Index.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>search</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="design.css">
  </head>
  <body>
    <center>
    <form method="GET" action="searchengine">
       Enter Your Search:
       <input type="text" name="query">
       <br>
       <br>
       <br>
       <button type="submit" name="ggl" value="Google">Search With Google</button>
       <br>
       <br>
       <button type="submit" name="bng" value="Bing">Search With Bing</button>
    </form>
    </center>
  <br>
  <br><br><
  <br>
  <br/>br>
  <br>
  <footer class="footer" style="background-color: #ADD8E6;">
  <div class="container">
    <div class="row">
       <div class="col-md-12 text-center">
         <br/>br/>
               <center>
                By Viraj Thakkar <br>
                201806100110094
              </center>
       </div>
    </div>
  </div>
</footer>
  </body>
                                             </html>
```

Searchegine.java

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
* @author Viraj
public class searchengine extends HttpServlet {
  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
       String Qry = request.getParameter("query");
       String Googlekey = request.getParameter("ggl");
       if (Qry.equals("movies") ||Qry.equals("online games") ||Qry.equals("online shopping")
||Qry.equals("games"))
                response. Sc\_BAD\_REQUEST, "RESTRICTED \ KEYWORD
DETECTED IN INPUT");
       else{
                if("Google".equals(Googlekey))
                   response.sendRedirect("https://www.google.com/search?q="+Qry);
                else
                {
                   response.sendRedirect("https://www.bing.com/search?q="+Qry);
    }
  }
```

Web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd">
  <servlet>
     <servlet-name>searchengine</servlet-name>
     <servlet-class>searchengine</servlet-class>
  </servlet>
  <servlet-mapping>
     <servlet-name>searchengine</servlet-name>
     <url-pattern>/searchengine</url-pattern>
  </servlet-mapping>
  <session-config>
     <session-timeout>
       30
     </session-timeout>
  </session-config>
</web-app>
```

