

Apache Geronimo JSP J2EE Time Reporting Geronimo Derby Geronimo JDBC [9.b.](#)

Geronimo

- [Geronimo](#)
-
-
-
-

Geronimo

Apache Geronimo J2EE SSL Geronimo Geronimo EJB

Apache Geronimo : Jetty, Tomcat

Jetty

Jetty 100% Java HTTP JSP Jetty

Jetty Java Jetty Jetty Java
<http://jetty.mortbay.org/jetty/index.html>

Tomcat

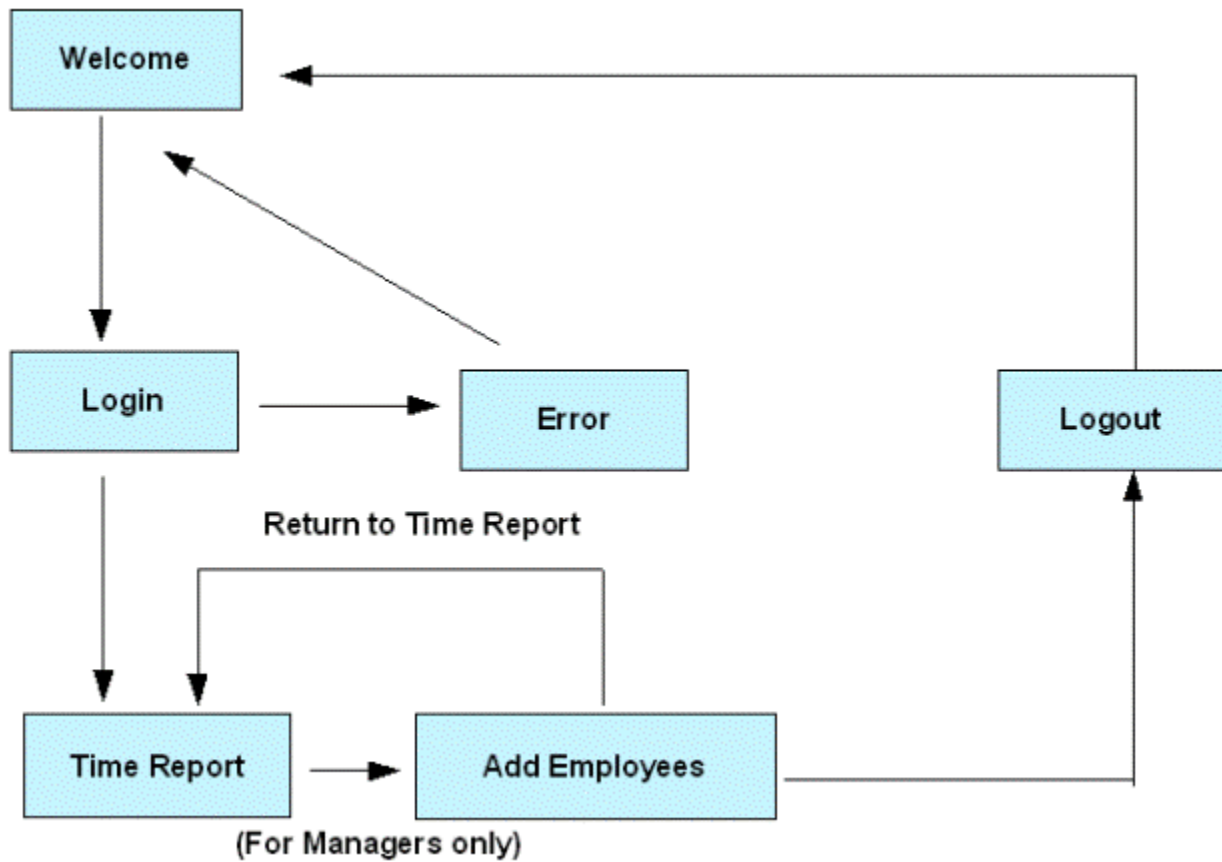
Apache Tomcat Java JavaServer Pages
<http://tomcat.apache.org/>

Time Reporting Apache Geronimo

(managers)(employees)

Time Reporting

- Welcome
- Login
- Time Report
- Add Employees
- Logout



Time Reporting Welcome Login Time Report Time Report Add Employees

Time Reporting JSP

```

|- employee
  |- index.jsp
|- login
  |- login.jsp
  |- login_error.jsp
  |- logout.jsp
|- manager
  |- index.jsp
|- WEB_INF
  |- geronimo-web.xml
  |- web.xml
|- index.jsp

```

JSP

- AddTimeRecordServlet - Read the input data from the Time Report page
- AddEmployeeServlet - Capture input information from Add Employee page
- AddTimeRecordServlet - Time Report
- AddEmployeeServlet - Add Employee

Time Reporting geronimo-web.xml web.xml geronimo-web.xml TimeReportRealm

geronimo-web.xml <security-realm-name> <security> <realms>

web.xml security rolesgeronimo-web.xml Geronimo <default-principal> realm

manager employee employee manager

geronimo-web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app
  xmlns="http://geronimo.apache.org/xml/ns/j2ee/web-1.1">

  <environment>
    <moduleId>
      <groupId>${pom.groupId}</groupId>
      <artifactId>${pom.artifactId}</artifactId>
      <version>${version}</version>
      <type>war</type>
    </moduleId>
  </environment>

  <context-root>/timereport</context-root>

  <security-realm-name>TimeReportRealm</security-realm-name>

  <security>
    <default-principal realm-name="TimeReportRealm">
      <principal name="anonymous"
        class="org.apache.geronimo.security.realm.providers.GeronimoUserPrincipal"
        />
    </default-principal>
    <role-mappings>
      <role role-name="employee">
        <realm realm-name="TimeReportRealm">
          <principal name="EmployeeGroup"
            class="org.apache.geronimo.security.realm.providers.
GeronimoGroupPrincipal"
            />
          </realm>
          <realm realm-name="TimeReportRealm">
            <principal name="ManagerGroup"
              class="org.apache.geronimo.security.realm.providers.
GeronimoGroupPrincipal"
              />
            </realm>
          </role>
          <role role-name="manager">
            <realm realm-name="TimeReportRealm">
              <principal name="ManagerGroup"
                class="org.apache.geronimo.security.realm.providers.
GeronimoGroupPrincipal"
                />
              </realm>
            </role>
          </role-mappings>
        </security>
      </web-app>
```

web.xml

web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns="http://java.sun.com/xml/ns/j2ee"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://java.sun.com/xml/ns/j2ee
    http://java.sun.com/xml/ns/j2ee/web-app_2_4.xsd"
  version="2.4">

  <welcome-file-list>
    <welcome-file>index.jsp</welcome-file>
  </welcome-file-list>

  <security-constraint>
    <web-resource-collection>
      <web-resource-name>employee</web-resource-name>
      <url-pattern>/employee/*</url-pattern>
    </web-resource-collection>
    <auth-constraint>
      <role-name>employee</role-name>
    </auth-constraint>
  </security-constraint>

  <security-constraint>
    <web-resource-collection>
      <web-resource-name>manager</web-resource-name>
      <url-pattern>/manager/*</url-pattern>
    </web-resource-collection>
    <auth-constraint>
      <role-name>manager</role-name>
    </auth-constraint>
  </security-constraint>

  <login-config>
    <auth-method>FORM</auth-method>
    <realm-name>TimeReportRealm</realm-name>
    <form-login-config>
      <form-login-page>/login/login.jsp</form-login-page>
      <form-error-page>/login/login_error.jsp</form-error-page>
    </form-login-config>
  </login-config>

  <security-role>
    <role-name>employee</role-name>
  </security-role>
  <security-role>
    <role-name>manager</role-name>
  </security-role>

  <servlet>
    <display-name>AddTimeRecordServlet</display-name>
    <servlet-name>AddTimeRecordServlet</servlet-name>
    <servlet-class>org.apache.geronimo.samples.timereport.web.AddTimeRecordServlet</servlet-class>
  </servlet>
  <servlet>
    <display-name>AddEmployeeServlet</display-name>
    <servlet-name>AddEmployeeServlet</servlet-name>
    <servlet-class>org.apache.geronimo.samples.timereport.web.AddEmployeeServlet</servlet-class>
  </servlet>

  <servlet-mapping>
    <servlet-name>AddTimeRecordServlet</servlet-name>
    <url-pattern>/employee/add_timerecord</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>AddEmployeeServlet</servlet-name>
    <url-pattern>/manager/add_employee</url-pattern>
  </servlet-mapping>

</web-app>

```

Time Report Add Employee

employee/index.jsp

```
...
<BR>
<%if(request.isUserInRole("manager")){%>
<A href="../manager/">Add Employees</A>
<BR>
...
```

geronimo-application.xml TimeReportPool.xml tranql-connector-ra-1.3.rar EAR

geronimo-application.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<application xmlns="http://geronimo.apache.org/xml/ns/j2ee/application-1.2">

  <environment xmlns="http://geronimo.apache.org/xml/ns/deployment-1.2">
    <moduleId>
      <groupId>${pom.groupId}</groupId>
      <artifactId>${pom.artifactId}</artifactId>
      <version>${version}</version>
      <type>ear</type>
    </moduleId>
  </environment>

  <module>
    <connector>tranql-connector-ra-1.3.rar</connector>
    <alt-dd>TimeReportPool.xml</alt-dd>
  </module>
</application>
```

TimeReportPool.xml

TimeReportPool.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<connector xmlns="http://geronimo.apache.org/xml/ns/j2ee/connector-1.2">
  <dep:environment xmlns:dep="http://geronimo.apache.org/xml/ns/deployment-1.2">
    <dep:moduleId>
      <dep:groupId>console.dbpool</dep:groupId>
      <dep:artifactId>TimeReportPool</dep:artifactId>
      <dep:version>1.0</dep:version>
      <dep:type>rar</dep:type>
    </dep:moduleId>
    <dep:dependencies>
      <dep:dependency>
        <dep:groupId>org.apache.geronimo.configs</dep:groupId>
        <dep:artifactId>j2ee-security</dep:artifactId>
        <dep:type>car</dep:type>
      </dep:dependency>
      <dep:dependency>
        <dep:groupId>org.apache.geronimo.configs</dep:groupId>
        <dep:artifactId>system-database</dep:artifactId>
        <dep:type>car</dep:type>
      </dep:dependency>
    </dep:dependencies>
  </dep:environment>
  <!--db pool fragment-->
  <resourceadapter>
    <outbound-resourceadapter>
```

```

        <connection-definition>
          <connectionfactory-interface>javax.sql.DataSource</connectionfactory-interface>
          <connectiondefinition-instance>
            <name>TimeReportPool</name>
            <config-property-setting name="Driver">org.apache.derby.jdbc.EmbeddedDriver</config-
property-setting>
            <config-property-setting name="UserName">app</config-property-setting>
            <config-property-setting name="ConnectionURL">jdbc:derby:TimeReportDB</config-property-
setting>
            <connectionmanager>
              <local-transaction/>
              <single-pool>
                <max-size>10</max-size>
                <min-size>0</min-size>
                <match-one/>
              </single-pool>
            </connectionmanager>
          </connectiondefinition-instance>
        </connection-definition>
      </outbound-resourceadapter>
    </resourceadapter>
    <!--security realm fragment-->
    <gbean name="TimeReportRealm" class="org.apache.geronimo.security.realm.GenericSecurityRealm">
      <attribute name="realmName">TimeReportRealm</attribute>
      <reference name="ServerInfo">
        <name>ServerInfo</name>
      </reference>
      <xml-reference name="LoginModuleConfiguration">
        <log:login-config xmlns:log="http://geronimo.apache.org/xml/ns/loginconfig-1.1">
          <log:login-module control-flag="REQUIRED" wrap-principals="false">
            <log:login-domain-name>TimeReportRealm</log:login-domain-name>
            <log:login-module-class>org.apache.geronimo.security.realm.providers.
SQLLoginModule</log:login-module-class>
            <log:option name="jdbcDriver">org.apache.derby.jdbc.EmbeddedDriver</log:
option>
            <log:option name="jdbcUser">app</log:option>
            <log:option name="userSelect">select userid, password from users where
userid=?</log:option>
            <log:option name="groupSelect">select userid, groupname from usergroups
where userid=?</log:option>
            <log:option name="jdbcURL">jdbc:derby:TimeReportDB</log:option>
          </log:login-module>
        </log:login-config>
      </xml-reference>
    </gbean>
  </connector>

```

Time Reporting

Apache Maven 2

Maven Java Maven Ant make Maven 1 Maven 2 Maven 2 URL
<http://maven.apache.org>

Time Reporting
[Time Report](#)

zip time_report

SVN

svn checkout <http://svn.apache.org/repos/asf/geronimo/samples/trunk/samples/timereport>

Time Reporting J2EE

Apache Geronimo Geronimo TimeReportDB

TimeReportDB.sql

```
CREATE TABLE users(
    userid VARCHAR(15) PRIMARY KEY,
    password VARCHAR(15),
    name VARCHAR(40)
);

CREATE TABLE usergroups(
    userid VARCHAR(15),
    groupname VARCHAR(20),
    PRIMARY KEY (userid, groupname)
);

INSERT INTO users VALUES('empl', 'pass1', 'Employee 1');
INSERT INTO users VALUES('emp2', 'pass2', 'Employee 2');
INSERT INTO users VALUES('mgm1', 'pass3', 'Manager 1');
INSERT INTO users VALUES('mgm2', 'pass4', 'Manager 2');

INSERT INTO usergroups VALUES('empl', 'EmployeeGroup');
INSERT INTO usergroups VALUES('emp2', 'EmployeeGroup');
INSERT INTO usergroups VALUES('mgm1', 'ManagerGroup');
INSERT INTO usergroups VALUES('mgm2', 'ManagerGroup');
```

1. **Console Navigation** DB Manager
2. **Create DB** TimeReportDB Create
3. **Use DB** TimeReportDB
4. **time_report/config** TimeReportDB.sql
5. **SQL Commands** TimeReportDB.sql Run SQL

Time Report pom.xml timereport mvn install site timereport timereport-ear-2.0-SNAPSHOT.ear Geronimo Time Report

Geronimo

1. **Console Navigation** Deploy New
2. **Archive** time_report timereport-ear-2.0-SNAPSHOT.ear
3. **Install**
[Back to Top](#)

<http://localhost:8080/timereport> Welcome

Time Report empl pass1 mgm1 pass3

J2EE Geronimo

- Apache Geronimo Jetty Tomcat
- Derby
- Geronimo
- Geronimo