<u>PROJECT REPORT</u>

Bluestock Fintech
Technical Documentation: IPO web application development

Team Name - Node js
Team Member Name - SIRI CHANDHANA SAMUDRALA
Role – Developer [Frontend Team]
Alloted Task – Building 4 Web Pages

1. Products
2. Contact us
3. Community
4. About us

1. INTRODUCTION:

The IPO Web App & REST API is a robust full-stack application designed to deliver real-time Initial Public Offering (IPO) information to users.

2. FRONTEND:

2.1 Technologies
  Language: JavaScript
 • Framework: React
 • Libraries:
 • HTTP Requests: fetch API or axios
 • Styling: Inline CSS (no CSS framework used)
 • Navigation: react-router-dom
 • State Management: React useState (no external state management library)
 • Build Tool: Create React App
 • Version Control: Git

2.2 Folder Structure

```
frontend/
|-- public/
|-- src/
|   |-- Products/
|   |-- App.js
|   |-- ContactUs/
|   |-- App.js
|   |-- Community/
|   |-- App.js
|   |-- AboutUs/
```

| |-- App.js
|-- package.json
|-- README.md

2.3 Setup Instructions

1. Clone the repository: git clone <https://github.com/b22ai111/BlueStock_Project.git>
2. Install dependencies: npm install bootstrap@5.3.2 react@18.2.0 react-dom@18.2.0 react-bootstrap@2.8.0 react-router-dom@6.22.3
3. Start the development server:

       3.1. clone the repository
       https://github.com/b22ai111/BlueStock_Project.git

       3.2. Navigate into the project folder
       cd BlueStock_Project

       3.3. Install all dependencies
       npm install

       3.4. Start the React development server
       npm start

4. Access the application at: http://localhost:3000

3. SYSTEM ARCHITECTURE:

• Frontend:
• Single Page Application (SPA) built with React
• Responsive UI for desktop and mobile devices
• Dynamic routing using React Router for seamless navigation between pages
  (e.g., Shark Investors, IPO Upcoming, Register IPO, Careers)
• Inline CSS for styling to maintain consistency and speed
• Data Flow:
• Client (Frontend) handles user interactions and renders UI
• React components communicate with APIs (if any) to fetch or send data
• Components:
• Modular React components for each page and feature (e.g., Shark Investors,
   IPO Upcoming, Register IPO, Careers)
• Reusable UI elements (headers, cards, forms)

4. PERFORMANCE:

Frontend:

• Lazy loading of components and images to improve initial load time.
• Image optimization using modern formats (e.g., WebP) and responsive images.
• Code splitting to reduce bundle size.
• Use of React.memo and useCallback to prevent unnecessary re-renders.
• Minification and compression of JavaScript and CSS files.
• Efficient state management with React hooks to avoid performance bottlenecks.
• Use of browser caching and CDN for static assets.

5.VERSION CONTROL:

• **Tool:** Git
• **Branching Strategy:**
• main branch for production
• develop branch for integration
• feature branches for new features and bug fixes
• **IP Policy:** Ensure the repository is private to comply with Bluestock Fintech's IP policy.

6. FUTURE IMPROVEMENTS:

• Implement real-time updates (e.g., WebSocket integration).
• Develop an admin dashboard for IPO management.
• Integrate third-party APIs for enhanced market data.
• Improve test coverage to target 95%.
• Explore containerization (e.g., Docker, Kubernetes) for scalability

7. CODE SNIPPETS (Frontend - React Components):

1. Products.js

```
  import React from "react";
import "bootstrap/dist/css/bootstrap.min.css";

export default function Products() {
  const productCards = [
    { id: 1, bgColor: "#ffeae6" },
    { id: 2, bgColor: "#e9e6ff" },
    { id: 3, bgColor: "#e6ffe9" },
    { id: 4, bgColor: "#e9e6ff" },
    { id: 5, bgColor: "#e6ffe9" },
  ];

  return (
    <div className="container py-5">
```

```jsx
{/* Section 1 */}
<div className="row align-items-center mb-5">
  <div className="col-md-6">
    <h1 className="fw-bold">Best-in-class<br />Technology & Platforms</h1>
    <p className="mt-3">
      Our products & services aim to help active traders & investors in India gain a winning edge in the stock markets.
    </p>
  </div>
  <div className="col-md-6">
    <div style={{ backgroundColor: "#f9fafe", width: "100%", height: "250px", borderRadius: "16px" }}></div>
  </div>
</div>

{/* Section 2 */}
<div className="p-4 mb-4 rounded" style={{ backgroundColor: "#e6faec" }}>
  <h5 className="fw-semibold">Diversify Your Portfolio Today!</h5>
  <p className="mb-0">
    Start your investment journey with our user-friendly and secure investment platforms.
  </p>
</div>

{/* First Row of Cards */}
<div className="row mb-5">
  {productCards.slice(0, 3).map((card) => (
    <div className="col-md-4 mb-3" key={card.id}>
      <div className="border rounded p-3" style={{ backgroundColor: "#fff" }}>
        <div style={{ backgroundColor: card.bgColor, width: 40, height: 40, borderRadius: "6px" }}></div>
        <h6 className="fw-bold mt-3">Bluestock IPO</h6>
        <p className="mb-0">Be the first to apply for IPOs and FPOs listed on the NSE and BSE.</p>
      </div>
    </div>
  ))}
</div>

{/* Section 3 */}
<div className="p-4 mb-4 rounded" style={{ backgroundColor: "#e6eaff" }}>
  <h5 className="fw-semibold">Grow Your Network and Learn the Stock Market</h5>
  <p className="mb-0">
    Our community-based approach encourages you to learn from experts and peers while expanding your connections.
```

```jsx
      </p>
    </div>

    {/* Second Row of Cards */}
    <div className="row">
      {productCards.slice(3).map((card) => (
        <div className="col-md-4 mb-3" key={card.id}>
          <div className="border rounded p-3" style={{ backgroundColor: "#fff" }}>
            <div style={{ backgroundColor: card.bgColor, width: 40, height: 40, borderRadius:
"6px" }}></div>
            <h6 className="fw-bold mt-3">Bluestock IPO</h6>
            <p className="mb-0">Be the first to apply for IPOs and FPOs listed on the NSE and
BSE.</p>
          </div>
        </div>
      ))}
    </div>
    {/* Add-on Section */}
      <section className="py-5">
      <div className="container">
        {/* Highlight Section */}
        <div className="bg-primary bg-opacity-10 p-4 rounded mb-4">
        <h5 className="fw-bold">Make your platform more powerful</h5>
        <p className="mb-0">
            Integrate with our in-house trading platform and build your own customized trading
applications.
        </p>
        </div>

        {/* Product Card */}
        <div className="row justify-content-start">
        <div className="col-md-4">
          <div className="border rounded p-3 h-100">
          <div
            className="mb-3"
            style={{
            width: "50px",
            height: "50px",
            borderRadius: "8px",
            backgroundColor: "#e4e1fb",
            }}
          ></div>
          <h6 className="fw-bold">Bluestock API</h6>
          <p className="mb-0">
```

```
          Be the first to apply for IPOs and FPOs listed on the NSE and BSE.
        </p>
      </div>
    </div>
  </div>
</div>
</section>

    </div>
  );
}
```

App.js

```
import Products from "./Products";

function App() {
  return <Products />;
}

export default App;
```

2. ContactUs.js

```
import React from "react";
import "bootstrap/dist/css/bootstrap.min.css";

export default function ContactUs() {
  return (
    <div className="container py-5 position-relative">
    {/* Breadcrumb */}
    <div className="mb-3">
      <small className="text-muted">Home &gt; Contact Us</small>
    </div>

    {/* Heading */}
    <h2 className="fw-bold mb-4">How Can We Help You?</h2>

    {/* Contact Options */}
    <div className="row g-4 mb-5">
     {/* Email Us */}
     <div className="col-md-6">
       <div className="border rounded p-4 h-100">
         <h6 className="fw-semibold mb-2">Email us</h6>
         <p className="text-muted mb-3">
```

```jsx
          One of our agents will respond at the earliest
        </p>
        <div className="d-flex justify-content-between align-items-center bg-light px-3 py-2
rounded">
          <span className="text-primary fw-semibold">
            hello@bluestock.in
          </span>
          <span className="text-primary fs-5">&#8594;</span>
        </div>
      </div>
    </div>

    {/* Chat Us */}
    <div className="col-md-6">
      <div className="border rounded p-4 h-100">
        <h6 className="fw-semibold mb-2">Chat us</h6>
        <p className="text-muted mb-3">Available from 8:00AM to 5:00PM</p>
        <div className="d-flex justify-content-between align-items-center bg-light px-3 py-2
rounded">
          <span className="text-primary fw-semibold">Open Chat</span>
          <span className="text-primary fs-5">&#8594;</span>
        </div>
      </div>
    </div>
  </div>

  {/* CTA Section */}
  <div
    className="text-white text-center py-5 rounded"
    style={{ backgroundColor: "#4e4cff" }}
  >
    <h3 className="fw-bold">Interact With Us in Our Active Community</h3>
    <p className="mb-4">
      Ask questions or discuss anything related to investing or trading
      <br />
      in the most active trading & investing community
    </p>
    <button className="btn btn-dark rounded-pill px-4 py-2">
      JOIN NOW
    </button>
  </div>

  {/* QR Code Floating Card */}
  <div
```

```
        className="position-absolute"
        style={{ bottom: "-100px", left: "20px" }}
      >
        <div
          className="bg-white border rounded p-3 text-center shadow-sm"
          style={{ width: "140px" }}
        >
          <small className="fw-semibold d-block mb-2">
            Download Bluestock
            <br />
            Mobile App
          </small>
          <img

src="https://chart.googleapis.com/chart?cht=qr&chs=120x120&chl=https://play.google.com/store"
            alt="QR code"
            className="img-fluid"
          />
          <div className="d-flex justify-content-center mt-2">
            <img

src="https://upload.wikimedia.org/wikipedia/commons/7/78/Google_Play_Store_badge_EN.svg"
              alt="Play Store"
              style={{ width: "100px" }}
            />
          </div>
        </div>
      </div>
    </div>
  );
}
```

App.js

```
import React from "react";
import "bootstrap/dist/css/bootstrap.min.css";
import ContactUs from "./ContactUs"; // ✅ Check file location

function App() {
  return (
    <div>
      <header className="py-3 border-bottom">
        <div className="container d-flex justify-content-between align-items-center">
```

```jsx
      <h4 className="m-0 fw-bold">BLUESTOCK</h4>
      <div>
        <button className="btn btn-outline-primary me-2">Sign In</button>
        <button className="btn btn-primary">Sign Up Now</button>
      </div>
    </div>
  </header>

  <main>
    <ContactUs />
  </main>

  <footer className="text-center text-muted py-4 border-top mt--5">
    &copy; {new Date().getFullYear()} Bluestock. All rights reserved.
  </footer>
  </div>
  );
}

export default App;
```

3. Community.js

```jsx
import React from "react";
import "bootstrap/dist/css/bootstrap.min.css";

export default function Community() {
  return (
    <div className="container py-5">
      {/* Breadcrumb */}
      <div className="mb-3">
        <small className="text-muted">Home &gt; Community</small>
      </div>

      {/* Hero Section */}
      <div className="row align-items-center mb-5">
        <div className="col-md-6">
          <h2 className="fw-bold mb-3">
            The Most Active Community of <br /> Traders & Investors
          </h2>
          <p className="text-muted">
            Join now to interact with thousands of active traders and investors
            to learn and share your knowledge on our buzzing forum.
          </p>
```

```jsx
      <button className="btn btn-primary mt-3">Join Our Community</button>
    </div>
    <div className="col-md-6">
      <img
        src="https://i.ibb.co/TKLnRQT/community-chat-ui.png" // Replace with actual image if
available
        alt="Community UI"
        className="img-fluid"
      />
    </div>
  </div>

  {/* Join Benefits Section */}
  <div className="row align-items-center mb-5">
    <div className="col-md-6">
      <h4 className="fw-semibold text-capitalize">
        be a part of trading & investments club
      </h4>
      <ul className="list-unstyled mt-3">
        <li className="mb-2">✓ rich environment for knowledge exchange.</li>
        <li className="mb-2">
          ✓ stay connected about the latest stock market
        </li>
        <li className="mb-2">
          ✓ Access exclusive community events, webinars, and meet-ups
        </li>
      </ul>
    </div>
    <div className="col-md-6 text-center">
      <div className="d-flex justify-content-center gap-3">
        <div className="bg-light p-3 rounded">Dynamic Discussions</div>
        <div className="bg-light p-3 rounded">Expert Insights</div>
        <div className="bg-light p-3 rounded">Real-Time Interaction</div>
      </div>
    </div>
  </div>

  {/* Team Cares Section */}
  <div className="text-center mb-5">
    <h4 className="fw-bold">Team Bluestock Cares</h4>
    <p className="text-muted">
      Interact with our members to engage, clarify and contribute
    </p>
  </div>
```

```jsx
      {/* Expert Interaction Section */}
      <div className="row">
        <div className="col-md-6">
          <h5 className="fw-bold mb-4">Interact With Our Experts</h5>
          <ul className="list-unstyled">
            <li className="mb-3">◉  Get valid suggestions</li>
            <li className="mb-3">◉  Raise issues or concerns</li>
            <li className="mb-3">◉  Ask your questions</li>
          </ul>
        </div>
        <div className="col-md-6">
          <img
            src="https://i.ibb.co/DkdbkKf/expert-replies-ui.png" // Replace with actual image if
available
            alt="Expert UI"
            className="img-fluid"
          />
        </div>
      </div>
    </div>
  );
}
```

App.js

```jsx
import React from "react";
import "bootstrap/dist/css/bootstrap.min.css";
import Community from "./Community";

function App() {
  return (
    <div>
      {/* Optional Header */}
      <header className="py-3 border-bottom">
        <div className="container d-flex justify-content-between align-items-center">
          <h4 className="m-0 fw-bold">BLUESTOCK</h4>
          <div>
            <button className="btn btn-outline-primary me-2">Sign In</button>
            <button className="btn btn-primary">Sign Up Now</button>
          </div>
        </div>
      </header>
```

```jsx
      {/* Main Content */}
      <main>
        <Community />
      </main>

      {/* Optional Footer */}
      <footer className="text-center text-muted py-4 border-top mt-5">
        &copy; {new Date().getFullYear()} Bluestock. All rights reserved.
      </footer>
    </div>
  );
}

export default App;
```

4. AboutUs.js

```jsx
import React, { useState } from "react";
import "bootstrap/dist/css/bootstrap.min.css";

export default function AboutUs() {
  const [openFAQ, setOpenFAQ] = useState(null);

  const toggleFAQ = (index) => {
    setOpenFAQ(openFAQ === index ? null : index);
  };

  const faqs = [
    { question: "What is Bluestock?", answer: "Bluestock is a mobile app designed for market
learning, analytics, and trading discussions." },
    { question: "What platforms does Bluestock support?", answer: "Bluestock supports Android,
iOS, and web browsers." },
    { question: "Is there educational content on the app?", answer: "Yes, Bluestock offers learning
materials, expert insights, and discussions." },
    { question: "Is Bluestock free to use?", answer: "Yes, Bluestock is free for users." },
    { question: "How can I get technical support for the app?", answer: "You can reach us via chat
or email at hello@bluestock.in." },
  ];

  return (
    <div className="container py-5">
      {/* Hero Section */}
      <div className="row align-items-center mb-5">
        <div className="col-md-6">
```

```jsx
      <h2 className="fw-bold">
        The Most Active<br />Community of Traders & Investors
      </h2>
      <p className="mt-3">
        Join now to interact with thousands of active traders and investors to learn and share
your knowledge on our buzzing forum.
      </p>
      <button className="btn btn-primary">Join Our Community</button>
    </div>
    <div className="col-md-6">
      <img
        src="https://i.imgur.com/KkPQWhl.png"
        alt="Community Discussion"
        className="img-fluid"
      />
    </div>
  </div>

  {/* Features Section */}
  <div className="text-center mb-5">
    <h4 className="fw-bold">be a part of trading & investments club</h4>
    <div className="row mt-4 justify-content-center">
      <div className="col-md-3">
        <ul className="list-unstyled text-start">
          <li>  rich environment for knowledge exchange.</li>
          <li>  stay connected about the latest stock market.</li>
          <li>  access exclusive community events, webinars, and meet-ups.</li>
        </ul>
      </div>
      <div className="col-md-3 d-flex align-items-end">
        <div>
          <p><strong>Dynamic Discussions</strong></p>
          <p><strong>Expert Insights</strong></p>
          <p><strong>Real-Time Interaction</strong></p>
        </div>
      </div>
    </div>
  </div>

  {/* Team Cares */}
  <div className="text-center mb-5">
    <h4 className="fw-bold">Team Bluestock Cares</h4>
    <p>Interact with our members to engage, clarify and contribute</p>
    <div className="row justify-content-center">
```

```jsx
      <div className="col-md-4 text-start">
        <h5 className="fw-bold">Interact With Our Experts</h5>
        <ul className="list-unstyled mt-3">
          <li>  Get valid suggestions</li>
          <li>  Raise issues or concerns</li>
          <li>  Ask your questions</li>
        </ul>
      </div>
      <div className="col-md-4">
        <img
          src="https://i.imgur.com/KkPQWhl.png"
          alt="Expert Chat"
          className="img-fluid"
        />
      </div>
    </div>
  </div>

  {/* News Section */}
  <div className="text-center mb-5">
    <h3 className="fw-bold">Recent News</h3>
    <div className="row mt-4">
      <div className="col-md-4">
        <div className="bg-light p-3 rounded">
          <h6 className="text-danger fw-bold">Business Standard</h6>
          <p className="small mb-0">
            Rs 20 trillion & rising: AUM of active equity mutual funds surges
          </p>
        </div>
      </div>
      <div className="col-md-4">
        <div className="bg-light p-3 rounded">
          <h6 className="fw-bold">  Medium</h6>
          <p className="small mb-0">
            Bluestock is a mobile app for stock market learning, analytics, and club.
          </p>
        </div>
      </div>
      <div className="col-md-4">
        <div className="bg-light p-3 rounded">
          <h6 className="text-primary fw-bold">BW BusinessWorld</h6>
          <p className="small mb-0">
            Mutual Funds Experience Fourfold Surge In NFO Collections, Reaching Rs 22,000 Cr
In Q2
```

```
        </p>
      </div>
    </div>
  </div>
  <p className="mt-3 text-primary">
    Media & Press Realease <span>&#x2192;</span>
  </p>
</div>

{/* Join Us Section */}
<div className="p-5 text-white rounded mb-5" style={{ backgroundColor: "#6c85f5" }}>
  <h4>Want to join us ?</h4>
  <p className="mb-3">
    We're taking complicated stuff and making it super simple. Our teams are full of smart
and savvy folks working on challenging tasks.
  </p>
  <p className="mb-4">
    And we're always looking for customer-obsessed people. Think you're customer-focused
enough?
    Write to us at <strong>hello@bluestock.in</strong>.
  </p>
  <button className="btn btn-dark">APPLY NOW</button>
</div>

{/* FAQ Section */}
<div className="mb-5">
  <h3 className="fw-bold text-center mb-4">FREQUENTLY ASKED QUESTIONS</h3>
  <div className="accordion" id="faqAccordion">
   {faqs.map((faq, index) => (
     <div className="accordion-item mb-2" key={index}>
       <h2 className="accordion-header">
        <button
          className={`accordion-button ${openFAQ === index ? "" : "collapsed"}`}
          onClick={() => toggleFAQ(index)}
        >
          {faq.question}
        </button>
       </h2>
       <div className={`accordion-collapse collapse ${openFAQ === index ? "show" : ""}`}>
         <div className="accordion-body">{faq.answer}</div>
       </div>
     </div>
   ))}
  </div>
```

```jsx
        </div>
      </div>
  );
}
```

App.js

```jsx
import React from "react";
import "bootstrap/dist/css/bootstrap.min.css";
import AboutUs from "./AboutUs"; // ✅ Use exact file name

function App() {
  return (
    <div>
      {/* Optional Header */}
      <header className="py-3 border-bottom">
        <div className="container d-flex justify-content-between align-items-center">
          <h4 className="m-0 fw-bold">BLUESTOCK</h4>
          <div>
            <button className="btn btn-outline-primary me-2">Sign In</button>
            <button className="btn btn-primary">Sign Up Now</button>
          </div>
        </div>
      </header>

      {/* Main Content */}
      <main>
        <AboutUs />
      </main>

      {/* Footer */}
      <footer className="text-center text-muted py-4 border-top mt-5">
        &copy; {new Date().getFullYear()} Bluestock. All rights reserved.
      </footer>
    </div>
  );
}

export default App;
```

8. Full Source Code:

The full source code is available in the attached GitHub repository:
https://github.com/b22ai111/BlueStock_Project.git