**Source Code of** **Job Portal Smart Contract**

**A Usecase of Application of Blockchain**

**In The Field Of Employment**

pragma solidity ^0.8.0;

contract JobPortal {

    address public admin;

    struct Applicant {

        uint id;

        string name;

        string skills;

    }

    struct Job {

        uint id;

        string title;

        string description;

        uint salary;

        string companyName;

        address filledBy;

        bool isFilled;

    }

    mapping(uint => Applicant) public applicants;

    mapping(uint => Job) public jobs;

    uint public applicantCount;

    uint public jobCount;

    constructor() {

        admin = msg.sender;

    }

    modifier onlyAdmin() {

        require(msg.sender == admin, "Only admin can perform this action");

        \_;

    }

    function addApplicant(string memory \_name, string memory \_skills) public onlyAdmin {

        applicantCount++;

        applicants[applicantCount] = Applicant(applicantCount, \_name, \_skills);

    }

    function addJob(string memory \_title, string memory \_description, uint \_salary, string memory \_companyName) public onlyAdmin {

        jobCount++;

        jobs[jobCount] = Job(jobCount, \_title, \_description, \_salary, \_companyName, address(0), false);

    }

    function applyForJob(uint \_jobId) public {

        require(\_jobId > 0 && \_jobId <= jobCount, "Invalid job ID");

        Job storage job = jobs[\_jobId];

        require(!job.isFilled, "Job is already filled");

        job.isFilled = true;

        job.filledBy = msg.sender;

    }

}