**Job Portal Smart Contract.**

Course-end Project 1

Description

Unskilled migrant workers face a major issue due to a lack of awareness of the available jobs and a lack of platforms that list them. They cannot register and apply for the job that best matches their skills through such platforms. Due to this, middlemen such as job agencies and contractors connect these workers to jobs through illegal means and ask for a major portion of their salary as commissions.

**Solution**

Develop a Dapp using Blockchain technology that connects unskilled and unorganized migrant workers with job providers. It can eliminate their exploitation by middlemen, such as unrecognized agents and contractors. A worker can register with the portal by creating their profile and uploading labor history, skills, availability, and other personal details. Then, a job provider can directly connect with the worker.

**Advantages**

1. Experience building through building a job history and rating mechanism of laborers.
2. Migrant laborers can show this experience in a resume or CV when they apply for any job.
3. Our aim is to allow laborers to rise up the social ladder through this process of experience building.

**Smart Contract Functions**

1. Add a new applicant

*Admin uses this function to add a new applicant.*

1. Get applicant details

*This function helps to fetch the applicant details from the blockchain.*

1. Get applicant type

*This function helps to fetch the application type based on the application id from the blockchain.*

1. Add a new Job to the portal

*This function helps to add a new job to the portal.*

1. Get job details

*This function fetches job data from the blockchain.*

1. Applicants apply for a job

*With the help of this function, applications can apply for existing jobs.*

1. Provide a rating to an applicant

*This function provides the rating to the applicant.*

1. Fetch applicant rating

*This function fetches applicant ratings from the blockchain.*

**Recommended technologies:**

1. Smart Contract development: Solidity
2. IDE Tool: Remix
3. Blockchain: Ethereum
4. Server: Ganache blockchain

**Project development guidelines:**

1. The project will be delivered within four sprints with every sprint delivering a minimal viable product.
2. It is mandatory to do sprint planning with user stories to develop all the components of the project.
3. The learner can use any technology from the above-mentioned technologies for different layers of the project.
4. The learner must maintain the version of the application over GitHub and every new change should be sent to the repository.
5. The learner should also deploy and host the application on any blockchain instance.