

Remote HealthCare System using Blockchain

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Group 11

Pre requisites

Ganache cli installed

Access to Remix IDE (<https://remix.ethereum.org/>)

Getting started:

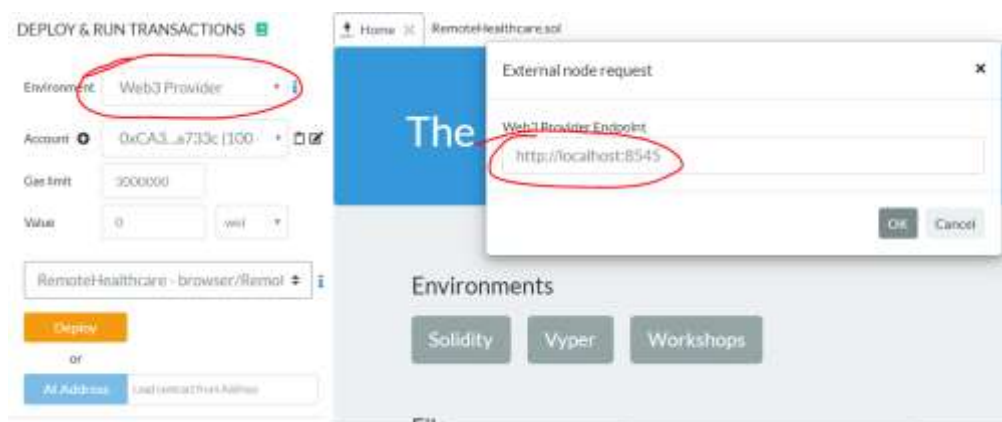
1. Start the ganache-cli in the directory where the project is extracted.

```
D:\>cd BlockChainLab\1821cs07_BlockChainProject
D:\BlockChainLab\1821cs07_BlockChainProject>ganache-cli
```

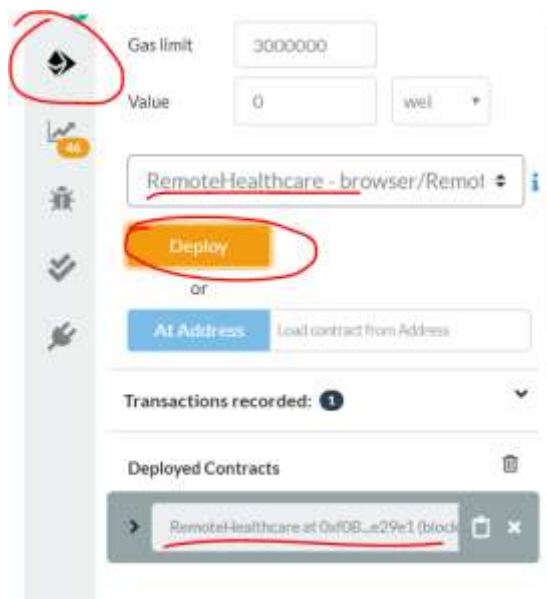
2. Open Remix IDE and upload **RemoteHealthcare.sol** to deploy the smart contract.



3. Connect Remix IDE with the local runtime

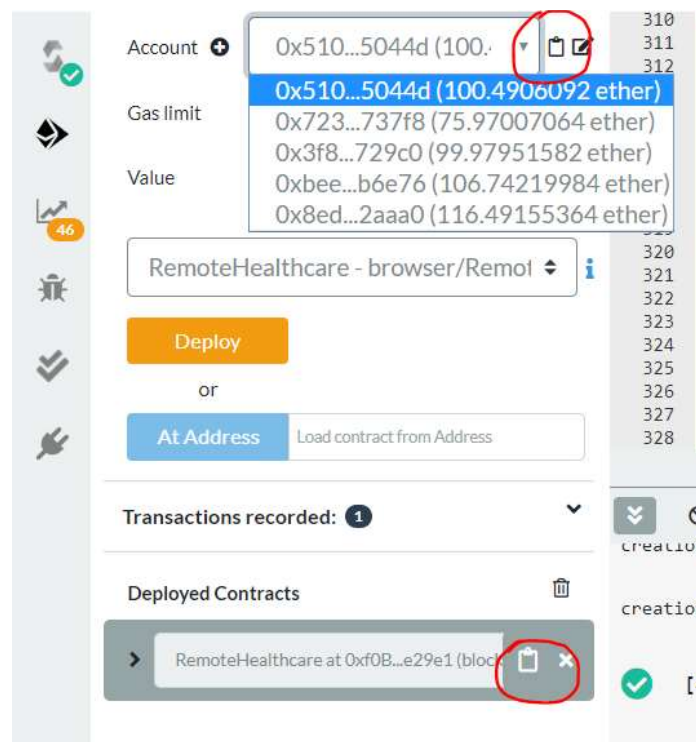


4. Deploy the smart contract as follows



Note: The account selected when deploying the smart contract will be assigned as the healthcare provider.

5. The addresses for the contract and the user accounts can be obtained as follows



6. Finally open **login.html** in your browser to start using the project.

Note: If any changes are made to the solidity code, the corresponding ABI needs to be copied to contract_script.js. Use <https://www.freeformatter.com/json-escape.html> to escape the json.

Using the app

Creating Accounts

Using login.html, create a patient and doctor accounts. Depending on the role of the account, the user will be redirected to his homepage.

The image shows two side-by-side screenshots of account creation forms. The left form is for a patient, and the right form is for a doctor.

Patient Form:

- Address: 0xf0BA968854C8013AbDC8F35704FE
- Address: 0x7230568bc2d55d4e101619eca7b2e
- Patient 1
- Gender: Male
- DOB: 21-11-2019
- CREATE PATIENT
- Already registered? [Sign In](#)

Doctor Form:

- Address: 0xf0BA968854C8013AbDC8F35704FE
- Address: 0xbec53491cc56030b7ac8a13296720
- Doctor 1
- MBBS
- CREATE DOCTOR
- Already registered? [Sign In](#)

Creating Cases

Log into the patient account and add the case as follows.

The image shows a screenshot of the patient account dashboard. The dashboard has a blue header with 'Patient Services', 'Home', 'Medical History', 'Balance: (Balance: 99.95 Ether)', and 'Logout'. Below the header, it says 'HEALTH CARE PROVIDER : Health Care Provider'. The main content area is divided into three sections: 'Your Details:', 'Open Cases:', and 'Add Case'.

Your Details:

PATIENT ID	: 1
NAME	: Patient 1
DATE OF BIRTH	: 21-11-2019
GENDER	: Male
ADDRESS	: 0xc5cd3cab8754f48a84cfb10

[Update](#)

Open Cases:

CASE ID	: 1
STATUS	: Submitted
SYMPTOMS	: This is the first case created by Patient 1.

Add Case Modal:

The modal is titled 'New Case:' and contains a text area with the text 'This is the second case created by Patient 1.'. Below the text area is a 'Submit' button. The modal is open, and the 'Add Case' button on the dashboard is circled in red and labeled '1'. The 'Submit' button in the modal is also circled in red and labeled '2'.

Assigning Cases

Log into the Health Care Provider account to assign cases to Doctors as follows.

HCP Services Home **Open Cases** Transactions (Balance: 99.88 Ether) Logout

Open Cases:

Case ID	Patient	Symptoms	Select
1	Patient 1	This is the first case created by Patient 1.	Doctor 1 Assign

Diagnosing Cases

Login to the respective doctor's account to view the assigned case and diagnose it. You will also have to decide on the fee to charge the patient.

Doctor Services Home Balance: (Balance: 100.00 Ether) Logout

HEALTH CARE PROVIDER

Your Details:

DOCTOR ID : 1
NAME : Doctor 1
QUALIFICATION : MBBS
ADDRESS : 0x359c9981cf17cce3e44887bd73d9b2770c5f603
Update

Open Cases:

CASE ID : 1
PATIENT : Patient 1
STATUS : Assigned
SYMPTOMS : This is the first case created by Patient 1
Medical History Diagnose

Diagnose Case - Google Chrome

File | D:/BlockchainLab/project%202/diagnose_case.html?case=1

CASE ID: 1
PATIENT: Patient 1
SYMPTOMS: This is the first case created by Patient 1.
DIAGNOSYS: This is the doctors diagnosis for Patient 1.

FEES: 7 Ether
1 Ether
2 Ether
5 Ether
7 Ether
10 Ether

Submit

Note: A fixed charge of $\frac{1}{4}$ ether will be given to Health Care Provide and the remaining amount will be transferred to the doctor's account during payment by patient.

Payment

To pay, log into the corresponding patient account. And make the payment as follows

Open Cases:

CASE ID	:	1
STATUS	:	Diagnosed
SYMPTOMS	:	This is the first case created by
Patient 1.		
DOCTOR ID	:	Doctor 1
DIAGNOSYS	:	This is the doctors diagnosis for
Patient 1.		
FEES	:	7

Pay

Additionally you can view open cases, pending payments and payments made using the Health Care Provider account.