**WINTER SEMESTER 2025-26**

**BCSE203E: Web Programming**

**Lab 7**

Date: 07/01/2026

Reg. No: 24BCE5362

CODE:

**index.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Student Performance Analytics</title>

<!-- Font Awesome -->

<link rel="stylesheet"

href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">

<!-- External CSS -->

<link rel="stylesheet" href="Lab7.css">

</head>

<body>

<div class="background-layer"></div>

<div class="layout">

<!-- LEFT DASHBOARD MENU -->

<div class="overlay">

<h1>SPAS</h1>

<h3>Student Performance<br>Analytics System</h3>

<p>

<b>Reg No:</b> 24BCE5362<br>

<b>Date:</b> 07/01/2026

</p>

<div class="menu">

<a href="index.html" class="menu-item">

<i class="fa fa-home"></i> Home

</a>

<a href="upload.html" class="menu-item">

<i class="fa fa-upload"></i> Upload Dataset

</a>

<a href="analytics.html" class="menu-item">

<i class="fa fa-line-chart"></i> Analytics

</a>

<a href="clusters.html" class="menu-item">

<i class="fa fa-users"></i> Student Clusters

</a>

<a href="contact.html" class="menu-item">

<i class="fa fa-envelope"></i> Contact

</a>

</div>

</div>

<!-- RIGHT CONTENT AREA -->

<div class="content-card">

<h2>About the System</h2>

<p>

The <b>Student Performance Decision Support System</b> is a web-based intelligent

platform designed to help educators, administrators, and analysts understand,

evaluate, and improve student academic performance using data science and

machine learning techniques.

</p>

<h3>Core Purpose</h3>

<p>

The main goal of this system is to convert raw student data into

<b>actionable insights</b>. Instead of manual spreadsheets and static reports,

the system provides predictive analytics, clustering results, and visual summaries

to support data-driven decision making in education.

</p>

<h3>Key Objectives</h3>

<ul>

<li>Identify students who may be at academic risk</li>

<li>Discover hidden patterns in student performance</li>

<li>Analyze trends using statistical and ML models</li>

<li>Summarize textual feedback using sentiment analysis</li>

<li>Assist educators with visual dashboards</li>

</ul>

<h3>How the System Works</h3>

<h4>1. Data Preprocessing</h4>

<p>

Uploaded datasets are cleaned and prepared by handling missing values,

normalizing features, and structuring the data for analysis.

</p>

<h4>2. Machine Learning Analysis</h4>

<p>

The system applies supervised learning for prediction and unsupervised learning

for clustering students based on similar academic patterns.

</p>

<h4>3. Visualization & Insights</h4>

<p>

Results are displayed using charts, graphs, and cluster views that allow

educators to easily interpret student performance.

</p>

<h3>What Users Can Do</h3>

<ul>

<li>Upload student datasets (CSV format)</li>

<li>View analytical dashboards</li>

<li>Explore student clusters</li>

<li>Analyze academic trends</li>

<li>Make informed academic decisions</li>

</ul>

<h3>Technologies Used</h3>

<ul>

<li><b>Frontend:</b> HTML, CSS, JavaScript</li>

<li><b>Analytics:</b> Python, Pandas, NumPy, scikit-learn</li>

<li><b>Visualization:</b> Charts and dashboards</li>

<li><b>Database:</b> SQL-based storage</li>

</ul>

<p>

This platform bridges the gap between raw academic data and intelligent

decision making, helping institutions improve student outcomes effectively.

</p>

</div>

</div>

</body>

</html>

**upload.html**

<!DOCTYPE html>

<html>

<head>

<title>Upload Dataset</title>

<link rel="stylesheet" href="Lab7.css">

</head>

<body>

<div class="background-layer"></div>

<div class="overlay">

<h1>Upload Dataset</h1>

<p>Upload student performance data here.</p>

<a href="index.html" class="menu-item">⬅ Back to Home</a>

</div>

</body>

</html>

**analytics.html**

<!DOCTYPE html>

<html>

<head>

<title>Analytics</title>

<link rel="stylesheet" href="Lab7.css">

</head>

<body>

<div class="background-layer"></div>

<div class="overlay">

<h1>Analytics</h1>

<p>Analyze student performance metrics.</p>

<a href="index.html" class="menu-item">⬅ Back to Home</a>

</div>

</body>

</html>

**clusters.html**

<!DOCTYPE html>

<html>

<head>

<title>Student Clusters</title>

<link rel="stylesheet" href="Lab7.css">

</head>

<body>

<div class="background-layer"></div>

<div class="overlay">

<h1>Student Clusters</h1>

<p>View grouped student performance clusters.</p>

<a href="index.html" class="menu-item">⬅ Back to Home</a>

</div>

</body>

</html>

**contact.html**

<!DOCTYPE html>

<html>

<head>

<title>Contact</title>

<link rel="stylesheet" href="Lab7.css">

</head>

<body>

<div class="background-layer"></div>

<div class="overlay">

<h1>Contact</h1>

<p>Email: analytics@college.edu</p>

<a href="index.html" class="menu-item">⬅ Back to Home</a>

</div>

</body>

</html>

**Lab7.css**

\* {

box-sizing: border-box;

margin: 0;

padding: 0;

}

body {

font-family: "Segoe UI", Arial, Helvetica, sans-serif;

padding: 40px;

background: #f5f7fb;

}

.background-layer {

position: fixed;

inset: 0;

background-image: url("https://images.unsplash.com/photo-1666875753105-c63a6f3bdc86?fm=jpg&q=60&w=3000");

background-size: cover;

background-position: center;

filter: blur(2px) brightness(0.9);

z-index: -1;

}

.layout {

display: flex;

gap: 40px;

align-items: flex-start;

}

.overlay {

width: 360px;

background: linear-gradient(

180deg,

rgba(245,248,255,0.96),

rgba(235,240,255,0.96)

);

padding: 30px;

border-radius: 18px;

box-shadow:

0 20px 40px rgba(0,0,0,0.12),

inset 0 0 0 1px rgba(37,99,235,0.08);

}

h1 {

font-size: 28px;

margin-bottom: 8px;

}

h1::after {

content: "";

display: block;

width: 70px;

height: 3px;

background: linear-gradient(to right, #1e90ff, #6f42c1);

margin-top: 6px;

}

h1::first-letter {

font-size: 40px;

color: #1e90ff;

}

h2, h3, h4 {

margin-top: 20px;

margin-bottom: 10px;

color: #1f2937;

}

p {

color: #444;

font-size: 15px;

line-height: 1.7;

margin-bottom: 14px;

}

ul {

margin-left: 20px;

margin-bottom: 20px;

}

li {

margin-bottom: 8px;

}

.menu {

margin-top: 25px;

}

.menu-item {

display: block;

text-decoration: none;

color: #1f2937;

padding: 14px 16px;

margin-bottom: 14px;

border-radius: 12px;

background: #ffffff;

border: 1px solid #e5e7eb;

position: relative;

transition: all 0.3s ease;

font-weight: 500;

}

.menu-item i {

color: #2563eb;

margin-right: 12px;

}

.menu-item:hover {

background: linear-gradient(to right, #e0edff, #f3e8ff);

transform: translateX(6px);

box-shadow: 0 10px 20px rgba(0,0,0,0.12);

}

.menu-item:active {

transform: scale(0.96);

}

.menu-item:focus {

outline: 2px solid #2563eb;

}

.menu-item::before {

content: "➜";

position: absolute;

left: -22px;

top: 50%;

transform: translateY(-50%);

opacity: 0;

color: #2563eb;

font-size: 16px;

}

.menu-item:hover::before {

opacity: 1;

}

.content-card {

background: rgba(255,255,255,0.98);

padding: 42px 46px;

border-radius: 20px;

box-shadow: 0 30px 60px rgba(0,0,0,0.18);

max-width: 880px;

}

.content-card h2 {

font-size: 26px;

}

.content-card h3 {

font-size: 20px;

}

.content-card p {

max-width: 760px;

}

Output:





















