Human Resource Management

The project "HR management" depicts the use of distrbuted database.

The Employee table is distributed over the network and fragmented using various methodology.

This document contains all the data regarding the spawn of the database, queries of table creation, triggers used In the environment, as well a few examples on insert query.

QUERIES:

Table creation: Employee
CREATE TABLE `employee` (

  `empname` varchar(255) NOT NULL,

  `project_location` varchar(45) NOT NULL,

  `department` varchar(45) NOT NULL,

  `salary` varchar(45) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1;

Table creation: salfrag1
CREATE TABLE ` salfrag1` (

  `empname` varchar(255) NOT NULL,

  `project_location` varchar(45) NOT NULL,

  `department` varchar(45) NOT NULL,

  `salary` varchar(45) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1;

Table creation: salfrag2
CREATE TABLE ` salfrag2` (

  `empname` varchar(255) NOT NULL,

  `project_location` varchar(45) NOT NULL,

  `department` varchar(45) NOT NULL,

  `salary` varchar(45) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1;

Table creation: locfrag1

```
CREATE TABLE `locfrag1` (

  `empname` varchar(255) NOT NULL,

  `project_location` varchar(45) NOT NULL,

  `department` varchar(45) NOT NULL,

  `salary` varchar(45) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Table creation: locfrag2

```
CREATE TABLE `locfrag2` (

  `empname` varchar(255) NOT NULL,

  `project_location` varchar(45) NOT NULL,

  `department` varchar(45) NOT NULL,

  `salary` varchar(45) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Table creation: deptfrag1

```
CREATE TABLE `deptfrag1` (

  `empname` varchar(255) NOT NULL,

  `project_location` varchar(45) NOT NULL,

  `department` varchar(45) NOT NULL,

  `salary` varchar(45) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

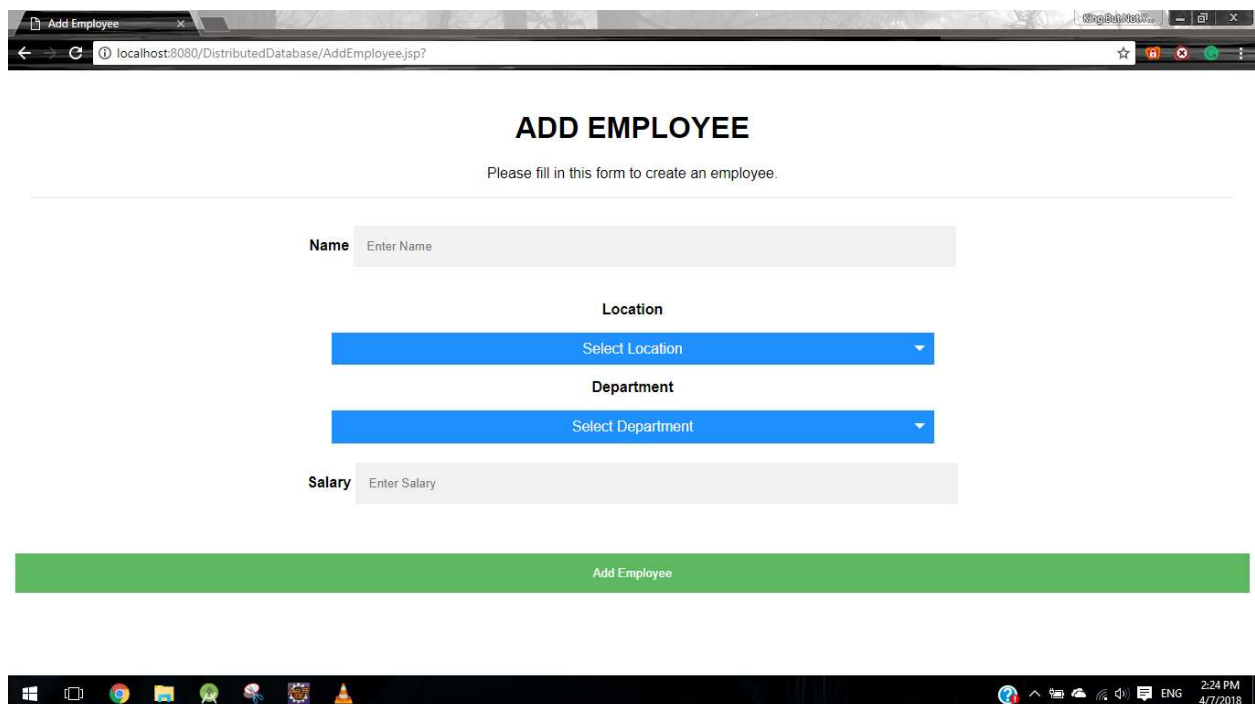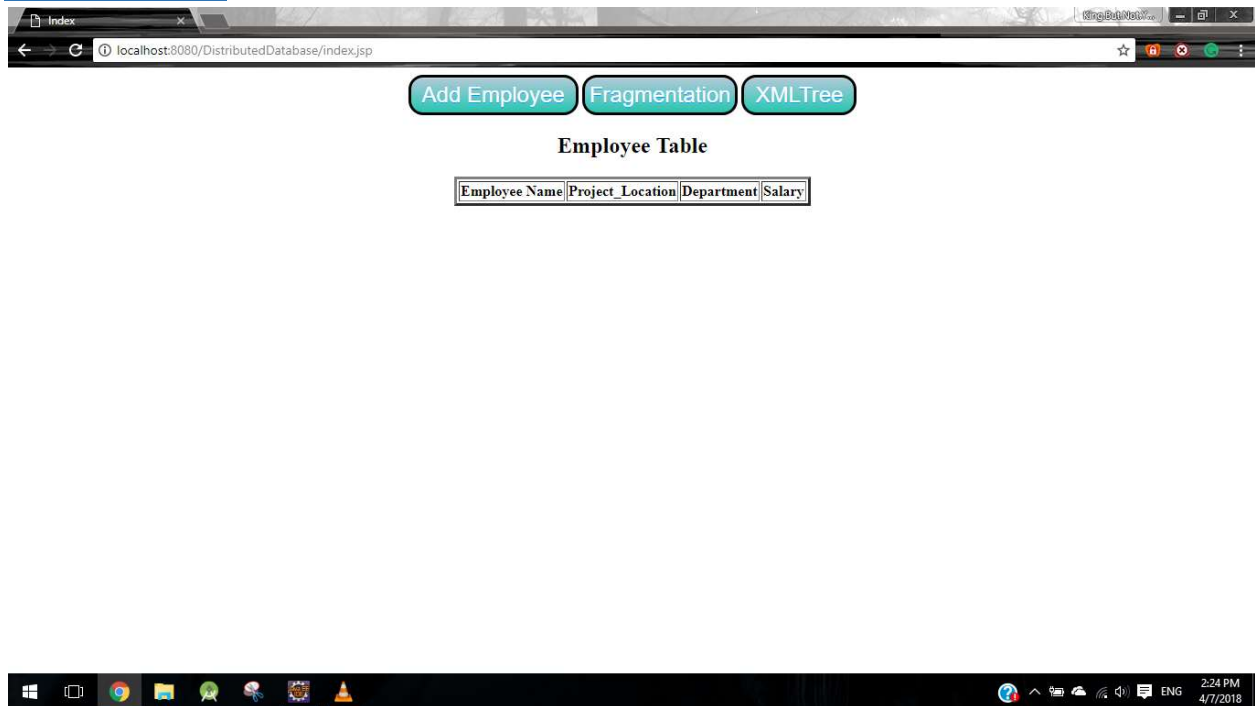## Table creation: deptfrag2

```
CREATE TABLE `deptfrag2` (

  `empname` varchar(255) NOT NULL,

  `project_location` varchar(45) NOT NULL,

  `department` varchar(45) NOT NULL,

  `salary` varchar(45) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

TRIGGERS:

Trigger creation: trigger

CREATE DEFINER=`root`@`localhost` TRIGGER `trigger` AFTER insert ON `employee`

FOR EACH ROW

BEGIN

Delete from locfrag1;

Insert into locfrag1

      Select * from employee where project_location = 'Mumbai';

Delete from locfrag2;

Insert into locfrag2

      Select * from employee where project_location = 'Delhi';

Delete from salfrag1;

Insert into salfrag1

      Select * from employee where salary < 100000;

Delete from salfrag2;

Insert into salfrag2

  Select * from employee where salary >= 100000;

Delete from deptfrag1;

Insert into deptfrag1

      Select * from employee where department = 'Computer Science';

Delete from deptfrag2;

Insert into deptfrag2 Select * from employee where department = 'Production';

END

SCREENSHOTS:

Employee Table

Employee Name	Project_Location	Department	Salary

ADD EMPLOYEE

Please fill in this form to create an employee.

Name   Enter Name

Location

Select Location

Department

Select Department

Salary   Enter Salary

Add Employee

localhost:8080/DistributedDatabase/addemp

Add Employee | **Fragmentation** | **XMLTree**

Employee Table

Employee Name	Project_Location	Department	Salary
shantanu	Mumbai	Computer Science	100000

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localhost:8080/DistributedDatabase/Fragmentation1.jsp

Employee Table

Employee Name	Project_Location	Department	Salary
shantanu	Mumbai	Computer Science	100000

Location_Fragment_1 - Mumbai

Employee Name	Project_Location	Department	Salary
shantanu	Mumbai	Computer Science	100000

Location_Fragment_2 - Delhi

Employee Name	Project_Location	Department	Salary

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Employee Table

Employee Name	Project_Location	Department	Salary
shantanu	Mumbai	Computer Science	100000

Location_Fragment_1 - Computer Science

Employee Name	Project_Location	Department	Salary
shantanu	Mumbai	Computer Science	100000

Location_Fragment_2 - Production

Employee Name	Project_Location	Department	Salary

Employee Table

Employee Name	Project_Location	Department	Salary
shantanu	Mumbai	Computer Science	100000

Location_Fragment_1 - < 1,00,000

Employee Name	Project_Location	Department	Salary

Location_Fragment_2 - Salary >= 1,00,000

Employee Name	Project_Location	Department	Salary
shantanu	Mumbai	Computer Science	100000

localhost:8080/DistributedDatabase/XmlTree.jsp?

```xml
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="cd_catalog.css"?>
<Employees>
        <Employee>
                <Name>shantanu</Name>
                <Location>Mumbai</Location>
                <Department>Computer Science</Department>
                <Salary>100000</Salary>
        </Employee>
</Employees>
```