Axios Features Explained Simply

1. Make HTTP Requests from React App

Axios helps you connect your React app to a server or API to get or send data.

Think of it like: You're asking a waiter (API) for food (data), and Axios helps you make that request.

Example:

```
axios.get('https://api.example.com/users');
```

2. Supports Promise API

Axios uses Promises, so you can handle success and error easily using .then() and .catch() or async/await.

Think of it like: Do this, and then do that if it works, or catch the error if it fails.

Example:

```
axios.get('/data').then(res => console.log(res.data)).catch(err => console.error(err));
```

3. Intercept Request and Response

You can edit the request before it's sent or check the response before using it.

Think of it like: Adding a security tag to every letter you send (request), or checking every reply you receive (response).

Example:

```
axios.interceptors.request.use(config => { config.headers.Authorization = 'Bearer token'; return config; });
```

4. Transform Request and Response

You can change the data format before sending to the server or after getting a response.

Think of it like: Rewriting your letter (data) before sending it, or editing the reply before reading it.

Example:

transformRequest: [(data) => { data.timestamp = Date.now(); return JSON.stringify(data); }]

5. Cancel Request

You can stop a request if it is taking too long or if you no longer need it.

Think of it like: You order food but then cancel it before it is prepared.

Example:

```
const controller = new AbortController();

axios.get('/data', { signal: controller.signal });

controller.abort();
```

6. Support JSON Data

Axios automatically sends and receives data in JSON format, which is the most common format used in APIs.

Think of it like: You and the server speak the same language - JSON. Axios translates for both.

Example:

```
axios.post('/user', { name: 'Tushar', age: 21 });
```

7. Support multipart/form-data (File Upload)

Axios allows you to upload files, images, or form data to the server using FormData.

Think of it like: Packing clothes in a bag (FormData) and sending it to someone.

Example:

```
const formData = new FormData();

formData.append('file', selectedFile);

axios.post('/upload', formData);
```