# **SentimentPulse User Manual**

## **Authentication Features**

1. **Sign In Options**
   * Email/password login
   * Google account sign in
   * Create new account with email
   * Password recovery support
2. **Account Security**
   * Automatic session management
   * Secure token-based authentication
   * Option to logout from any screen

## **Main Dashboard Features**

### **Stock Symbol Management**

1. **Adding Symbols**
   * Type stock symbol in the search bar
   * Press Enter or click the plus icon to add
   * Supports multiple symbols simultaneously
   * Each symbol appears as a removable tag
2. **Removing Symbols**
   * Click the 'X' button on any symbol tag
   * Instantly updates the news feed
   * No limit on removing symbols

### **News Feed Management**

1. **Viewing News**
   * Real-time financial news display
   * Each article shows:
     + Title and description
     + Source and publication date
     + Related stock symbols
     + Sentiment analysis (Positive, Neutral, Negative)
     + Sentiment score percentage
2. **News Refresh**
   * Manual refresh button in header
   * 10-second cooldown between refreshes
   * Visual loading indicator
   * Automatic timestamp update
3. **News Filtering**
   * Filter by sentiment (Positive, Neutral, Negative)
   * Filter by specific stock symbols
   * Shows total number of filtered items

### **Sentiment Analysis Features**

1. **Sentiment Statistics**
   * Visual sentiment distribution
   * Percentage breakdown of:
     + Positive sentiment
     + Neutral sentiment
     + Negative sentiment
   * Updates automatically with filters
2. **Data Export**
   * Export to CSV feature
   * Includes all article data
   * Sentiment scores included
   * Downloadable file format

### **User Interface Elements**

1. **Header Information**
   * Current time display
   * Last refresh timestamp
   * User email display
   * Quick access to logout
2. **Visual Indicators**
   * Color-coded sentiment badges
     + Green for positive
     + Yellow for neutral
     + Red for negative
   * Loading animations
   * Error messages when applicable

### **Performance Features**

1. **Data Caching**
   * 10-minute news cache
   * Reduced API calls
   * Faster content loading
   * Automatic cache refresh
2. **Rate Limiting**
   * Protection against excessive refreshes
   * Clear feedback on refresh cooldown
   * Automatic retry mechanism

## **Best Practices**

1. **Optimal Usage**
   * Add relevant symbols for targeted news
   * Use filters to focus on specific sentiments
   * Regular refreshes for latest updates
   * Export data for detailed analysis
2. **Troubleshooting**
   * Check internet connection if loading fails
   * Clear browser cache if experiencing issues
   * Ensure proper login credentials
   * Contact support for persistent problems

## **Browser Compatibility**

* Works on all modern browsers:
  + Chrome
  + Firefox
  + Safari
  + Edge
* Responsive design for all screen sizes