# OAuth 2.0 for Browser-Based Apps

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### Overview

- Use the OAuth 2.0 authorization code flow with the PKCE extension
- Require the OAuth 2.0 state parameter
- Recommend exact matching of redirect URIs, and require the hostname of the redirect match the hostname of the URL the app was served from
- Do not return access tokens in the front channel

#### First-Party Applications

- It is strongly RECOMMENDED that applications use the Authorization Code flow instead of the Password grant
- Can prompt the user for multi-factor authentication
- Can take advantage of single-sign-on sessions
- Can use a third-party IdP

## Apps Served from the Same Domain as the API

- OAuth and OIDC provide little benefit
- Use session authentication instead

### **Authorization Code Flow**

- MUST use PKCE
- MUST use the "state" parameter
- SHOULD require exact match of redirect\_uri, but MAY require only the hostname match
- SHOULD use a unique redirect\_uri per authorization server
- MUST be considered public clients, and SHOULD NOT be issued a secret

### Implicit Flow

- MUST NOT be used by browser-based apps
- Cannot be protected with PKCE
- Already cannot be used for mobile apps following RFC 8252

