marks were taken into account, for the calculation of the in the final overall performance.

The most important part of this week was covering all the basis aspects of the java and jdbc concepts and database from scratch.

Below is the sample java code for highest placement.

```
Main.java
1- import java.util.*;
2- class Placement {
3-     public static void main(String[] args) {
4-         Scanner scanner = new Scanner(System.in);
5-         int cse, ece, mech;
6-
7-         System.out.println("Enter the no of students placed in CSE:");
8-         cse = scanner.nextInt();
9-         System.out.println("Enter the no of students placed in ECE:");
10-        ece = scanner.nextInt();
11-        System.out.println("Enter the no of students placed in MECH");
12-        mech = scanner.nextInt();
13-
14-        if (ece<0 || cse<0 ||mech<0) {
15-            System.out.println("Input is Invalid");
16-        } else if (ece==cse && cse==mech && mech==ece) {
17-            System.out.println("None of the department has got the highest placement");
18-        } else {
19-            System.out.println("Highest placement");
20-            if(cse>=ece && cse >=mech){
21-                if(cse==ece){
22-                    System.out.println("CSE");
23-                    System.out.println("ECE");
24-                }
25-                else if(cse==mech){
26-                    System.out.println("CSE");
27-                    System.out.println("MECH");
28-                }
29-                else{
30-                    System.out.println("CSE");
31-                }
32-            }
33-        }
34-    }
35-}
36-else if(ece>=cse &&ece>=mech){
37-    if(ece==cse){
38-        System.out.println("ECE");
39-        System.out.println("CSE");
40-    }
41-    else if(ece==mech){
```

Inheritance sample hands on:

```

class Vehicle {
    protected String brand = "Ford";
    public void honk() {
        System.out.println("Tuut, tuut!");
    }
}

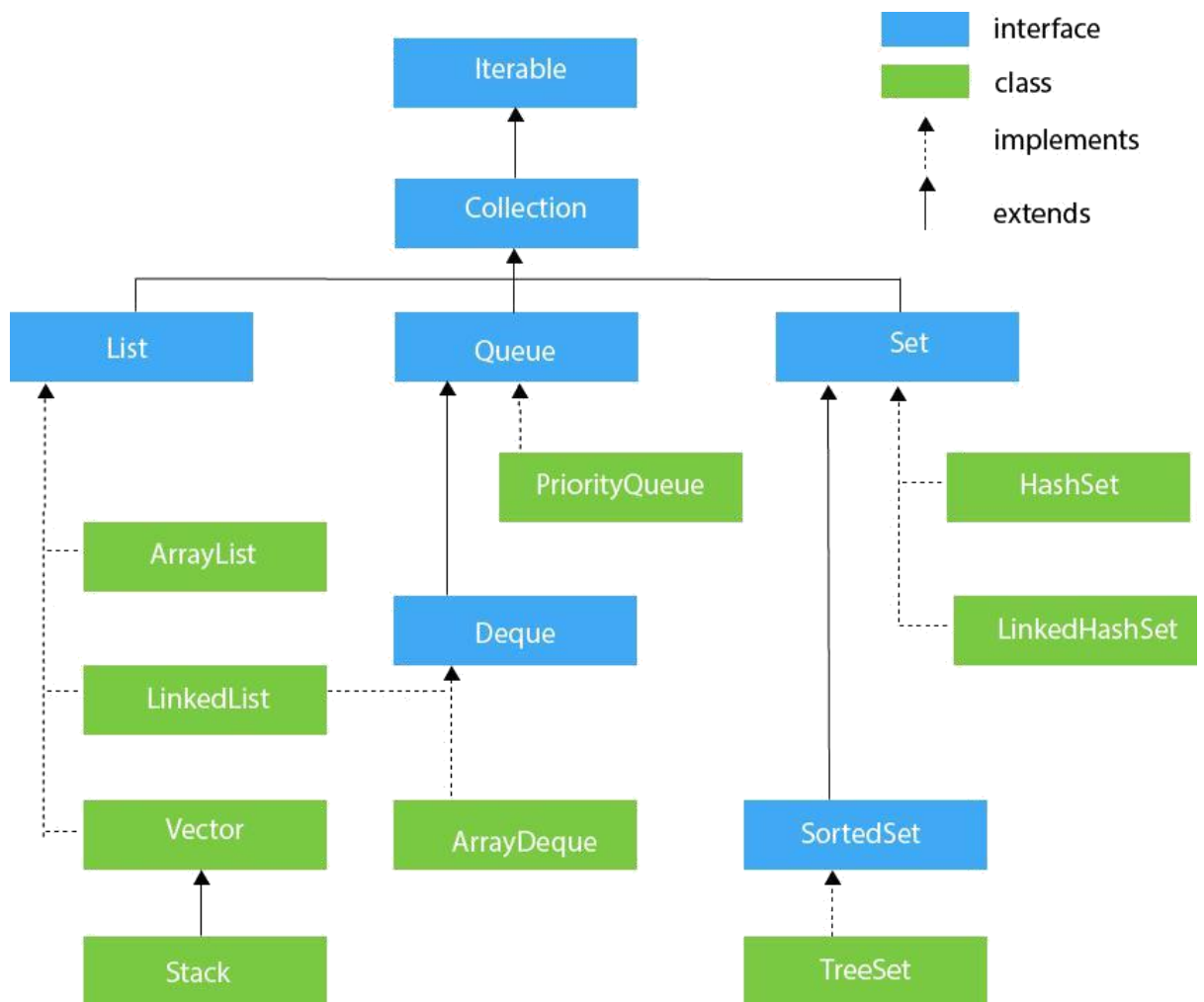
class Car extends Vehicle {
    private String modelName = "Mustang";
    public static void main(String[] args) {
        Car myFastCar = new Car();
        myFastCar.honk();
        System.out.println(myFastCar.brand + " " + myFastCar.modelName);
    }
}

```

```

Tuut, tuut!
Ford Mustang

```



Week 3,4:

- Programming with java with jdbc
- Behavioral skills

In this week we all have to do is to complete Udemy courses provided by the cognizant during the internship, complete the hands-on, assessment(important), and to complete the integrated capability test also.

In this week 2 we learned the core java part from scratch with the help of the Udemy courses and trainer guide queries.

After we completed the online Udemy courses, we did the hands -on and completing the hands- on is mandatory for every intern and then, after completing the hands -on we use to give assessment, a small test whose marks were taken into account, for the calculation of the in the final overall performance.

The most important part of this week was covering all the basis aspects of the core java and learning JDBC and database connectivity with database from scratch because learning java and JDBC is very important in application development.

It also covered integrating of Core java and JDBC with the database to form proper webpage.

This part was very long because it was 3 week long, and we started from core java to advance java part also, connecting small core java with database through database connectivity or JDBC.

These 3 weeks was very important because we learned very crucial things in these 3 weeks, the most important, that very developer should k now for developing application.

We did around 28 hands-on in this part, the hands-on were very long and difficult in this part

The most important thing in these 3 weeks was basics of core java. We learned core java from basics and covering all aspects of the java, it's features, it's uses and how to develop an application from scratch with the help of the java and connecting with database through JDBC.

JDBC was very important part in these 3 weeks because very application requires the

database connectivity, and that's only possible with the of the database connectivity through JDBC.

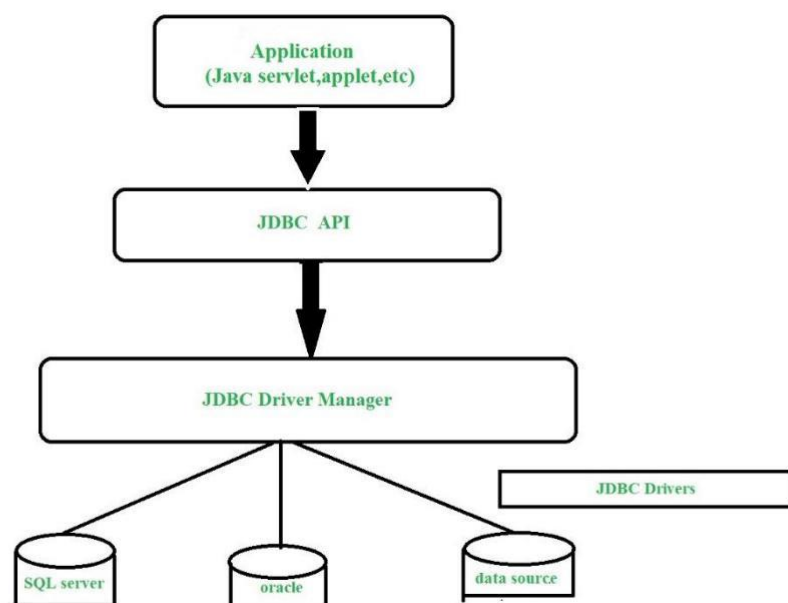
We learned all aspects of the JDBC, all types of the Database connectivity and storing data in the tables in the database and also retrieving the data from the database using few lines of the codes.

Connecting to the database is very crucial in the application development and also is the major part in the application development

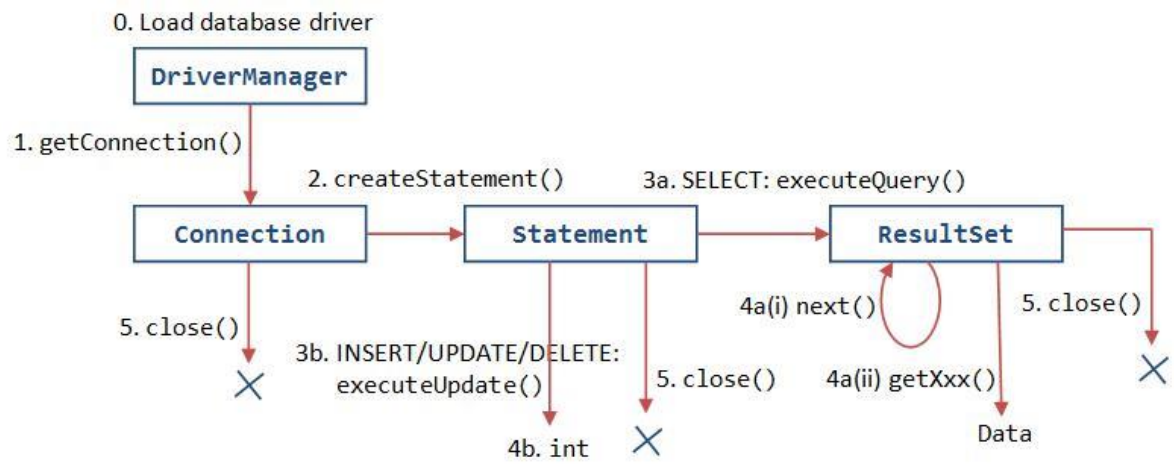
Our trainer taught that 4 lines of code will we same in very code of JDBC, that 4 lines should know to very java developer who is working with the application development.

We also learned few packages which are very essential in connecting with the database and without that packages, it would we not possible to connect to the database. We also learned 4 types of database connectivity in the java application development.

Jdbc architecture



Life cycle of jdbc.



Below is the sample example of few lines of the codes to store data and retrieve from the table form database.

```

1 import java.sql.*;
2 public class JDBCExample {
3     static final String JDBC_DRIVER = "com.mysql.jdbc.Driver";
4     static final String DB_URL = "jdbc:mysql://localhost/CODINGGROUND";
5
6     static final String USER = "root";
7     static final String PASS = "root";
8
9     public static void main(String[] args) {
10        Connection conn = null;
11        Statement stmt = null;
12
13        try{
14            Class.forName("com.mysql.jdbc.Driver");
15            System.out.println("Connecting to database...");
16            conn = DriverManager.getConnection(DB_URL,USER,PASS);
17            System.out.println("Creating statement...");
18            stmt = conn.createStatement();
19            String sql;
20            sql = "select * from users";
21            ResultSet rs = stmt.executeQuery(sql);
22            while(rs.next()){
23                int id = rs.getInt("id");
24                int age = rs.getInt("age");
25                String name = rs.getString("name");
26                String sex = rs.getString("sex");
27
28                System.out.print("ID: " + id);
29                System.out.print(", Name: " + name);
30                System.out.print(", Age: " + age);
31                System.out.println(", Sex: " + sex);
32            }
33            rs.close();
34            stmt.close();
35            conn.close();
36        }catch(SQLException se){
37            se.printStackTrace();
38        }catch(Exception e){
39            e.printStackTrace();
40        }finally{
41            try{
42                if(stmt!=null)
43                    stmt.close();
44            }catch(SQLException se2){
45                // nothing we can do
46            }
47            try{
48                if(conn!=null)
49                    conn.close();
50            }catch(SQLException se){
51                se.printStackTrace();
52            }
53        }
54    }
55 }

```

Above is the small code of database connectivity or JDBC code.

Week-4(continuity)

Access type – 2 (Integrated capability Test)

After completing few technologies, we had Integrated capability test, in which we combine our all knowledge what we learned in past weeks like java, JDBC, and try to solve whole long coding question.

Integrated capability test is of 4 hours, which include all the things what we had learned till now.

It consists of 1 coding question and require full knowledge of all the technologies and integrate that to solve the coding question.

It's a simple or medium size project, which we get as a question in the Integrated capability test within 4 hours.

It contains the huge weightage in the overall performance, the overall performance is calculating as the average of the assessment, Integrated capability test, Business unit score, Project score.

We get two attempts to give the integrated capability test, if we get failed in first attempt then, we get second attempt to give integrated capability test.

And the second attempt is the last attempt to Integrated capability test because failing in the second attempt can lead to the termination of the offer said by the HR in the one session.

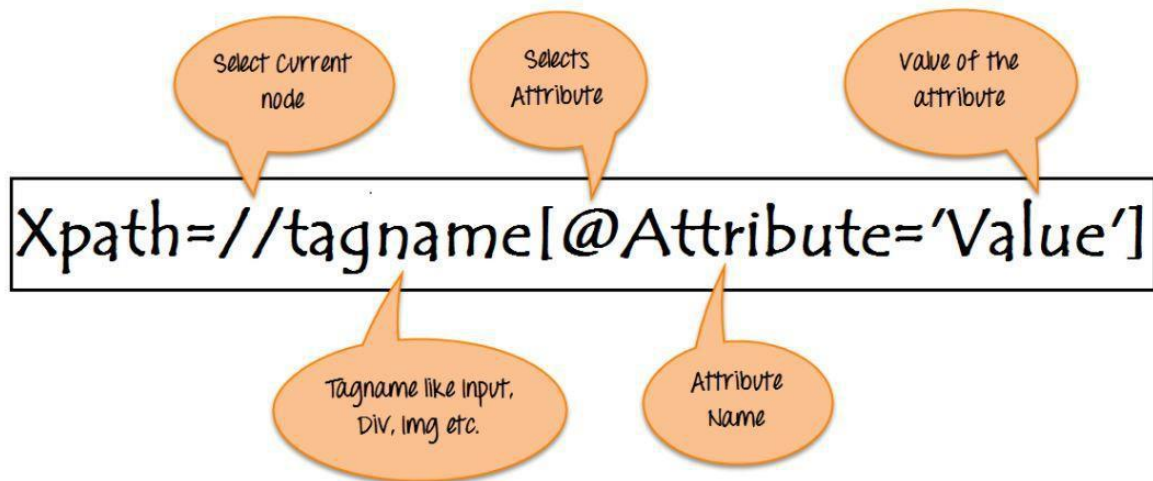
Week 5,6,7,8:

- WebUI.
- JavaScript, Bootstrap.
- Data Source (SQL, XML, JSON).
- ICT (Integrated Capability Test).

In these weeks we learned about xpath, xml, JavaScript and sql.

Xpath: XPath in Selenium is a XML way utilized for route through the HTML design of

the page. It is a punctuation or language for discovering any component on a page utilizing XML way articulation. XPath can be utilized for both HTML and XML reports to discover the area of any component on a website page utilizing HTML DOM structure.



Basic Format of XPath

Categories of XPath:

1. **Absolute XPath.**

Absolute XPath:

```
/html/body/div[2]/div[1]/div/h4[1]/b/html[1]/body[1]/div[2]/div[1]/div[1]/h4[1]/b[1]
```

The screenshot shows a web browser interface with a table of learning resources. The table has columns for 'TESTING' and 'SAP'. The 'TESTING' column contains links like 'Learn Software Testing', 'QTP (Quick Test Professional)', 'Learn Selenium', and 'Learn Mobile App Testing'. The 'SAP' column contains links like 'Learn SAP Beginner', 'Learn SAP ABAP', 'Learn SAP HR/HCM', and 'Learn SAP FICO'. Below the table, the FirePath tool is open, showing the XPath path `html/body/div[1]/section/div[1]/div/div/div[1]/div/div/div/div[3]/div[1]/div/h4[1]/b` in the 'XPath' field. The DOM tree shows the corresponding node: `<div class="row featured-boxes"> <div class="col-md-3"> <div class="featured-box" style="height: 700px;"> <h4> Testing </h4> <ul id="java_technologies" class="menu"> <p style="line-height: 15px;"> <h4>`. A red box highlights the XPath path, and another red box highlights the '1 matching node' at the bottom. Handwritten orange callouts point to the 'TESTING' header and the 'Absolute Path' label.

Absolute XPath

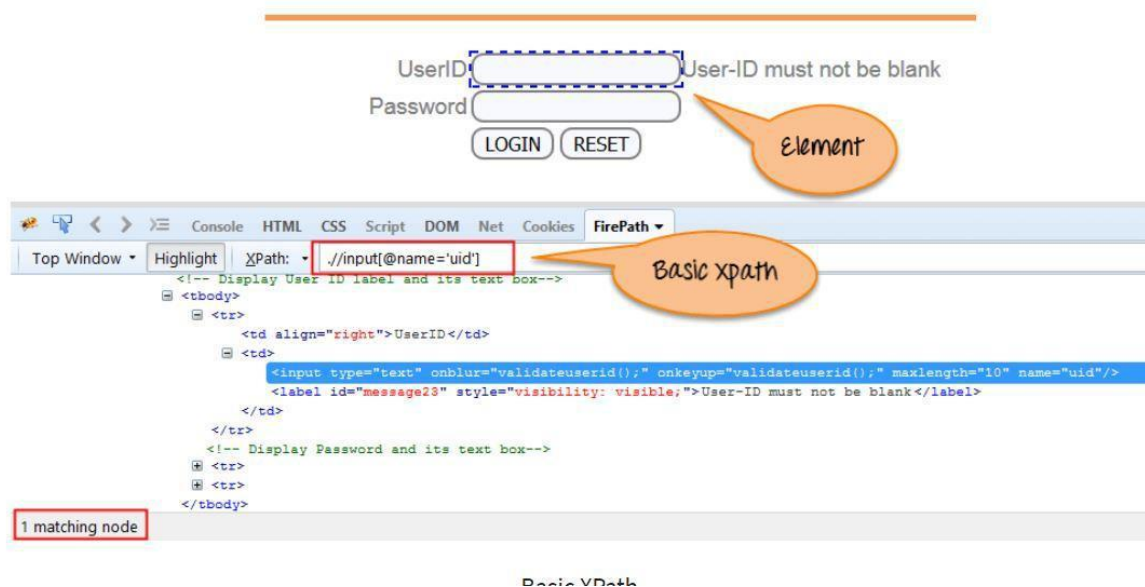
2. Relative XPath

```
Relative XPath: //div[@class='featured-box cloumnsze1']//h4[1]//b[1]
```

The screenshot shows the same web browser interface as above. The FirePath tool is open, showing the relative XPath path `//*[@class='featured-box']//*[text()='Testing']` in the 'XPath' field. The DOM tree shows the corresponding node: `<div class="row featured-boxes"> <div class="col-md-3"> <div class="featured-box" style="height: 700px;"> <h4> Testing </h4> <ul id="java_technologies" class="menu"> <p style="line-height: 15px;"> <h4>`. A red box highlights the relative XPath path, and another red box highlights the '1 matching node' at the bottom. Handwritten orange callouts point to the 'TESTING' header and the 'Relative Path' label.

Relative XPath

We can find the path use chropath, fire path etc. in chrome.



XML: XML (Extensible Markup Language) is a markup language like HTML, however without predefined labels to utilize. All things considered; you characterize your own labels planned explicitly for your necessities. This is an incredible method to store information in an organization that can be put away, looked, and shared. Above all, since the essential organization of XML is normalized, in the event that you share or communicate XML across frameworks or stages, either locally or over the web, the beneficiary can in any case parse the information due to the normalized XML linguistic structure.

HTML vs XML	
HTML	XML
HTML document formats and displays web page data.	XML document carry data along with their description.
Predefined tags (Predefined markup language).	Not have predefined tags.You can create and define new tags as per your needs.(Meta Language).
May not have closing tag.	Must have closing tag.
Not Case Sensitive.	Case Sensitive.
Directly Viewable in browser.	Viewable if proper Stylesheet provided.

We have been assigned different assignments and hands-on in this week for every week.

Like sample xml hands-on.

Code:

simple.xml

```
<breakfast_menu>
  <food>
    <name>Belgian Waffles</name>
    <price>$5.95</price>
    <description>Two of our famous Belgian Waffles with plenty of real maple syrup</description>
    <calories>650</calories> </food>
  <food>
    <name>Strawberry Belgian Waffles</name>
    <price>$7.95</price>
    <description>Light Belgian waffles covered with strawberries and whipped cream</description>
    <calories>900</calories> </food>
  <food>
    <name>Berry-Berry Belgian Waffles</name>
    <price>$8.95</price>
    <description>Light Belgian waffles covered with an assortment of fresh berries and whipped cream</description>
    <calories>900</calories> </food>
  <food>
    <name>French Toast</name>
    <price>$4.50</price>
    <description>Thick slices made from our homemade sourdough bread</description>
    <calories>600</calories> </food>
  <food>
    <name>Homestyle Breakfast</name>
    <price>$6.95</price>
    <description>Two eggs, bacon or sausage, toast, and our ever-popular hash browns</description>
    <calories>950</calories> </food>
</breakfast_menu>
```

Output

Belgian Waffles - \$5.95

Two of our famous Belgian Waffles with plenty of real maple syrup *(650 calories per serving)*

Strawberry Belgian Waffles - \$7.95

Light Belgian waffles covered with strawberries and whipped cream *(900 calories per serving)*

Berry-Berry Belgian Waffles - \$8.95

Light Belgian waffles covered with an assortment of fresh berries and whipped cream *(900 calories per serving)*

French Toast - \$4.50

Thick slices made from our homemade sourdough bread *(600 calories per serving)*

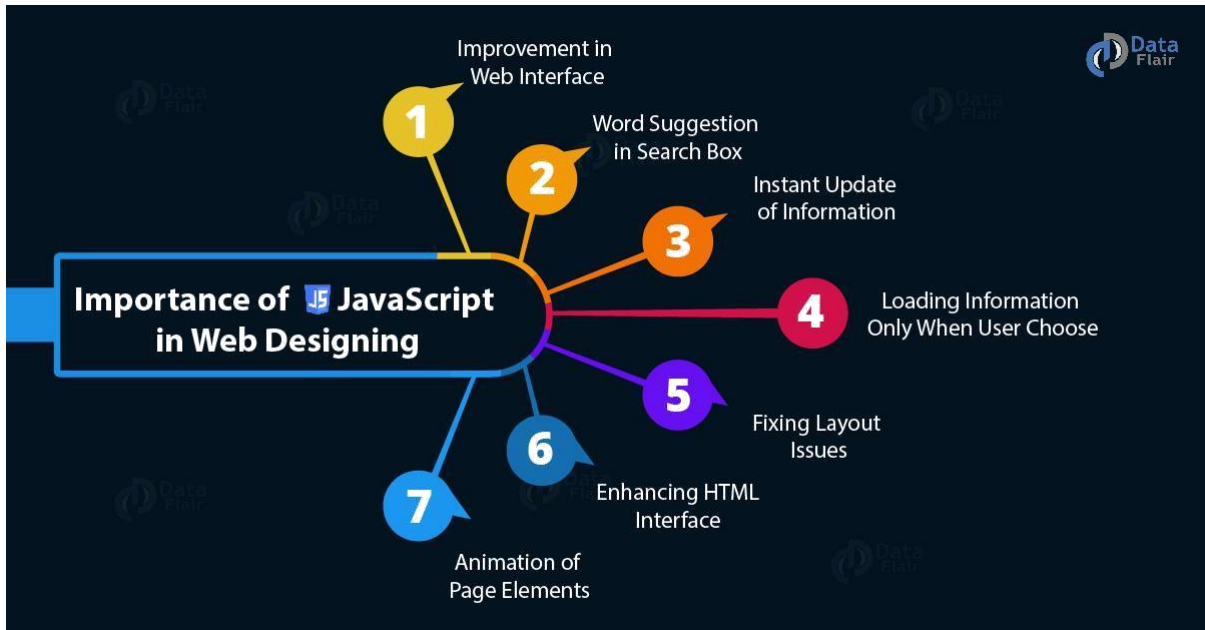
Homestyle Breakfast - \$6.95

Two eggs, bacon or sausage, toast, and our ever-popular hash browns *(950 calories per serving)*

We have done total of 5 assignment in xml.

JavaScript: JavaScript is a programming language used basically by Web projects to make a dynamic and canny experience for the customer. Most of the limits and applications that make the Internet imperative to introduce day life are coded in some kind of JavaScript.

The soonest signs of JavaScript were made in the last piece of the 1990s for the Netscape Navigator Web program. By then, Web pages were static, offering little customer joint effort past clicking associations and stacking new pages. Strangely, JavaScript enabled action, flexible substance and construction endorsement on the page.



We have done total of 6 hands-on in JavaScript.

Example:

Objective:

To add prearranging to existing page and work with JavaScript essential exercises. The essential JavaScript ideas like DOM, Operators and Conditional Statements are covered.

Problem

The application deals with the location subtleties of the clients. As a component of the whole application, one of the business rationales done through JavaScript is to guarantee that the location data isn't unfilled.

Description:

Following are the files that contains code snippets.

Index.html	HTML for webpage (complete implementation is given for you). You only have to run this. No change needed in this file.
Script.js	Add your code in this file for the functions given.

Index.html

```

{
<!--DO NOT CHANGE THIS FILE-->

<html>

<head>

    <script src="script.js" type="text/javascript"> </script>

</head>

<body>

    <table>

        <tr>

            <td>Address Form</td>

        </tr><tr>

            <td>Name</td>

            <td><input type="text" id="name"></td>

        </tr><tr>

            <td>Street</td>

            <td><input type="text" id="street"></td>

        </tr><tr>

            <td>City</td>

            <td><input type="text" id="city"></td>

        </tr>

        <tr>

            <td><button                id="address"

onclick=displayAddress()>Display Address</button></td>

        </tr>

```



```

        </table>

        <div id="msg"></div>

</body>

</html>}

Script.js {

function displayAddress() {

        var name=document.getElementById("name").value;

        var street = document.getElementById("street").value

        // Fill your code to get the street element - by id "street" and store it in the variable
        "street" var city = document.getElementById("city").value

        // Fill your code to get the city element - by id "city" and store it in the variable "city"

        // HINT: use the above "name" as sample to get "street" and "city"

        // Fill your code here

        // if 'name' or 'street' or 'city' is empty then display error message using =>
document.getElementById("msg").innerHTML = "Address cannot be empty";

        if(street=="" || city=="")

        {

```

```

document.getElementById("msg").innerHTML = "Address cannot be empty"

}

// if 'name' or 'street' or 'city' is not empty then display the address using =>
document.getElementById("msg").innerHTML = name + " "+street+ " "+city;

else{

document.getElementById("msg").innerHTML = name + " "+street+ " "+city;

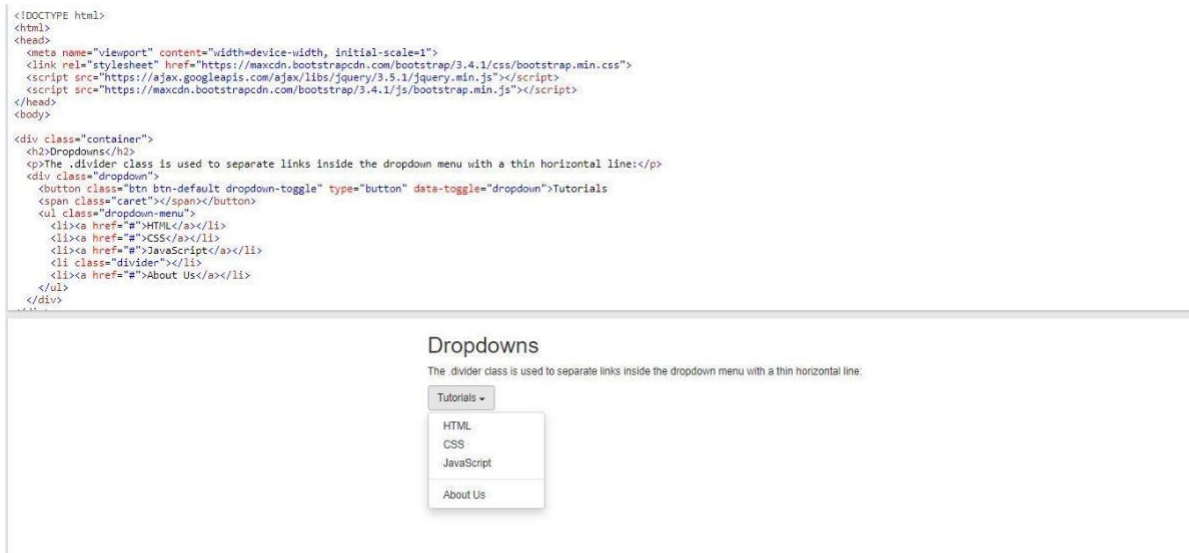
}

}

}

```

Bootstrap: Bootstrap is a free and open-source CSS structure facilitated at responsive, versatile first front-end web headway. It contains CSS-and (then again) JavaScript-based arrangement designs for typography, structures, gets, course, and other interface portions.



SQL: It is used to perform system on the records set aside in the data base like reviving records, deleting records, making and changing tables, sees, etc.



In sql we have done around 30 hands on like from core to advanced.

Example:

1.Select statement.

SQL Statement:

```
SELECT * FROM Customers;
```

|

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

Number of Records: 91

CustomerID	CustomerName	ContactName	Address	City	PostalCode	Country
1	Alfreds Futterkiste	Maria Anders	Obere Str. 57	Berlin	12209	Germany
2	Ana Trujillo Emparedados y helados	Ana Trujillo	Avda. de la Constitución 2222	México D.F.	05021	Mexico
3	Antonio Moreno Taquería	Antonio Moreno	Mataderos 2312	México D.F.	05023	Mexico
4	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	WA1 1DP	UK
5	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-958 22	Sweden
6	Blauer See Delikatessen	Hanna Moos	Forsterstr. 57	Mannheim	68306	Germany
7	Blondel père et fils	Frédérique Citeaux	24, place Kléber	Strasbourg	67000	France

2.update/delete command.

SQL Statement:

```
UPDATE Customers  
SET ContactName='Alfred Schmidt', City='Frankfurt'  
WHERE CustomerID=1;
```

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

You have made changes to the database. Rows affected: 1

3.Where having clauses.

SQL Statement:

```
SELECT COUNT(CustomerID), Country
FROM Customers
GROUP BY Country
HAVING COUNT(CustomerID) > 5;
```

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

Number of Records: 5

COUNT(CustomerID)	Country
9	Brazil
11	France
11	Germany
7	UK
13	USA

4. Different joins in sql.

SQL Statement:

```
SELECT Orders.OrderID, Customers.CustomerName, Shippers.ShipperName
FROM ((Orders
INNER JOIN Customers ON Orders.CustomerID = Customers.CustomerID)
INNER JOIN Shippers ON Orders.ShipperID = Shippers.ShipperID);
```

Edit the SQL Statement, and click "Run SQL" to see the result.

Run SQL »

Result:

Number of Records: 196

OrderID	CustomerName	ShipperName
10248	Wilman Kala	Federal Shipping
10249	Tradição Hipermercados	Speedy Express
10250	Hanari Carnes	United Package
10251	Victuailles en stock	Speedy Express
10252	Suprêmes délices	United Package
10253	Hanari Carnes	United Package
10254	Chop-suey Chinese	United Package
10255	Richter Supermarkt	Federal Shipping
10256	Wellington Importadora	United Package

5.subqueries.

Syntax :

```
SELECT    select_list
FROM      table
WHERE     expr operator
          (SELECT    select_list
           FROM      table);
```

6.Aggregate functions in sql.

- COUNT
- GROUPING
- MAX
- MIN
- STDEV
- SUM
- VAR

SQL Statement:

```
SELECT MAX(Price) AS LargestPrice
FROM Products;
```

Edit the SQL Statement, and click "Run SQL" to see the result.

[Run SQL >](#)

Result:

Number of Records: 1

LargestPrice
263.5

7.Common table expressions.

Using the CTE -

We can define CTEs by adding a WITH clause directly before SELECT, INSERT, UPDATE, DELETE, or MERGE statement. The WITH clause can include one or more CTEs separated by commas. The following syntax can be followed:

```
[WITH [, ...]]  
  
::=  
cte_name [(column_name [, ...])]  
AS (cte_query)
```

8.Pivoting.

```

SELECT * FROM
(
    SELECT
        category_name,
        product_id
    FROM
        production.products p
    INNER JOIN production.categories c
        ON c.category_id = p.category_id
) t
PIVOT(
    COUNT(product_id)
    FOR category_name IN (
        [Children Bicycles],
        [Comfort Bicycles],
        [Cruisers Bicycles],
        [Cyclocross Bicycles],
        [Electric Bikes],
        [Mountain Bikes],
        [Road Bikes])
) AS pivot_table;

```

This query generates the following output:

Children Bicycles	Comfort Bicycles	Cruisers Bicycles	Cyclocross Bicycles	Electric Bikes	Mountain Bikes	Road Bikes
59	30	78	10	24	60	60

9. Error handling in sql using try catch.

```

USE AdventureWorks2014
GO
-- Basic example of TRY...CATCH

BEGIN TRY
-- Generate a divide-by-zero error
    SELECT
        1 / 0 AS Error;
END TRY
BEGIN CATCH
    SELECT
        ERROR_NUMBER() AS ErrorNumber,
        ERROR_STATE() AS ErrorState,
        ERROR_SEVERITY() AS ErrorSeverity,
        ERROR_PROCEDURE() AS ErrorProcedure,
        ERROR_LINE() AS ErrorLine,
        ERROR_MESSAGE() AS ErrorMessage;
END CATCH;
GO

```


10.Triggers, view, procedures.

Triggers

```
CREATE OR REPLACE TRIGGER display_salary_changes
BEFORE DELETE OR INSERT OR UPDATE ON customers
FOR EACH ROW
WHEN (NEW.ID > 0)
DECLARE
    sal_diff number;
BEGIN
    sal_diff := :NEW.salary - :OLD.salary;
    dbms_output.put_line('Old salary: ' || :OLD.salary);
    dbms_output.put_line('New salary: ' || :NEW.salary);
    dbms_output.put_line('Salary difference: ' || sal_diff);
END;
/
```

View

SQL Statement:

```
CREATE VIEW [Brazil Customers] AS
SELECT CustomerName, ContactName
FROM Customers
WHERE Country = 'Brazil';
```

Edit the SQL Statement, and click "Run SQL" to see the result.

[Run SQL >](#)

Result:

You have made changes to the database.

Procedures

Example

```
CREATE PROCEDURE SelectAllCustomers  
AS  
SELECT * FROM Customers  
GO;
```

Execute the stored procedure above as follows:

Example

```
EXEC SelectAllCustomers;
```

We have completed our intern till this now and stage 1 Qea basics will be completed in 24 may 2021. After 24 may **Selenium with digital technologies path** will start which is stage 2 and then we will have project.

We don't have ict for this week but we have regular test week wise for xml, JavaScript and sql.

2.2 Stage 2 (Will be starting in the coming weeks)

In selenium with digital technologies we will learn Spring core, boot and Mvc , spring restful, microservices, web driver with pom and apache poi, selenium with testNG. It will be of 11 weeks.

Chapter 3

SOFTWARE REQUIREMENT SPECIFICATION (SRS)

- Microsoft Office Package

Microsoft Office, or simply Office, is a meeting of the residents of the programming, which specializes in the development and the organizations that have been created by Microsoft. It was first described by Bill Gates on 2 May 1978, at COMD in L V, USA. From the very beginning, which is the leading term for an office suite (which is the plan of the game, with useful applications in the main page of Office contained Microsoft Word, Microsoft Excel, and Microsoft PowerPoint).

- Eclipse

Eclipse is an integrated development environment (IDE) used in computer programming. It contains a base workspace and an extensible plug-in system for customizing the environment. Eclipse is written mostly in Java and its primary use is for developing Java applications.

- Visual Studio Code

Visual Studio Code is a freeware source-code chief made by Microsoft for Windows, Linux and macOS. Features consolidate help for exploring, accentuation including, astute code satisfaction, bits, code refactoring, and introduced

Git. Clients can change the topic, console alternate ways, inclinations, and introduce expansions that add extra usefulness.

- MS SQL

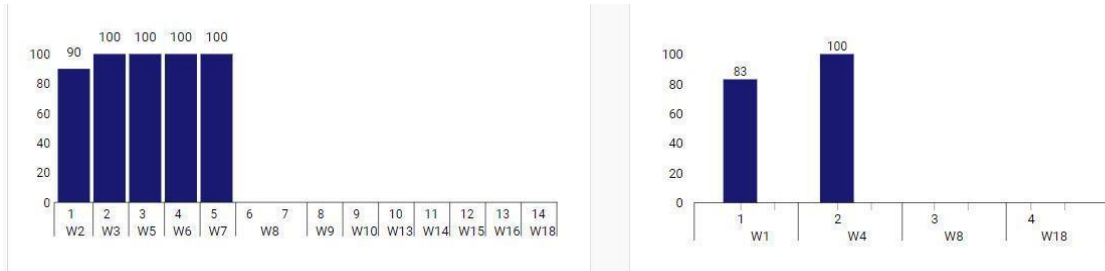
Microsoft SQL Server is a social informational index organization structure made by Microsoft. As an informational index specialist, it is an item thing with the fundamental limit of taking care of and recuperating data as referenced by other programming applications—which may run either on a comparable PC or on another PC across an association (checking the Internet).

- Cisco WebEx

Chapter -4

Result and Performance Analysis

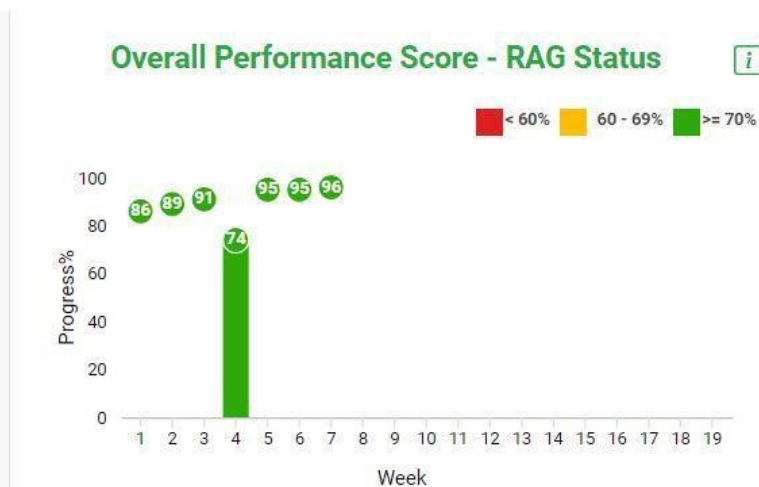
These are my scores from past assessment and Ict test.



The first bar graph is for week wise test result and the second bar graph is for ict test Result.



This is my overall score.



Chapter-5

5.1 Conclusion

I am still on the way doing my internship with the cognizant and I have learned so much from this internship offered by the internship, really helped me in shaping my personality and equipping me with the knowledge of this technologies.

My Final internship project is still remaining with cognizant internship and I will give my best in doing the internship project.

I like to thanks in advance to the coaches, SME, mentor and trainer of cognizant who guided me through the whole journey of my internship in cognizant and solved all my doubts during the internship. The Coaches, Sme, Mentor and trainer were all of good nature and at every moment helped me when I was doing wrong and shaped me during my whole internship.

Specially my mentor gave his more effort during the internship and passed our all query to the higher authority in the company whether it was related to the reattempt of the assessment, technical issue faced in the assessment or providing extra time to complete the work.

I would highly recommend my juniors once to prepare well for the offer in the cognizant and get the internship opportunity form the cognizant because cognizant is top fortune company in the information technology field.

I like thank you my TNP officer Mr. Pankaj Kumar and Faculty member Dr. Nafis U khan sir for their support and hard work during the whole placement process because I know how complex is the management of the placement drive.

5.2 Reference

- Cognizant Hand book
- Internship experience
- Assessment
- Cognizant internship curriculum