

Got you. Let's build a ****plain React JS frontend**** from scratch for your NestJS Movies & Reviews backend.

- ✓ All APIs integrated
- ✓ No CSS at all
- ✓ Uses `fetch` (no extra libraries)
- ✓ Works with backend at `http://localhost:3000`

1. Create React App (Vite + React)

```
```bash
1. Create project
npm create vite@latest movie-frontend -- --template react

cd movie-frontend

2. Install deps
npm install

3. Start dev server
npm run dev
```
```

Your backend should already be running on ****http://localhost:3000****.

2. (Backend) Enable CORS (important)

In your NestJS `main.ts` (backend), make sure you have:

```
```ts
import { NestFactory } from '@nestjs/core';
import { AppModule } from './app.module';
import { ValidationPipe } from '@nestjs/common';

async function bootstrap() {
 const app = await NestFactory.create(AppModule);

 app.enableCors({
 origin: 'http://localhost:5173', // Vite frontend
 });
}
```

```

});

app.useGlobalPipes(
 new ValidationPipe({
 whitelist: true,
 forbidNonWhitelisted: true,
 transform: true,
 }),
);

await app.listen(3000);
}
bootstrap();
`

```

---

### ## 3. Frontend Code

We'll only touch **two files**:

```

* `src/main.jsx`
* `src/App.jsx`

```

No CSS files, no imports of ``.css``.

---

#### ### 3.1 `src/main.jsx`

Replace everything with:

```

``jsx
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App.jsx';

ReactDOM.createRoot(document.getElementById('root')).render(
 <React.StrictMode>
 <App />
 </React.StrictMode>
);
`

```

---

### 3.2 `src/App.jsx`

Replace everything with this (full code, all APIs wired):

```
``jsx
import React, { useEffect, useState } from 'react';

const API_BASE = 'http://localhost:3000';

function App() {
 // Movies
 const [movies, setMovies] = useState([]);
 const [loadingMovies, setLoadingMovies] = useState(false);
 const [moviesError, setMoviesError] = useState("");

 // Selected movie details
 const [selectedMovie, setSelectedMovie] = useState(null);
 const [reviews, setReviews] = useState([]);
 const [loadingReviews, setLoadingReviews] = useState(false);
 const [reviewsError, setReviewsError] = useState("");

 // Create movie form
 const [newMovieTitle, setNewMovieTitle] = useState("");
 const [newMovieGenre, setNewMovieGenre] = useState("");
 const [newMovieReleaseYear, setNewMovieReleaseYear] = useState("");

 // Filters & sorting
 const [filterGenre, setFilterGenre] = useState("");
 const [filterReleaseYear, setFilterReleaseYear] = useState("");
 const [sortBy, setSortBy] = useState("");
 const [sortOrder, setSortOrder] = useState('ASC');

 // Create review form
 const [reviewReviewer, setReviewReviewer] = useState("");
 const [reviewRating, setReviewRating] = useState("");
 const [reviewComment, setReviewComment] = useState("");

 // ----- API functions -----

 async function fetchMovies() {
 try {
 setLoadingMovies(true);
```

```

setMoviesError("");

const params = new URLSearchParams();

if (filterGenre) params.append('genre', filterGenre);
if (filterReleaseYear) params.append('releaseYear', filterReleaseYear);
if (sortBy) params.append('sortBy', sortBy);
if (sortOrder) params.append('sortOrder', sortOrder);

const url = `${API_BASE}/movies${params.toString() ? `?${params.toString()}` : ""}`;

const res = await fetch(url);
if (!res.ok) {
 throw new Error('Failed to fetch movies');
}
const data = await res.json();
setMovies(data);
} catch (err) {
 setMoviesError(err.message || 'Error fetching movies');
} finally {
 setLoadingMovies(false);
}
}

async function fetchMovieById(id) {
 try {
 const res = await fetch(`${API_BASE}/movies/${id}`);
 if (!res.ok) {
 throw new Error('Failed to fetch movie');
 }
 const data = await res.json();
 setSelectedMovie(data);
 } catch (err) {
 console.error(err);
 }
}

async function fetchReviewsByMovieId(movieId) {
 try {
 setLoadingReviews(true);
 setReviewsError("");
 const res = await fetch(`${API_BASE}/reviews/${movieId}`);
 if (!res.ok) {
 throw new Error('Failed to fetch reviews');
 }
 }
}

```

```

 }
 const data = await res.json();
 setReviews(data);
 } catch (err) {
 setReviewsError(err.message || 'Error fetching reviews');
 } finally {
 setLoadingReviews(false);
 }
}

```

```

async function createMovie(event) {
 event.preventDefault();

```

```

 try {
 setMoviesError("");

```

```

 const body = {
 title: newMovieTitle,
 };

```

```

 if (newMovieGenre.trim() !== "") {
 body.genre = newMovieGenre;
 }

```

```

 if (newMovieReleaseYear.trim() !== "") {
 body.releaseYear = Number(newMovieReleaseYear);
 }

```

```

 const res = await fetch(`${API_BASE}/movies`, {
 method: 'POST',
 headers: {
 'Content-Type': 'application/json',
 },
 body: JSON.stringify(body),
 });

```

```

 if (!res.ok) {
 const errorText = await res.text();
 throw new Error(errorText || 'Failed to create movie');
 }

```

```

 const created = await res.json();
 console.log('Movie created:', created);

```

```

// Reset form
setNewMovieTitle("");
setNewMovieGenre("");
setNewMovieReleaseYear("");

// Refresh movie list
await fetchMovies();
} catch (err) {
 setMoviesError(err.message || 'Error creating movie');
}
}

async function createReview(event) {
 event.preventDefault();

 if (!selectedMovie) {
 alert('Select a movie first');
 return;
 }

 try {
 setReviewsError("");

 const body = {
 movieId: selectedMovie.id,
 reviewer: reviewReviewer,
 rating: Number(reviewRating),
 };

 if (reviewComment.trim() !== "") {
 body.comment = reviewComment;
 }

 const res = await fetch(`${API_BASE}/reviews`, {
 method: 'POST',
 headers: {
 'Content-Type': 'application/json',
 },
 body: JSON.stringify(body),
 });

 if (!res.ok) {
 const errorText = await res.text();
 throw new Error(errorText || 'Failed to create review');
 }
 }
}

```

```

 }

 const created = await res.json();
 console.log('Review created:', created);

 // Reset form
 setReviewReviewer("");
 setReviewRating("");
 setReviewComment("");

 // Refresh reviews
 await fetchReviewsByMovieId(selectedMovie.id);
 // Optional: refresh movies to reflect rating sorting if needed
 await fetchMovies();
 } catch (err) {
 setReviewsError(err.message || 'Error creating review');
 }
}

// ----- Effects -----

useEffect(() => {
 fetchMovies();
}, []); // initial load

// ----- Handlers -----

function handleApplyFilters(event) {
 event.preventDefault();
 fetchMovies();
}

function handleSelectMovie(movie) {
 setSelectedMovie(movie);
 fetchMovieById(movie.id); // to use /movies/:id API
 fetchReviewsByMovieId(movie.id); // to use /reviews/:movieId API
}

// ----- Render -----

return (
 <div>
 <h1>Movies & Reviews</h1>

```

```
{/* Create Movie */}
<section>
 <h2>Add New Movie</h2>
 <form onSubmit={createMovie}>
 <div>
 <label>
 Title:{' '}
 <input
 type="text"
 value={newMovieTitle}
 onChange={(e) => setNewMovieTitle(e.target.value)}
 required
 />
 </label>
 </div>

 <div>
 <label>
 Genre:{' '}
 <input
 type="text"
 value={newMovieGenre}
 onChange={(e) => setNewMovieGenre(e.target.value)}
 placeholder="Action, Drama, etc."
 />
 </label>
 </div>

 <div>
 <label>
 Release Year:{' '}
 <input
 type="number"
 value={newMovieReleaseYear}
 onChange={(e) => setNewMovieReleaseYear(e.target.value)}
 placeholder="e.g. 2023"
 />
 </label>
 </div>

 <button type="submit">Create Movie</button>
 </form>
 {moviesError && <p>Error: {moviesError}</p>}
</section>
```



```
{/* Filters & Sorting */}
<section>
 <h2>Filter & Sort Movies</h2>
 <form onSubmit={handleApplyFilters}>
 <div>
 <label>
 Genre:{' '}
 <input
 type="text"
 value={filterGenre}
 onChange={(e) => setFilterGenre(e.target.value)}
 placeholder="Action"
 />
 </label>
 </div>

 <div>
 <label>
 Release Year:{' '}
 <input
 type="number"
 value={filterReleaseYear}
 onChange={(e) => setFilterReleaseYear(e.target.value)}
 placeholder="2023"
 />
 </label>
 </div>

 <div>
 <label>
 Sort By:{' '}
 <select
 value={sortBy}
 onChange={(e) => setSortBy(e.target.value)}
 >
 <option value="">Default (createdAt)</option>
 <option value="releaseYear">Release Year</option>
 <option value="rating">Average Rating</option>
 </select>
 </label>
 </div>

 <div>
```

```

 <label>
 Sort Order:{' '}
 <select
 value={sortOrder}
 onChange={(e) => setSortOrder(e.target.value)}
 >
 <option value="ASC">ASC</option>
 <option value="DESC">DESC</option>
 </select>
 </label>
 </div>

 <button type="submit">Apply Filters</button>
</form>
</section>

{/* Movies List */}
<section>
 <h2>Movies List</h2>
 {loadingMovies && <p>Loading movies...</p>}
 {!loadingMovies && movies.length === 0 && <p>No movies found.</p>}

 {movies.map((movie) => (
 <li key={movie.id}>
 <div>
 {movie.title}
 </div>
 <div>Genre: {movie.genre || 'N/A'}</div>
 <div>Release Year: {movie.releaseYear || 'N/A'}</div>
 <button onClick={() => handleSelectMovie(movie)}>
 View Details & Reviews
 </button>

))}

</section>

{/* Selected Movie Details & Reviews */}
{selectedMovie && (
 <section>
 <h2>Movie Details</h2>
 <p>ID: {selectedMovie.id}</p>
 <p>Title: {selectedMovie.title}</p>
 <p>Genre: {selectedMovie.genre || 'N/A'}</p>
 </section>
)}

```

<p>Release Year: {selectedMovie.releaseYear || 'N/A'}</p>

{/\* Add Review \*/}

<h3>Add Review for this Movie</h3>

<form onSubmit={createReview}>

<div>

<label>

Reviewer:{' '}

<input

type="text"

value={reviewReviewer}

onChange={(e) => setReviewReviewer(e.target.value)}

required

/>

</label>

</div>

<div>

<label>

Rating (1-5):{' '}

<input

type="number"

min="1"

max="5"

value={reviewRating}

onChange={(e) => setReviewRating(e.target.value)}

required

/>

</label>

</div>

<div>

<label>

Comment:{' '}

<textarea

value={reviewComment}

onChange={(e) => setReviewComment(e.target.value)}

placeholder="Optional comment"

/>

</label>

</div>

<button type="submit">Submit Review</button>

</form>

```

{reviewsError && <p>Error: {reviewsError}</p>}

{/* Reviews List */}
<h3>Reviews</h3>
{loadingReviews && <p>Loading reviews...</p>}
{!loadingReviews && reviews.length === 0 && (
 <p>No reviews for this movie yet.</p>
)}

 {reviews.map((review) => (
 <li key={review.id}>
 <div>
 {review.reviewer} — Rating: {review.rating}
 </div>
 <div>Comment: {review.comment || 'No comment'}</div>
 <div>Created At: {review.createdAt}</div>

))}

</section>
)}
</div>
);
}

export default App;
...

```

---

#### ### 4. What's Integrated?

This React app calls **all your backend APIs**:

- \* `POST /movies` → Add movie (form at top)
- \* `GET /movies` → List movies with filters & sorting
- \* `GET /movies/:id` → Fetch single movie when “View Details & Reviews” clicked
- \* `POST /reviews` → Add review for selected movie
- \* `GET /reviews/:movieId` → Fetch reviews for selected movie

No CSS, only plain HTML tags and JS logic.

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