

Activity based

Project 1 Report on

Application Security

Submitted to Vishwakarma University, Pune

Under the Initiative of Contemporary Curriculum, Pedagogy, and Practice (C2P2)

By

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Project Statement:

(PS, Introduction, Objectives)

Vishwakarma University needs to establish server-side input validation that includes both whitelisting and blacklisting approaches, alongside effective session management, to boost security measures, avert the intake of unauthorized data, reduce vulnerabilities, and guarantee the integrity of its web application functions

Design (Usecase Model, ER Model, DFDs)

```
Implementation:
```

```
Application Security
    k rel="stylesheet" href="style.css">
  </head>
  <body>
    <header>
      <center><h1><b> Vishwakarma<br>University </b></h1></center><br><br><br>
      <center><h3><b>Vision:</b><bre>Empowering Educational <bre>br> Excellence
      Through Seamless<br/>
Ser>Integration and Innovation</h3></center>
    <center><section id="Home">
      <h3> <p1><b>Mission:</b><br>To Be a global<br>leader in Educational
ERP<br/>br>Software Solutions </p1> </h3>
      </section></center>
      <center><div><p4><h1><b> Vishwakarma Group </b></h1></p4></div></center>
    </section></header></center><br
    <center><section id="Academics">
      <h2> Academics </h2>
      <p2> Academics..which would you choose!! </p2>
    </section></center><br>>
    <center><section id="About">
      <h2> About Us </h2>
      <p3>VU Advantage </p3><br><br>
    </section></center><br>>
    <center><section id="Contact">
      <h2> Contact Us </h2><br>>
      <h2></h2>
      <form action="">
```

<div2 class="input-box">

</div2>

 Register

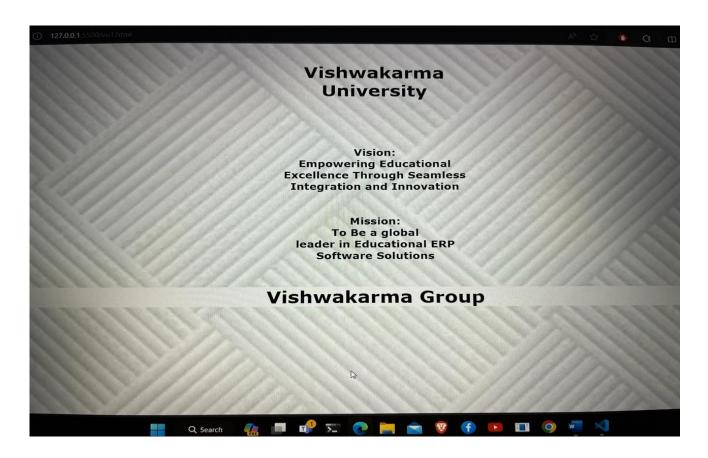
```
</section></center><br>>
  <center>
    <nav>
      <a href="#home"> Home </a><br>>
      <a href="#destinations"> Destination </a><br><br>
      <a href="#about">About Us </a><br>
      <a href="#contact"> Contact </a><br>
    </nav>
</center>
  <center><footer>
    <h5><p5> <b> Vishwakarma Group </b><br><br><br>
      <b>About Us</b><br><br>
      About the Group <br > <br >
      Vision/Mission<br><br>>
      Our History<br><br>>
      Blog<br><br><br>>
      <b>Sectors & Brands</b><br><br>
      Education < br> < br>
      Retail<br><br>
      Manufacturing<br><br>
      Publishing<br><br>>
```

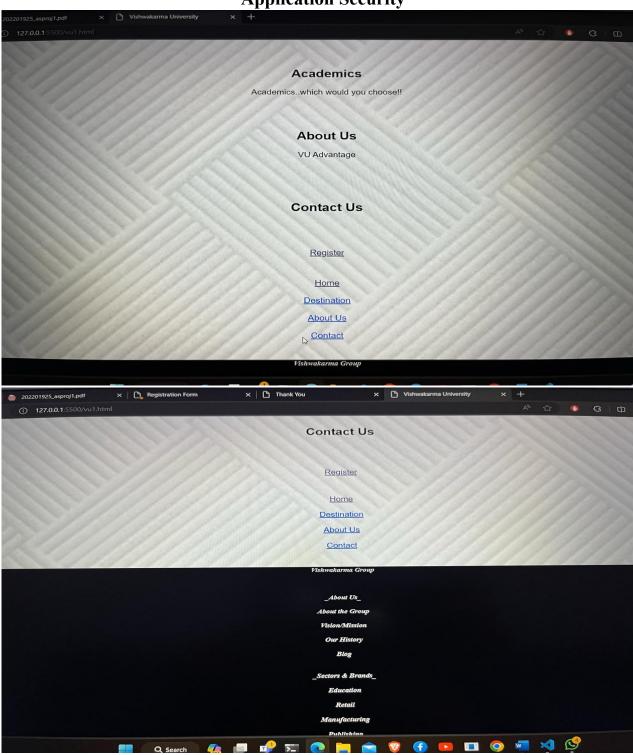
```
Marketing<br><br>
         Software Products and Services < br > < br > < br >
         <b>Our Educational Institutions</b><br><br>
         Vishwakarma Institute of Technology (VIT)<br>
         Vishwakarma Institute of Information Technology (VIIT) < br>
         Vishwakarma University (VU)<br><br>
         Vishwakarma Vidyalaya (VV)<br><br>
         Vishwakarma College of Arts, Commerce & Science (VCACS)<br><br><br/>Vishwakarma College of Arts, Commerce & Science (VCACS)<br/>
         Wisdom World School<br><br><
       </p5></h5>
       <h5><p6> Copyright &copy; 2024 Vishwakarma Group. All Rights Reserved
</p6></h5>
    </footer></center>
  <style>
    body{
       font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial, sans-serif;
       background-color: rgb(4, 4, 4);
       font-style:normal;
       font-variation-settings:initial;
       }
       body {
 font-family: Arial, sans-serif;
```

```
margin: 0;
 padding: 0;
 background-image: url(car.webp);
 background-size: cover;
 background-position: center;
}
    header{
       color: #100c0c;
       padding: 20px;
       text-align: center;
       font-family: Verdana, Geneva, Tahoma, sans-serif;
       border-radius: 20px;
       height: 100vh;
       background-size: cover;
       background-position: center;
       margin: 0px;
    }
    section{
       font-style: normal;
       padding: 10px;
       list-style-type: none;
    }
    footer{
       background-color:black;
       font-style: italic;
       font-family: "cursive";
    }
    p{
       color: rgb(10, 15, 11);
    }
```

```
.p1{
  color: rgb(11, 14, 11);
}
nav{
  color: #080707;
}
.input-box input{
  width: 20%;
  height: 20px;
  padding: 0 30px;
  border-radius: 60px;
  margin: 10px 0;
  outline: none;
  border: none;
  font-size: 0.9;
  box-shadow: 5px 5px 5px -1px rgba(239, 240, 242, 0.16),
  -7px -7px 5px -1px rgba (255,255,255,0.7);
}
div{
  background-color: rgb(249, 245, 245);
  color: #010101;
}
.p6{
  background-color: rgb(246, 242, 242);
}
h5{
```

```
color: #d5cfcf;
}
</style>
</body>
</html>
```







```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Registration Form</title>
link rel="stylesheet" href="styles.css">
</head>
<body>

<form action="Register.php" method="POST" onsubmit="return validateForm()" onclick="Register">
```

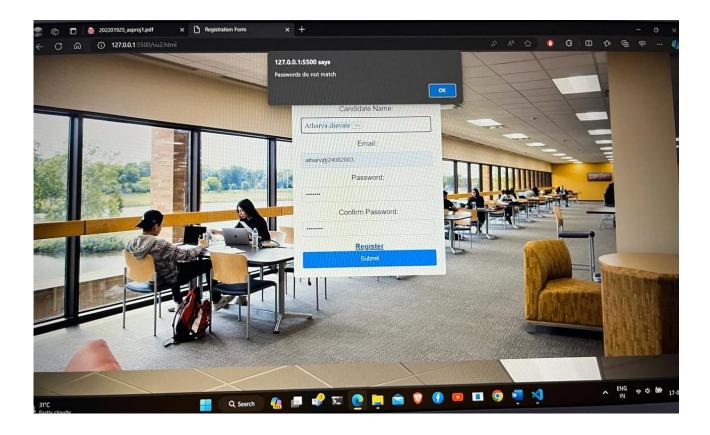
```
<center><h3>Registration form</h3></center>
  <marquee>fill all the details...</marquee>
 <center><label for="username">Candidate Name:</label></center>
 <input type="text" id="username" name="username" required>
 <center><label for="email">Email:</label></center>
 <input type="email" id="email" name="email" required>
 <center><label for="password">Password:</label></center>
 <input type="password" id="password" name="password" required>
 <center><label for="confirm password">Confirm Password:</label></center>
 <input type="password" id="confirm password" name="confirm password" required>
 <center><b><a href="last.html"> Register <input type="submit"</pre>
id="submit"></a></b></center>
</form>
</body>
<style>
body {
 font-family: Arial, sans-serif;
 margin: 0;
 padding: 0;
 background-image: url(atharva2.jpeg);
 background-size: cover;
 background-position: center;
}
body {
```

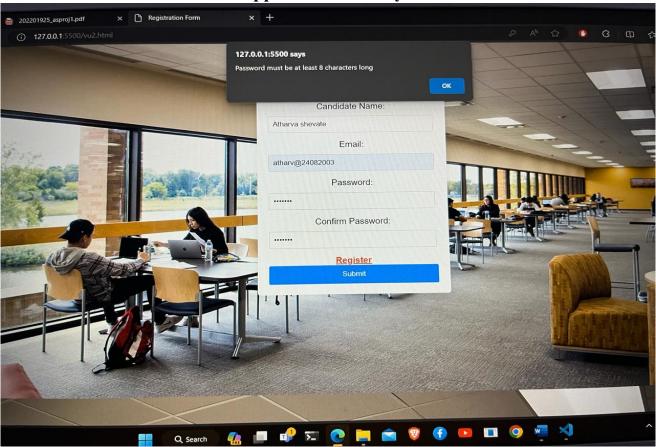
```
font-family: Arial, sans-serif;
 margin: 0;
 padding: 0;
 background-image: url(hpl.webp);
 background-size: cover;
 background-position: center;
}
form {
 width: 300px;
 margin: 20px auto;
 padding: 20px;
 background-color: #fff;
 border-radius: 5px;
 box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}
h2 {
 text-align: center;
 color:rgb(56, 56, 180);
}
label {
 display: block;
 margin-bottom: 10px;
}
input[type="text"],
input[type="email"],
input[type="password"] {
 width: calc(100% - 20px);
 padding: 8px;
```

```
margin-bottom: 15px;
 border: 1px solid #ccc;
 border-radius: 3px;
}
input[type="submit"] {
 width: 100%;
 padding: 10px;
 background-color: #007bff;
 border: none;
 border-radius: 3px;
 color: #fff;
 cursor: pointer;
}
</style>
<script>
  function validateForm(){
    var username = document.getElementById("username").value;
    var email = document.getElementById("email").value;
    var password = document.getElementById("password").value;
    var confirm password = document.getElementById("confirm password").value;
    if(username === "" || email === "" || password === "" || confirm password === ""){
      alert("All fields must be filled out");
      return false;
    }
    if(password !== confirm_password ){
      alert("Passwords do not match");
      return false;
    }
```

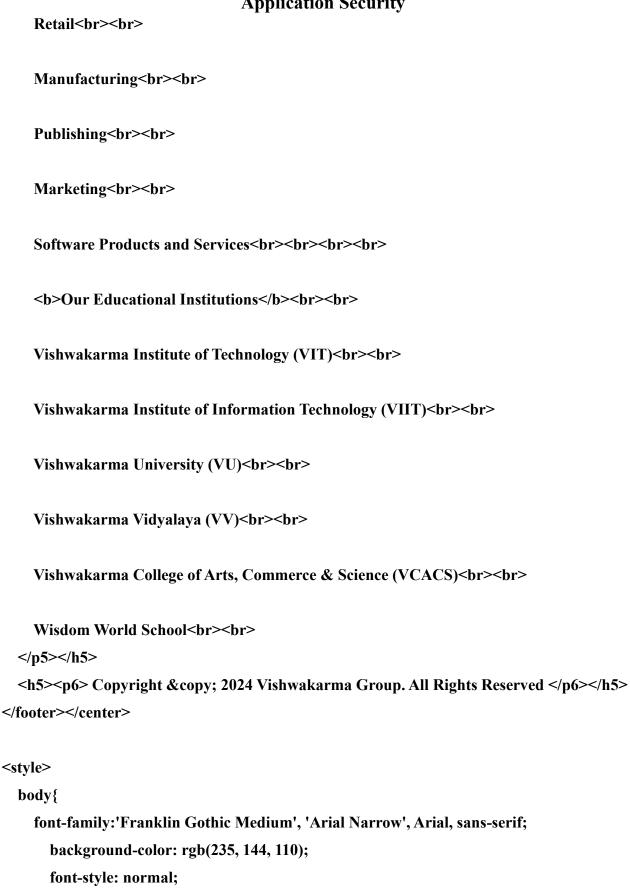
```
if(password.length < 8){
    alert("Password must be at least 8 characters long");
    return false;
}

return true;
}
</script>
</html>
```

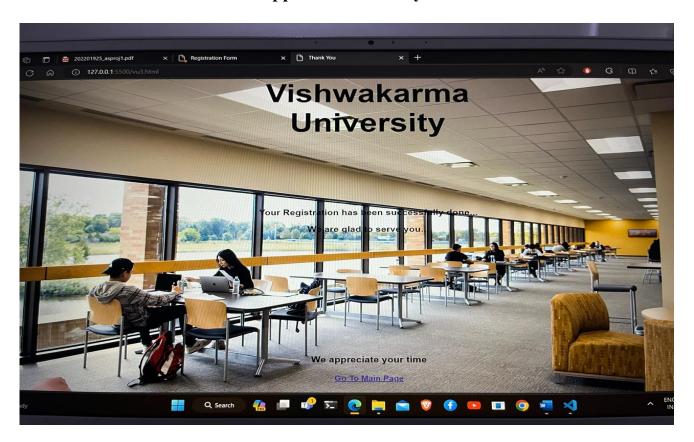




Application Security	
 //>	
 //>	
 br>	
 br>	
 br>	
<h3>We appreciate your time</h3>	
<h4> Go To Main Page </h4>	
<center><footer></footer></center>	
<h5><p5> Vishwakarma Group <br< td=""><td>></td></br<></p5></h5>	>
About Us	
About the Group 	
Vision/Mission br>	
Our History >	
Blog >	
Sectors & Brands	
Education 	



```
color: black;
       padding: 20px;
       text-align: center;
       font-family: Verdana, Geneva, Tahoma, sans-serif;
       background-image: url(".jpeg");
       border-radius: 20px;
       height: 100vh;
       background-size: cover;
       background-position: center;
       margin: 0px;
     }
     body {
     font-family: Arial, sans-serif;
     margin: 0;
     padding: 0;
     background-image: url(hpl.webp);
     background-size: cover;
     background-position: center;
}
     .p5{
       color: #fff;
     }
     footer{
       background-color:black;
       font-style: italic;
       font-family: "cursive";
       color: #fff;
</style>
</html>
```



Conclusion:

Conclusion: Implementing server-side input validation incorporating both whitelisting and blacklisting techniques, coupled with robust session management, is imperative for Vishwakarma University to enhance security measures, prevent the acceptance of unauthorized data, mitigate vulnerabilities, and ensure the integrity of its web application functionalities. By adopting these measures, the university can significantly bolster its defenses against potential threats and safeguard sensitive information effectively.