

# WebHooks

This project is a stock price monitoring application built using HTML, JavaScript, and Express.js. The HTML file provides a form for users to subscribe to stock price notifications. When users submit the form, JavaScript captures the input data and sends it to the server using a POST request. The Express.js server handles the subscription logic, storing user subscriptions in memory.

Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Stock Price Monitoring</title>
</head>
<body>
  <h1>Stock Price Monitoring</h1>
  <form id="subscriptionForm">
    <label for="userId">User ID:</label>
    <input type="text" id="userId" name="userId" required><br>
    <label for="stockSymbol">Stock Symbol:</label>
    <input type="text" id="stockSymbol" name="stockSymbol" required><br>
    <label for="threshold">Threshold:</label>
    <input type="number" id="threshold" name="threshold" required><br>
    <button type="submit">Subscribe</button>
  </form>

  <script>
    document.getElementById('subscriptionForm').addEventListener('submit',
async (event) => {
      event.preventDefault();
      const formData = new FormData(event.target);
      const userId = formData.get('userId');
      const stockSymbol = formData.get('stockSymbol').toUpperCase(); //
      Convert to uppercase
      const threshold = parseFloat(formData.get('threshold'));
      try {
        const response = await fetch('/subscribe', {
          method: 'POST',
```

```
        headers: {
            'Content-Type': 'application/json'
        },
        body: JSON.stringify({ userId, stockSymbol, threshold })
    });
    const result = await response.text();
    alert(result);
} catch (error) {
    console.error('Error:', error);
    alert('An error occurred. Please try again.');
```

```
    }
    });
</script>
```

```
</body>
```

```
</html>
```

## App.js

```
const express = require('express');

const app = express();
const port = 3000;

app.use(express.json());

let subscriptions = {};

app.post('/subscribe', (req, res) => {
    const { userId, stockSymbol, threshold } = req.body;
    subscriptions[userId] = { stockSymbol, threshold };
    res.status(200).send('Subscribed successfully');
});

function checkStockPrices() {

    const stockPrices = {
        'AAPL': 150.25,
        'GOOGL': 2700.50,
        'MSFT': 320.75,
    };
}
```

```
Object.entries(subscriptions).forEach(([userId, { stockSymbol, threshold }])
=> {
  const currentPrice = stockPrices[stockSymbol];
  if (currentPrice && currentPrice >= threshold) {
    console.log(`Sending webhook notification to user ${userId} -
${stockSymbol} price exceeds ${threshold}: ${currentPrice}`);
  }
});
}

setInterval(checkStockPrices, 5000);

app.listen(port, () => {
  console.log(`Server running at http://localhost:${port}`);
});
```

```
"dependencies": {
  "express": "^4.18.3"
}
```

# Stock Price Monitoring

User ID:

Stock Symbol:

Threshold: