

## Interview

### Project Goal Summary

Your goal is to write code to subscribe (and unsubscribe) to real-time solana token wallet balances and display the data. This balance data for a certain token may be displayed in more than one component at the same time.

### Libraries needed:

@solana/web3.js

@solana/spl-token

### Wallet address to use:

5QRZKZ65CuQPu3XwKaNnK9L2ASuzvrz4NGpAUrWEDoQm

### Token addresses to listen to:

BONK: DezXAZ8z7PnrrnRjz3wXBoRgixCa6xjnB7YaB1pPB263

Decimals: 5

WIF: 21AErpiB8uSb94oQKRcwuHqyHF93njAxBSbdUrpupump

Decimals: 6

### Connect to RPC:

```
import { Connection, PublicKey } from '@solana/web3.js';  
const RPC_URL = 'https://gene-v4mswe-fast-mainnet.helius-rpc.com';  
const SOLANA_CONNECTION = new Connection(RPC_URL);
```

```
const LAMPORT_PER_SOL = 1000000000;
```

### Get SOL balance:

```
const walletPublicKey = new PublicKey(WALLET_ADDRESS);  
SOLANA_CONNECTION.onAccountChange(  
  walletPublicKey,  
  (info) => {  
    console.log('SOL in lamports', info.lamports);  
  },  
  { commitment: 'processed' }  
);
```

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### **Get SPL Token Balance:**

Function to get associated token address:

```
import { getAssociatedTokenAddress } from '@solana/spl-token';
```

```
// get associated token address
```

```
SOLANA_CONNECTION.onAccountChange(  
  ASSOCIATED_TOKEN_ADDRESS,  
  (info) => {  
    const d = info.data;  
    if (d.length === 165 || d.length === 182) {  
      const low = d.readUInt32LE(64);  
      const high = d.readUInt32LE(68);  
      const raw = high * 2 ** 32 + low;  
      const divisor = 10 ** (DECIMALS_HERE);  
      const balance = raw / divisor;  
    }  
  },  
  { commitment: 'processed' }  
);
```