**LEARN DAML**

1 ] BLOCKCHAIN: -

-Digital record keeping system of records of transactions, they are immutable ( can not be changed) and it is distributed and decentralized and importantly duplicated and all this together is called as “Ledgers”.

Ledgers are:

1. Digital record keeping
2. Record of transactions
3. Immutable
4. Distributed
5. Duplicated
6. Decentralized

-Ledger is record keeping system that is BLOCK-CHAIN.

-This unique way of touching data works in all sectors like

* Banking and Finance
* Currency
* HealthCare
* Records of Property
* Supply Chain
* Voting

-Above all can works with SMART CONTRACTS.

2 ] SMART CONTRACT:-

Smart Contract is a unstoppable engine that keeps going with trails of data that cannot be edit (or go back to mutate or change).

Smart contract has self-executing nature.

Smart contracts are

Self-executing.

Can be duplicated many times.

Same rules and logics are applied every time when duplicated.

Smart contract analogy with Singer in a bar

|  |  |
| --- | --- |
| Singer | Smart Contract |
| Money | Assets |
| Singers and musicians | People |
| Songs, Date, Time, Break-time, Breaks etc. | Data |
| Show Tickets | Logic |

Things to be considers before start Creating First DAML App :-

1. Some valuable need to be tracked
2. Some existing data values changes over time.
3. Historical transactions are important.
4. Recorded data can never be change or deleted

To Create First DAML App :-

1] To check DAML installed :- “daml help” in cmd.

2] To check DAML version:- “daml version” in cmd .

3] To create DAML apps :- “daml create-daml-app MyFirstDamlProject” in cmd.

4] Now enter the path by :- “cd MyFirstDamlProject”.

5] To open DAML in VS Code type on cmd “daml studio”.

FRONT-END :- As per your choice

DAML :- Front end is communicated with backend which is managed by DAML framework by using JSON API .

DAML app displayed in

1] Distriubuted Block-chain:-

Eg:- DORDA , HyperLedger Fabric , vm-ware blockchain.

2] Centralized Database :-

Eg :- PostgreSQL ,Amazon QLDB

Coding and Compiling of Code:-

Coding done in “.daml” file.

Compilation done in “.dar / daml achieve file” , dar file is called as Template file to create Contracts.

Now if we create any Contract and now, we want to update that contract then we have to create new contract and latest one will marked as ACTIVE and other as ARCHIEVED (REMEMBER IN BLOCK CHAIN WE CAN NOT MUTED DATA.) refer house sold in bid example.

Diagram

Description automatically generated with medium confidence

Again ref car ownership example for the better understanding.

Graphical user interface

Description automatically generated