

Objective

Update the current blockchain wallet connection feature to improve user experience and add error handling.

Current State

- Multiple wallet connectors: MetaMask, TokenPocket, Bitget Wallet, Particle Network, WalletConnect
- Basic error handling for MetaMask connector
- Chain switching support for Polygon network
- BABT (Binance Account Bound Token) integration

Proposed Updates (10-20 minutes)

1. Enhanced Error Handling (5-7 minutes)

File: components/web3/WalletConnect.tsx

- Add specific error messages for each wallet type
- Implement retry mechanism for failed connections
- Add user-friendly error notifications

Changes:

```
// Add error handling for each wallet type
const handleWalletError = (error: any, walletType: string) => {
  const errorMessages = {
    'meta_mask': 'Please install MetaMask extension or check if it\'s unlocked',
    'token_pocket': 'Please install TokenPocket or check if it\'s unlocked',
    'bitget_wallet': 'Please install Bitget Wallet or check if it\'s unlocked',
    'particle_network': 'Particle Network connection failed. Please try again.',
    'wallet_connect': 'WalletConnect connection failed. Please try again.'
  };
};
```

```
toast.error(errorMessages[walletType] || 'Connection failed.  
Please try again.');
```

2. Connection Status Indicator (3-5 minutes)

File: components/web3/Web3Status.tsx

- Add loading state during wallet connection
- Show connection progress indicator
- Disable connect button during connection attempt

Changes:

```
// Add loading state  
const [isConnecting, setIsConnecting] = useState(false);  
  
// Update connect button  
<Button  
  size="small"  
  type="gradient"  
  className="h-10 w-[120px]"  
  disabled={isConnecting}  
>  
  {isConnecting ? 'Connecting...' : 'Connect'}  
</Button>
```

3. Network Validation Enhancement (3-5 minutes)

File: components/web3/Web3Status.tsx

- Add support for additional networks (Linea, BSC)
- Improve network switching UX
- Add network status indicator

Changes:

```
// Add supported networks  
const supportedNetworks = [polygon, linea, bsc];  
  
// Update network validation  
const isNetworkSupported = supportedNetworks.some(network =>  
  network.id === chain?.id);
```

4. Connection Persistence (2-3 minutes)

File: hooks/user.ts

- Add connection state persistence
- Auto-reconnect on page refresh
- Remember last connected wallet

Changes:

```
// Add localStorage for connection persistence
const saveConnectionState = (connector: string) => {
  localStorage.setItem('lastConnectedWallet', connector);
};

const getLastConnectedWallet = () => {
  return localStorage.getItem('lastConnectedWallet');
};
```



Files to Modify

1. components/web3/WalletConnect.tsx - Enhanced error handling
2. components/web3/Web3Status.tsx - Loading states and network validation
3. hooks/user.ts - Connection persistence
4. utils/toast.tsx - Error notification system (if needed)



Acceptance Criteria

- ☐ All wallet types have specific error messages
- ☐ Loading states are implemented during connection
- ☐ Network validation supports multiple chains
- ☐ Connection state persists across page refreshes
- ☐ No breaking changes to existing functionality



Estimated Time

Total: 10-20 minutes

- Error handling: 5-7 minutes
- Loading states: 3-5 minutes
- Network validation: 3-5 minutes

- Connection persistence: 2-3 minutes

Testing

- Test each wallet connector with error scenarios
- Verify loading states work correctly
- Test network switching functionality
- Confirm connection persistence works

Notes

- Focus on user experience improvements
- Maintain backward compatibility
- Use existing toast notification system
- Leverage current wagmi/viem setup