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Practical No: 12

Date Of Performance: 09/10/2025

Aim: Implementation of Nodejs Express Applications.

Q) Create functional components to demonstrate

## CODE (app.js):

```
const express = require('express');
const path = require('path');
const app = express();
const PORT = process.env.PORT || 3000;
app.set('view engine', 'ejs');
app.set('views', path.join(__dirname, 'views'));
app.use(express.static(path.join(__dirname,
'public')));
const napoleonData = {
   title: "Napoleon Bonaparte - Emperor of the
French",
    sections: {
        earlyLife: {
            title: "Early Life",
            content: "Napoleon Bonaparte was
born on August 15, 1769, in Ajaccio, Corsica. He
attended military school in France and quickly
rose through the ranks of the military during
the French Revolution."
       },
        militaryCampaigns: {
            title: "Military Campaigns",
            content: "Napoleon led successful
campaigns in the Italian Peninsula and Egypt,
establishing his reputation as a brilliant
military strategist. His most famous victories
include Austerlitz, Jena, and Friedland."
        },
        emperor: {
            title: "Emperor of the French",
            content: "In 1804, Napoleon crowned
himself Emperor of the French. He implemented
```

```
the Napoleonic Code, which influenced legal
systems worldwide, and reformed France's
education system."
        },
        exile: {
            title: "Exile and Death",
            content: "After defeat in the War of
the Sixth Coalition, Napoleon was exiled to Elba
in 1814. He escaped in 1815 but was defeated at
Waterloo. He died in exile on Saint Helena in
   },
   timeline: [
        { year: "1769", event: "Born in Corsica"
        { year: "1796", event: "Marries
Joséphine de Beauharnais" },
        { year: "1799", event: "Becomes First
Consul of France" },
        { year: "1804", event: "Crowned Emperor"
},
        { year: "1812", event: "Invades Russia"
        { year: "1814", event: "Exiled to Elba"
        { year: "1815", event: "Defeated at
        { year: "1821", event: "Dies in Saint
Helena" }
};
app.get('/', (req, res) => {
   res.render('index', { data: napoleonData });
```

```
});
                                                            console.log(`Napoleon SPA running on
                                                        http://localhost:${PORT}`);
app.listen(PORT, () => {
CODE (views/index.js)
<!DOCTYPE html>
                                                                                <span class="stat-</pre>
                                                        number">52</span>
<html lang="en">
<head>
                                                                                <span class="stat-</pre>
    <meta charset="UTF-8">
                                                        label">Battles Fought</span>
    <meta name="viewport" content="width=device-</pre>
                                                                            </div>
width, initial-scale=1.0">
                                                                            <div class="stat">
    <title>
                                                                                <span class="stat-</pre>
        <%= data.title %>
                                                        number">15</span>
    </title>
                                                                                <span class="stat-</pre>
    <link rel="preconnect"</pre>
                                                        label">Years as Emperor</span>
href="https://fonts.googleapis.com">
    link rel="preconnect"
                                                                            <div class="stat">
href="https://fonts.gstatic.com" crossorigin>
                                                                                <span class="stat-</pre>
                                                        number">12M</span>
    link
        href="https://fonts.googleapis.com/css2?
                                                                                <span class="stat-</pre>
                                                        label">Square Km Empire</span>
family=Playfair+Display:wght@400;500;600;700&fam
ily=Inter:wght@300;400;500;600&display=swap"
                                                                            </div>
                                                                        </div>
       rel="stylesheet">
    <link rel="stylesheet"</pre>
                                                                    </div>
href="/css/style.css">
                                                                    <div class="hero-scroll">
</head>
                                                                        <span>↓</span>
<body>
                                                                    </div>
    <header>
                                                                </section>
        <nav class="navbar">
                                                                <section id="early-life" class="content-</pre>
           <div class="container">
                                                        section with-image">
                <div class="nav-brand">
                                                                    <div class="container">
                                                                        <div class="section-header">
                    <h1>
                        <%= data.title %>
                    </h1>
                </div>
                                                        data.sections.earlyLife.title %>
                </h2>
                    <a href="#early-
                                                                            <div class="section-
                                                        divider"></div>
life">Early Life</a>
                    <1i><1
                                                                        </div>
href="#military">Military</a>
                                                                        <div class="content-grid">
                   <a
                                                                            <div class="content-text">
href="#emperor">Emperor</a>
                                                                                >
                    <a
                                                                                    <%=
href="#exile">Exile</a>
                                                        data.sections.earlyLife.content %>
href="#timeline">Timeline</a>
                                                                                <div class="key-facts">
                   <a</li>
                                                                                    <h3>Key Facts</h3>
href="#gallery">Gallery</a>
                                                                                    <l>
                                                                                        Born in
               </div>
                                                        Ajaccio, Corsica on August 15, 1769
       </nav>
                                                                                        Attended
    </header>
                                                        military school in Brienne, France
    <main>
                                                                                        Graduated
        <section class="hero">
                                                        from École Militaire in Paris at age 16
            <div class="hero-content">
                                                                                        Spoke French
                <h2>The Rise and Fall of an
                                                        with a Corsican accent throughout his life
Emperor</h2>
                                                                                    Explore the life and legacy
                                                                                </div>
                                                                            </div>
of one of history's most fascinating military
                                                                            <div class="content-image">
leaders and rulers
               <div class="hero-stats">
                    <div class="stat">
                                                        src="https://upload.wikimedia.org/wikipedia/comm
```

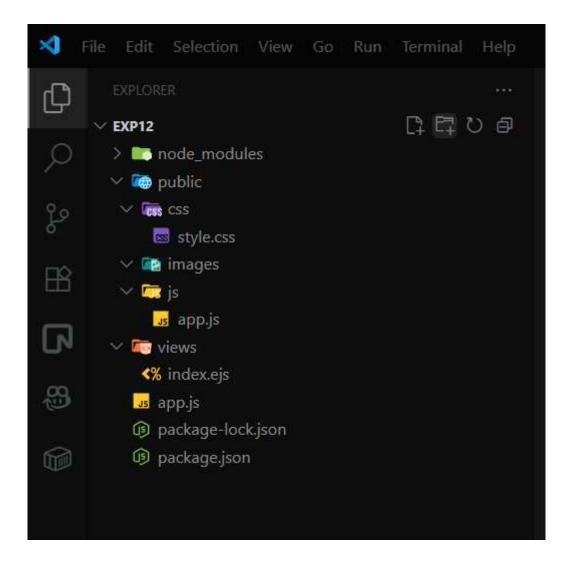
```
ons/thumb/2/28/Napoleon_bonaparte.jpg/800px-
ons/thumb/7/7a/Maison_bonaparte.jpg/800px-
Maison_bonaparte.jpg"
                                                         Napoleon_bonaparte.jpg"
                            alt="Napoleon's
                                                                                     alt="Napoleon
                                                         Bonaparte">
Birthplace in Corsica">
                        caption">Napoleon Bonaparte in his military
caption">Napoleon's birthplace in Ajaccio,
Corsica
                                                         uniform
                    </div>
                                                                             </div>
                </div>
                                                                         </div>
            </div>
                                                                     </div>
        </section>
                                                                 </section>
        <section id="military" class="content-</pre>
                                                                 <section id="emperor" class="content-</pre>
                                                         section with-image">
section with-image">
            <div class="container">
                                                                     <div class="container">
                <div class="section-header">
                                                                         <div class="section-header">
                    <h2>
                                                                             <h2>
data.sections.militaryCampaigns.title %>
                                                         data.sections.emperor.title %>
                    </h2>
                                                                             </h2>
                    <div class="section-
                                                                             <div class="section-
divider"></div>
                                                         divider"></div>
                </div>
                                                                         </div>
                <div class="content-grid
                                                                         <div class="content-grid">
reverse">
                                                                             <div class="content-text">
                    <div class="content-text">
                                                                                     <%=
                        >
                            <%=
                                                         data.sections.emperor.content %>
data.sections.militaryCampaigns.content %>
                                                                                 <div class="battles-
                                                         class="achievements">
list">
                                                                                     <h3>Kev
                            <h3>Major
                                                         Achievements</h3>
Battles</h3>
                                                                                     <div
                            <div class="battle-
                                                         class="achievement-grid">
item">
                                                                                         <div
                                                         class="achievement-item">
                                <snan
class="battle-name">Austerlitz</span>
                                                                                             <div
                                                         class="achievement-icon"> 90 </div>
class="battle-year">1805</span>
                                                                                             <h4>Napoleon
                            </div>
                                                         ic Code</h4>
                            <div class="battle-
                                                                                             legal
item">
                                                         system that influenced civil law worldwide
                                                                                         </div>
class="battle-name">Jena-Auerstedt</span>
                                                                                         <div
                                                         class="achievement-item">
class="battle-year">1806</span>
                                                                                             <div
                            </div>
                                                         class="achievement-icon"> m</div>
                            <div class="battle-
                                                                                             <h4>Bank of
item">
                                                         France</h4>
                                                                                             Establish
class="battle-name">Friedland</span>
                                                         ed central banking system
                                                                                         </div>
class="battle-year">1807</span>
                                                                                         <div
                            </div>
                                                         class="achievement-item">
                            <div class="battle-
                                                                                             <div
item">
                                                         class="achievement-icon"> <> </div>
                                <span
                                                                                             <h4>Educatio
class="battle-name">Waterloo</span>
                                                         n Reform</h4>
                                                                                             Created
class="battle-year">1815</span>
                                                         lycée system for secondary education
                            </div>
                                                                                         </div>
                        </div>
                                                                                     </div>
                    </div>
                                                                                 </div>
                    <div class="content-image">
                                                                             </div>
                        <ima
                                                                             <div class="content-image">
src="https://upload.wikimedia.org/wikipedia/comm
```

```
<ima
                                                                                             Exiled to
src="https://upload.wikimedia.org/wikipedia/comm
                                                         remote island where he died in 1821
ons/thumb/3/30/Napoleon_II_at_the_age_of_four.jp
                                                                                     </div>
g/800px-Napoleon_II_at_the_age_of_four.jpg"
                                                                                 </div>
                            alt="Napoleon's
Coronation">
                                                                             </div>
                        <div class="content-image">
caption">Napoleon's coronation as Emperor of the
French
                                                         src="https://upload.wikimedia.org/wikipedia/comm
                    </div>
                                                         ons/thumb/5/5c/Longwood_house_2.jpg/800px-
                </div>
                                                         Longwood_house_2.jpg"
            </div>
                                                                                     alt="Napoleon's
        </section>
                                                         Exile Home">
        <section id="exile" class="content-</pre>
                                                                                 section with-image">
                                                         caption">Longwood House, Napoleon's final
            <div class="container">
                                                         residence on Saint Helena
                <div class="section-header">
                                                                             </div>
                                                                         </div>
                    <h2>
                                                                     </div>
data.sections.exile.title %>
                                                                 </section>
                    </h2>
                                                                 <section id="timeline" class="content-</pre>
                    <div class="section-
                                                         section">
divider"></div>
                                                                     <div class="container">
                </div>
                                                                         <div class="section-header">
                <div class="content-grid
                                                                             <h2>Historical Timeline</h2>
                                                                             <div class="section-
reverse">
                    <div class="content-text">
                                                         divider"></div>
                                                                         </div>
                            <%=
                                                                         <div class="timeline">
data.sections.exile.content %>
                                                         data.timeline.forEach((item, index)=> { %>
                        <div class="exile-
                                                                                 <div class="timeline-
timeline">
                                                         item">
                            <div class="exile-
                                                                                     <div
event">
                                                         class="timeline-year">
                                <div
                                                                                         <%= item.year %>
class="exile-date">1814</div>
                                                                                     </div>
                                <div
                                                                                     <div
                                                         class="timeline-event">
class="exile-details">
                                    <h4>First
                                                                                         <div
Exile - Elba</h4>
                                                         class="event-content">
                                    Exiled to
                                                                                             <h3>
the island of Elba after abdication
                                                                                                 <%=
                                </div>
                                                         item.event %>
                            </div>
                                                                                             </h3>
                            <div class="exile-
                                                                                             Significa
event">
                                                         nt event in Napoleon's life and career
                                <div
                                                                                         </div>
class="exile-date">1815</div>
                                                                                     </div>
                                <div
                                                                                 </div>
class="exile-details">
                                                                                 <% }); %>
                                    <h4>Hundred
                                                                         </div>
                                                                     </div>
Days</h4>
                                                                 </section>
                                    Escaped
Elba and returned to power for 100 days
                                                                 <section id="gallery" class="content-</pre>
                                </div>
                                                         section">
                            </div>
                                                                     <div class="container">
                                                                         <div class="section-header">
                            <div class="exile-
event">
                                                                             <h2>Historical Gallery</h2>
                                <div
                                                                             <div class="section-
                                                         divider"></div>
class="exile-date">1815-1821</div>
                                <div
                                                                         </div>
class="exile-details">
                                                                         <div class="gallery-grid">
                                    <h4>Final
                                                                             <div class="gallery-item">
Exile - Saint Helena</h4>
                                                                                 <ima
                                                         src="https://upload.wikimedia.org/wikipedia/comm
```

```
ons/thumb/4/40/Jacques-Louis_David_-
                                                                               <h3>Lasting Impact</h3>
_Bonaparte_franchissant_le_Grand_Saint-
Bernard%2C_20_mai_1800_-
                                                                                   Napoleonic Code
_Google_Art_Project.jpg/800px-Jacques-
                                                       influenced legal systems worldwide
Louis_David_-
                                                                                   Reformed
_Bonaparte_franchissant_le_Grand_Saint-
                                                       education and administrative systems in
Bernard%2C_20_mai_1800_-_Google_Art_Project.jpg"
                                                       France
                           alt="Napoleon
                                                                                   Spread
Crossing the Alps">
                                                       revolutionary ideals across Europe
                                                                                   Inspired
                       <div class="gallery-
caption">Napoleon Crossing the Alps</div>
                                                       military tactics and strategy for
                   </div>
                                                       generations
                   <div class="gallery-item">
                                                                               </div>
                       <ima
src="https://upload.wikimedia.org/wikipedia/comm
                                                                       </div>
ons/thumb/c/cf/Franz_Ruben_-
                                                                   </div>
                                                               </section>
_Battle_of_Austerlitz.jpg/800px-Franz_Ruben_-
                                                           </main>
_Battle_of_Austerlitz.jpg"
                           alt="Battle of
                                                           <footer>
Austerlitz">
                                                               <div class="container">
                       <div class="gallery-
                                                                   <div class="footer-content">
caption">Battle of Austerlitz</div>
                                                                       <div class="footer-section">
                   </div>
                                                                           <h3>Napoleon Bonaparte</h3>
                    <div class="gallery-item">
                                                                           Emperor of the French
                                                       (1804-1814/1815)
src="https://upload.wikimedia.org/wikipedia/comm
                                                                       </div>
ons/thumb/7/76/Napoleon_at_Waterloo.jpg/800px-
                                                                       <div class="footer-section">
Napoleon_at_Waterloo.jpg"
                                                                           <h4>Explore More</h4>
                           alt="Napoleon at
Waterloo">
                                                                               <a href="#early-
                       <div class="gallery-
                                                       life">Early Life</a>
caption">Napoleon at Waterloo</div>
                                                                               <a
                   </div>
                                                       href="#military">Military Career</a>
                   <div class="gallery-item">
                                                       href="#emperor">As Emperor</a>
                       <ima
src="https://upload.wikimedia.org/wikipedia/comm
ons/thumb/1/14/Napoleon_I_of_France.jpg/800px-
                                                       href="#timeline">Timeline</a>
Napoleon_I_of_France.jpg"
                                                                           </div>
                           alt="Napoleon I">
                       <div class="gallery-
                                                                       <div class="footer-section">
caption">Emperor Napoleon I</div>
                                                                           <h4>Resources</h4>
                    </div>
               </div>
                                                                               <1 i><a
            </div>
                                                       href="#">Historical Documents</a>
        </section>
                                                                               <a href="#">Museum</a>
        <section id="legacy" class="content-</pre>
                                                       Collections</a>
section bg-dark">
                                                                               <a href="#">Further</a>
            <div class="container">
                                                       Reading</a>
               <div class="section-header">
                                                                           <h2>Napoleon's Legacy</h2>
                                                                       </div>
                    <div class="section-
                                                                   </div>
                                                                   <div class="footer-bottom">
divider"></div>
               </div>
                                                                       © 2024 Napoleon
               <div class="legacy-content">
                                                       Bonaparte Historical Archive. Educational
                    <div class="quote">
                                                       purposes only.
                       <blookquote>
                                                                       All images from Wikimedia
                                                       Commons - Public Domain
                           "Impossible is a
word to be found only in the dictionary of
                                                                   </div>
fools."
                                                               </div>
                           <cite>- Napoleon
                                                           </footer>
Bonaparte</cite>
                                                           <script src="/js/app.js"></script>
                       </blockquote>
                                                       </body>
                    </div>
                                                       </html>
```

<div class="legacy-facts">

## Folder Structure:



## **OUTPUT:**





