

## ONLINE VOTING SYSTEM USING BLOCKCHAIN

Copy code

```
pragma solidity ^0.8.0;
```

```
contract Voting {
    struct Candidate {
        uint id;
        string name;
        uint voteCount;
    }

    mapping(address => bool) public voters;
    mapping(uint => Candidate) public candidates;
    uint public candidatesCount;

    address public electionAuthority;

    constructor() {
        electionAuthority = msg.sender; // Set the election authority as the contract deployer
    }

    function addCandidate(string memory _name) public {
        require(msg.sender == electionAuthority, "Only the election authority can add candidates");
        candidatesCount++;
        candidates[candidatesCount] = Candidate(candidatesCount, _name, 0);
    }

    function vote(uint _candidateId) public {
        require(!voters[msg.sender], "You have already voted");
        require(_candidateId > 0 && _candidateId <= candidatesCount, "Invalid candidate");

        voters[msg.sender] = true;
        candidates[_candidateId].voteCount++;
    }

    function getCandidate(uint _candidateId) public view returns (string memory, uint) {
        require(_candidateId > 0 && _candidateId <= candidatesCount, "Invalid candidate");
        Candidate memory candidate = candidates[_candidateId];
        return (candidate.name, candidate.voteCount);
    }
}
```

}