

## EventBookingSystem Frontend Documentation

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### Project Structure

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```
frontend/
├── index.html                # Main landing page
├── js/                       # JavaScript files
│   ├── auth.js              # Handles authentication (login, register,
│   │                       token, UI updates)
│   ├── events.js            # Handles event listing, booking, and event
│   │                       actions
│   ├── mybookings.js        # Handles the 'My Bookings' page logic
│   ├── main.js              # General UI logic, notifications, helpers
│   └── config.js            # API base URL and config
├── css/
│   └── styles.css           # Main stylesheet
├── pages/
│   ├── login.html           # Login page
│   ├── signup.html          # Registration page
│   └── mybookings.html      # User's bookings page
├── .vscode/
│   └── launch.json          # VS Code launch config (for Live Server or
│   │                       Chrome)
└── launch.json              # (duplicate, can be ignored if using
    .vscode/launch.json)
```

### How to Run the Frontend

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1. Open a terminal and navigate to the 'frontend' directory:  
cd path/to/EventBookingSystem/frontend
2. Start a static server:
  - With Node.js: npx live-server
  - With Python: python -m http.server 8080
  - Or use the VS Code Live Server extension (right-click index.html → "Open with Live Server").
3. Open your browser and go to:  
http://localhost:8080/
  - Main page: /index.html
  - Login: /pages/login.html
  - Signup: /pages/signup.html
  - My Bookings: /pages/mybookings.html

### How the Frontend Works

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#### Authentication

- Login and registration are handled in auth.js.
- On login, the JWT token and user info are saved in localStorage.
- The UI updates to show the user's name and a logout button when logged in.

- Token expiry is checked on every page load; expired tokens log the user out automatically.

#### API Integration

- The frontend communicates with the backend API using fetch (or `authFetch` for authenticated requests).
- The API base URL is set in `js/config.js`.
- Protected endpoints (like booking creation) include the JWT token in the Authorization header.

#### Pages

- `index.html`: Shows the main event listing and navigation.
- `login.html`: Login form, calls `/api/Accounts/login`.
- `signup.html`: Registration form, calls `/api/Accounts/Register`.
- `mybookings.html`: Placeholder for user bookings (requires login).

#### JavaScript Files

- `auth.js`: Handles login, registration, logout, token management, and UI updates.
- `events.js`: Fetches and displays events, handles booking, and event management actions.
- `mybookings.js`: Handles logic for displaying user bookings (currently a placeholder).
- `main.js`: General UI helpers, notifications, and enhancements.
- `config.js`: Stores the API base URL.

#### Styling

- All pages use `css/styles.css` for consistent, modern styling.
- Google Fonts and Font Awesome are used for typography and icons.

#### VS Code Launch Configuration

- `.vscode/launch.json` can be used to launch Chrome or Live Server for development.

#### How to Connect with the Backend

- The frontend expects the backend API to be running and accessible at the URL specified in `js/config.js`.
- All API requests are made to endpoints like `/api/Accounts/login`, `/api/Events`, `/api/Bookings/CreateBooking`, etc.
- JWT tokens are required for protected endpoints and are automatically attached by the frontend.

#### Troubleshooting

- 404 errors for JS/CSS: Make sure you are running the server from the frontend directory and all files exist in their correct folders.
- CORS issues: The backend must allow requests from the frontend's origin (handled by CORS policy in the backend).
- Token/auth issues: Ensure the backend is running and the API base URL is correct in `config.js`.

#### Summary

- The frontend is a static site (HTML, CSS, JS) that interacts with the backend API for authentication, event management, and bookings.
- It is easy to run locally with any static server.
- All code is modular and organized for maintainability.