

BLOCK CHAIN PROJECT

TEAM ID	NMID2023TMID01235
PROJECT NAME	AGRICULTURE DOCS CHAIN

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AGRICULTURE DOCS CHAIN

SI.NO	INTRODUCTION
1.	PROECT OVERVIEW
2.	PURPOSE

1.1 PROJECT OVERVIEW

As a new generation of information technology, block chain plays an important role in business and industrial innovation. The employment of block chain technologies in industry has increased transparency, security and traceability, improved efficiency, and reduced costs of production activities.

1.2 PURPOSE

Using block chain for agriculture has enabled farmers to earn more returns as compared to traditional approaches. In the future, the implementation of block chain technology offers a promising solution to create a safer, more reliable, sustainable, and more efficient system.

2.LITERATURE SURVEY

2.1 EXISTING PROBLEM

Block chain technologies can track all types of information about plants, such as seed quality, and crop growth, and even generate a record of the journey of the plant after it leaves the farm.

2.2 REFERENCES

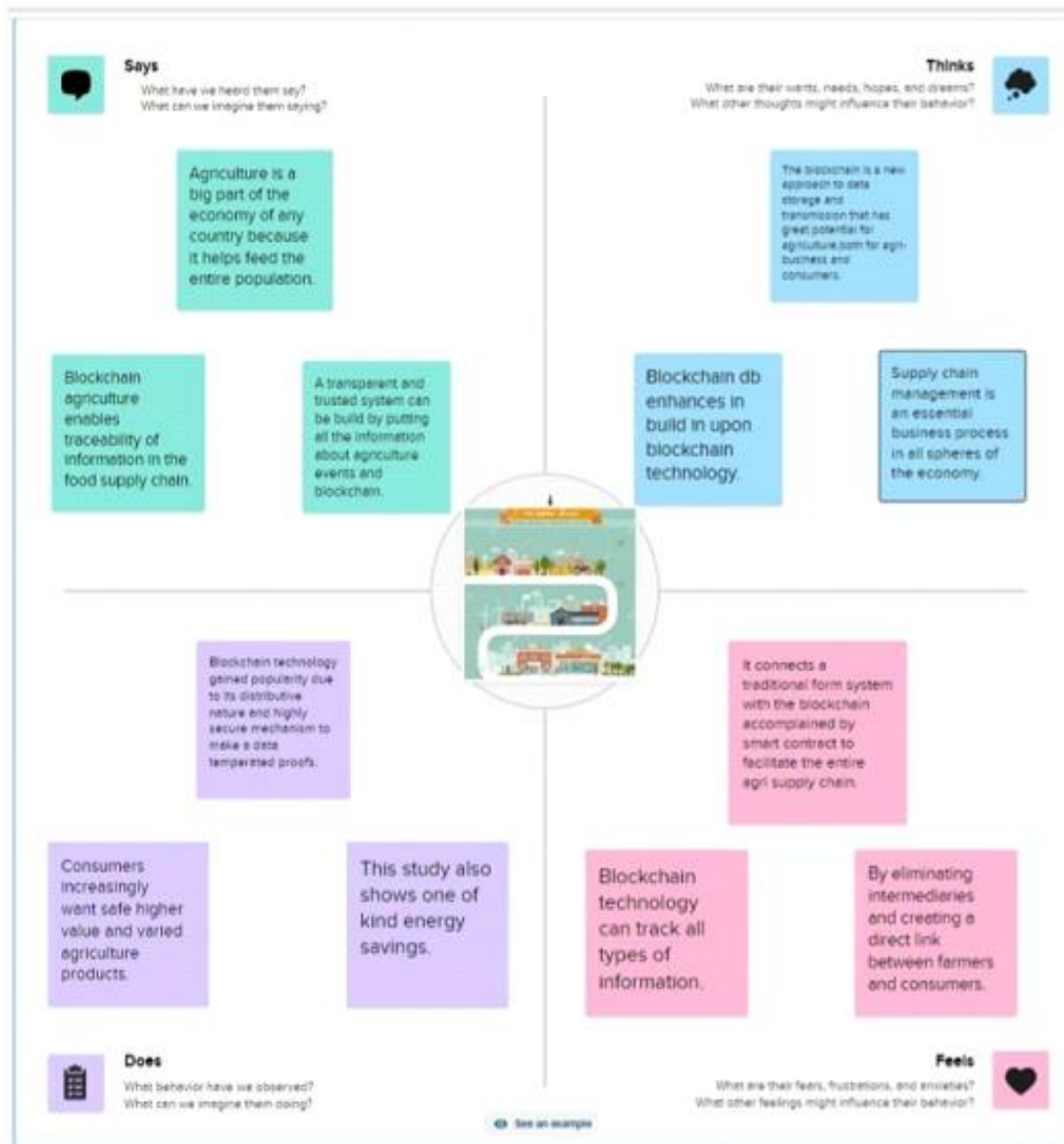
Smart contracts on the block chain can automate transactions, payments, and other processes, reducing the need for intermediaries and cutting transaction costs. For example, block chain can enable farmers to sell their crops directly to consumers or retailers, bypassing traditional middlemen and reducing costs,

2.3 PROBLEM STATEMENT / DEFINITION

Block chain technologies can track all types of information about plants, such as seed quality, and crop growth, and even generate a record of the journey of the plant after it leaves the farm.

3.IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP



3.2 IDEATION & BRAINSTORMING

1

The agri- supply chain system of the country is determined by different sortorial issues like **dominance of small/ marginal farmers, fragmented supply chains, absence of scale economies, low level of processing/value addition, inadequacy of marketing infrastructure** etc.

5 minutes

PROBLEM

How might we [your problem statement]?

Key rules of brainstorming

To run an smooth and productive session

Stay in topic.

Defer judgment.

Go for volume.

Encourage wild ideas.

Listen to others.

If possible, be visual.

2

Brainstorm

Write down any Ideas that come to mind that address your problem statement.

10 minutes

TIP
You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

SWETHA S

blockchain can enable farmers to sell their crops directly to consumers or retailers, bypassing traditional middlemen and reducing costs.

The blockchain provides a dependable source of truth about the state of crops, inventories, and contracts.

Blockchain can be used to make small farms able to compete.

ABINAYA P

includes the activities that take place within a company in order to deliver a valuable product or service to their market

to get the crops from the farm where they were planted, to the consumer that will end up eating them.

actors connected along a chain producing and delivering goods to consumers through a sequence of activities.

SRINITHI E

provides a dependable source of truth about the state of crops, inventories, and contracts.

production, processing, storage, trading, distribution and consumption.

farmers, traders, processors, transporters, wholesalers, retailers and final consumers

ASHA A

The network participants like farmers, suppliers, customers, and so on.

Computing equipment like microcontroller systems and cloud computing.

Sensors and surveillance cameras.

4

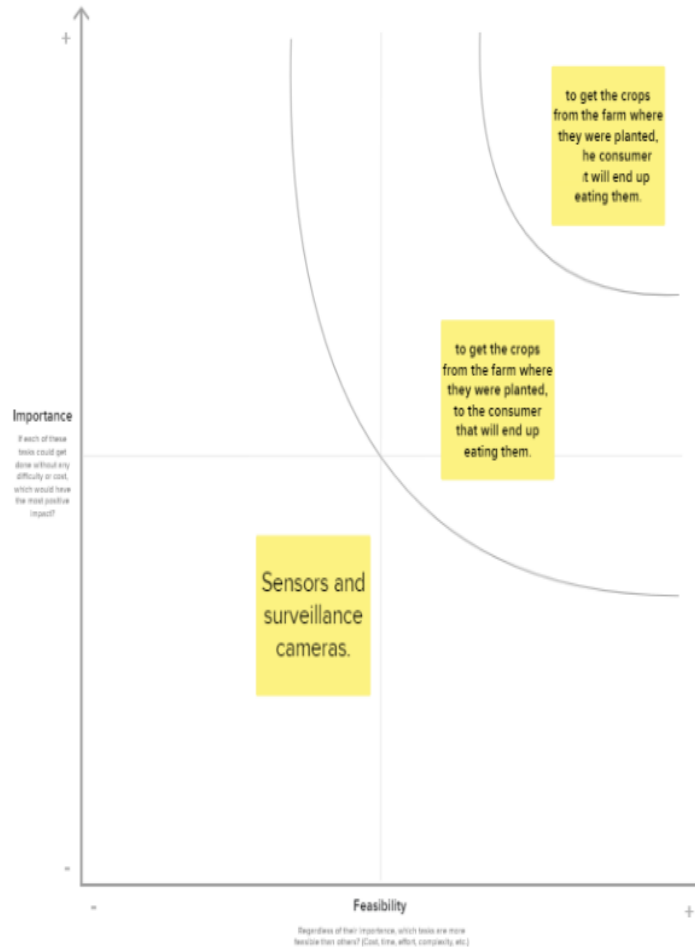
Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the H key on the keyboard.



5

After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

- [Share the mural](#)
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.
- [Export the mural](#)
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

Keep moving forward

- [Strategy blueprint](#)
Define the components of a new idea or strategy.
[Open the template →](#)
- [Customer experience journey map](#)
Understand customer needs, motivations, and obstacles for an experience.
[Open the template →](#)
- [Strengths, weaknesses, opportunities & threats](#)
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.
[Open the template →](#)

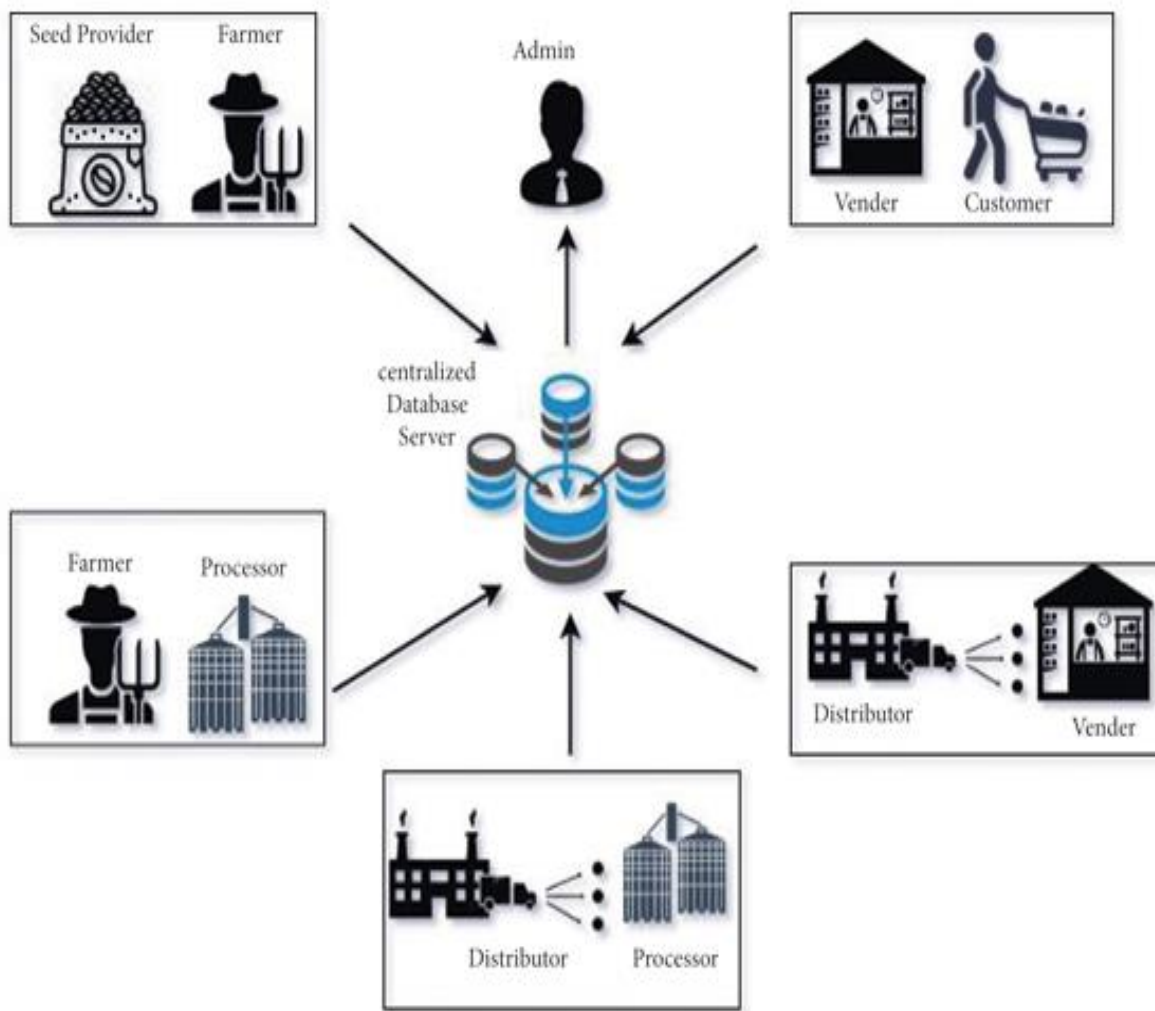
[Share template feedback](#)

4.2 NON – FUNCTIONAL REQUIREMENT

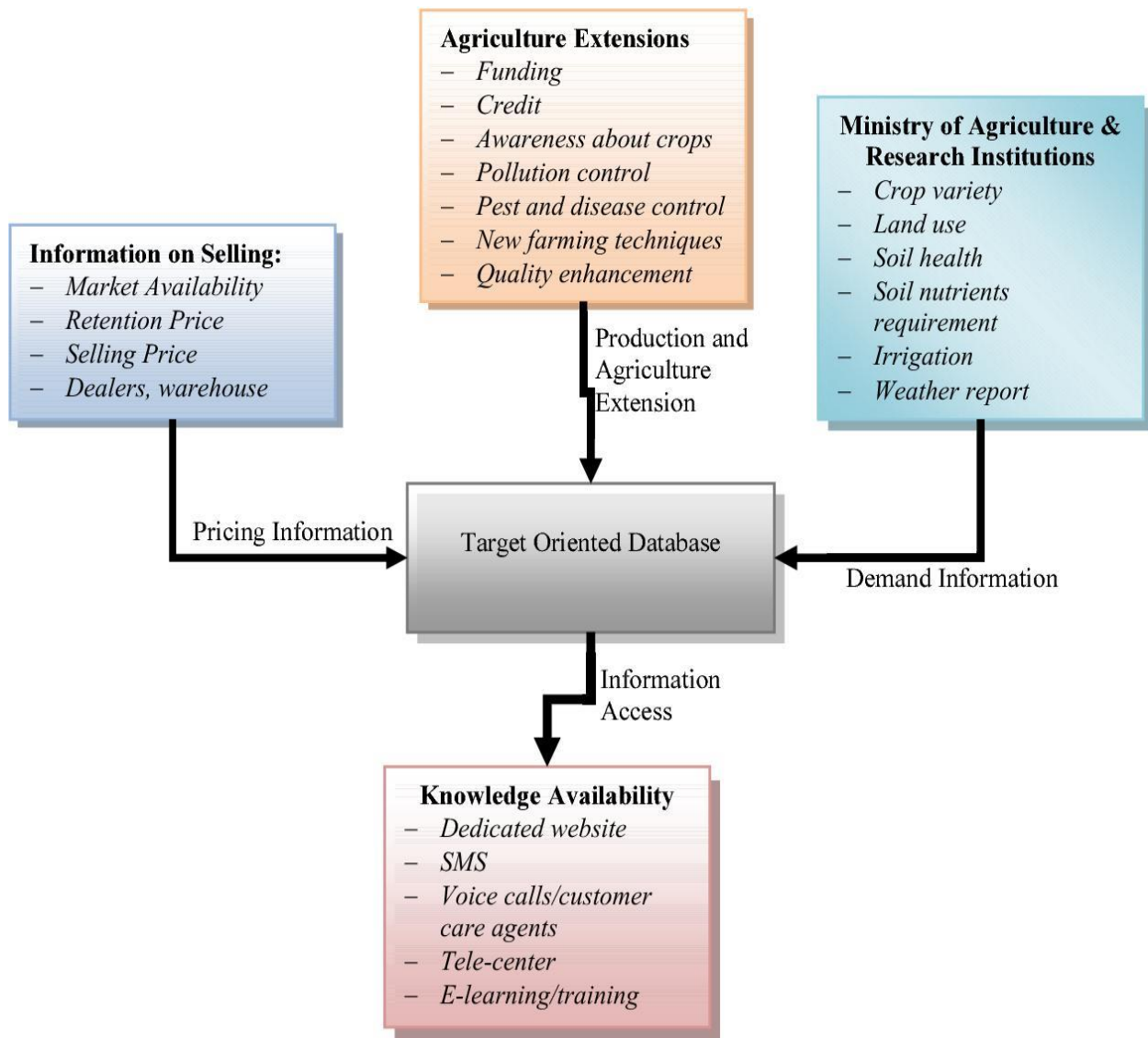
Non-functional requirements are product constraint or the features the system provides. They include constraints on timing, technology limits, and limitations imposed by standards

5.PROJECT DESIGN:

5.1 DATA FLOW DIAGRAMS & USER STORIES

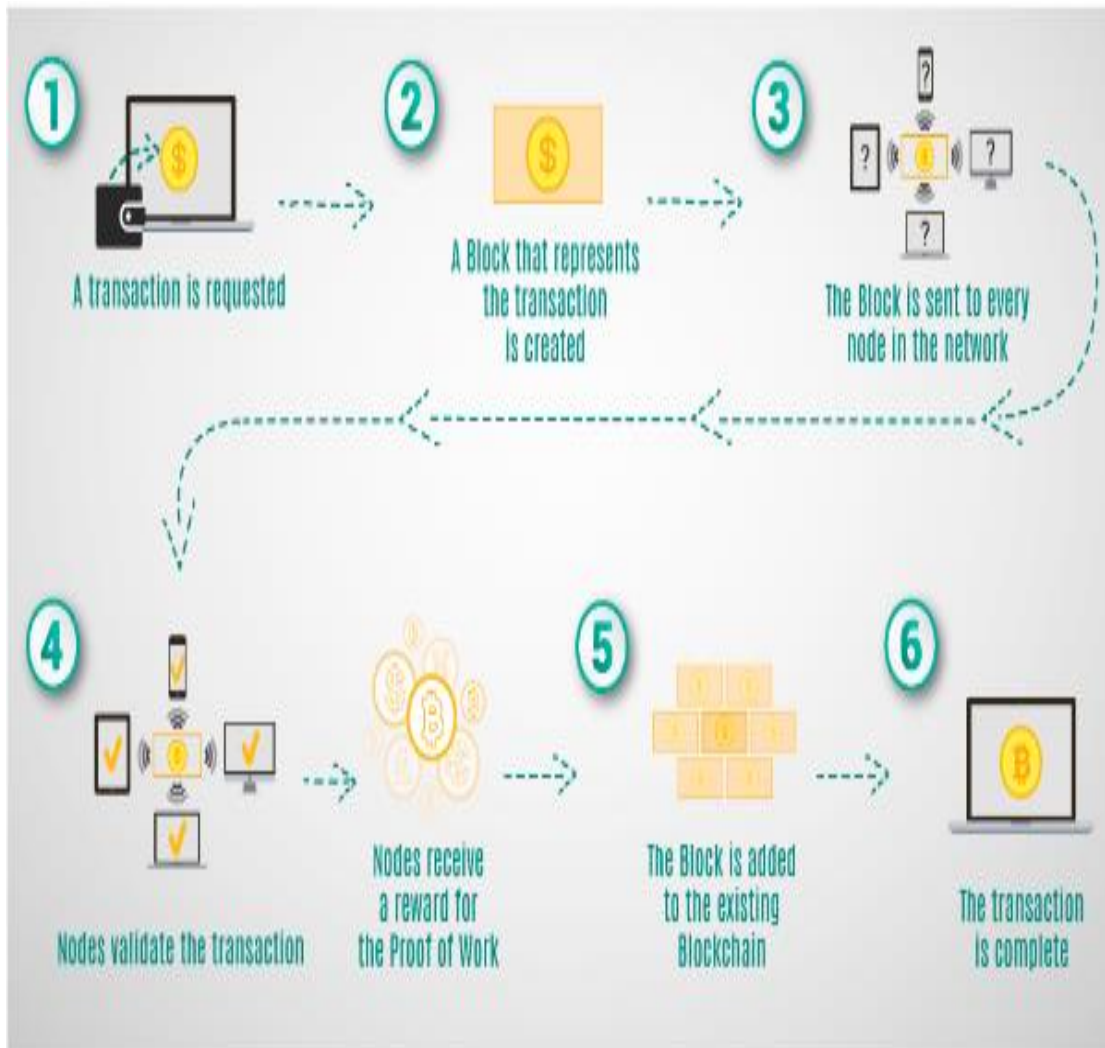


5.2 SOLUTION ARCHITECTURE

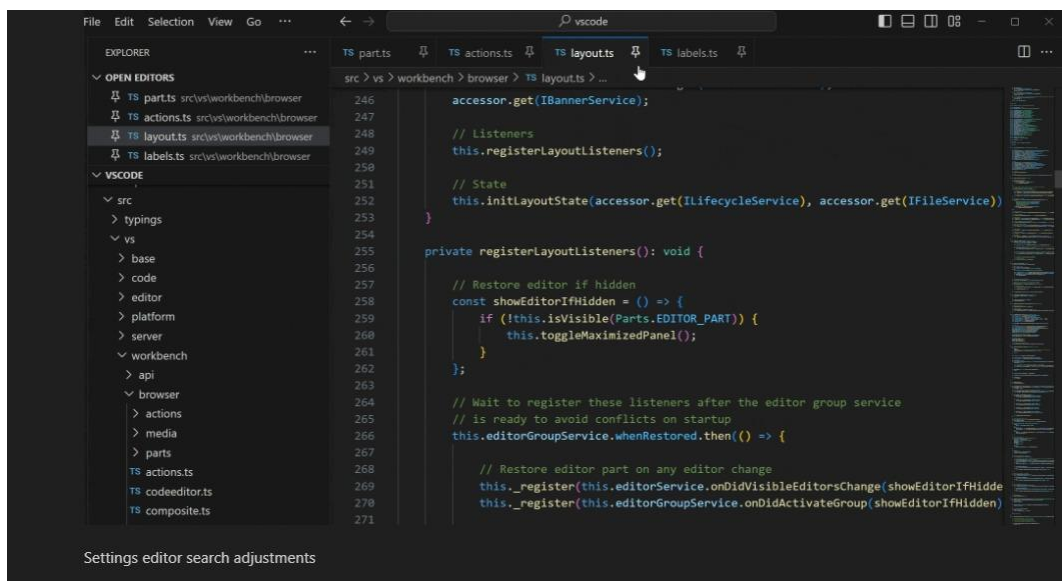
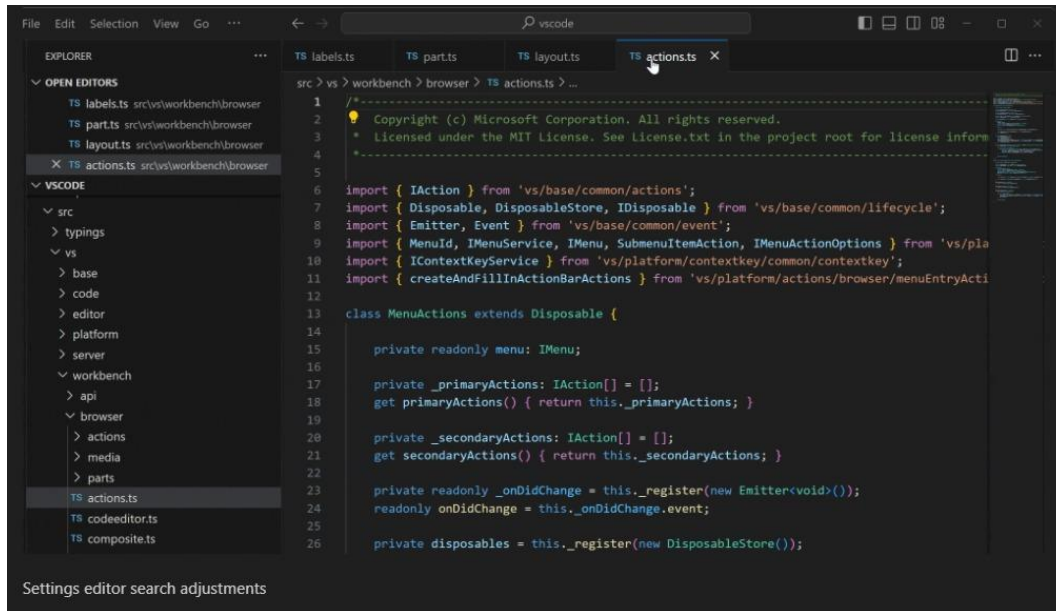


6.PROJECT PLANNING & SCHEDULING

6.1 TECHNICAL ARCHITECTURE

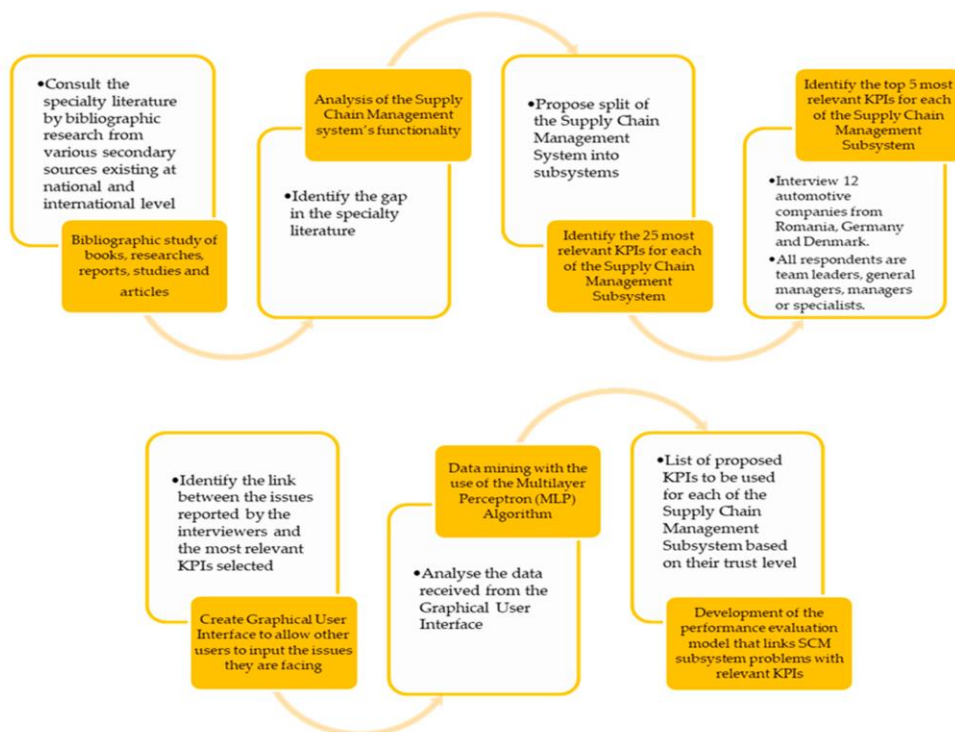


7.1 FEATURES



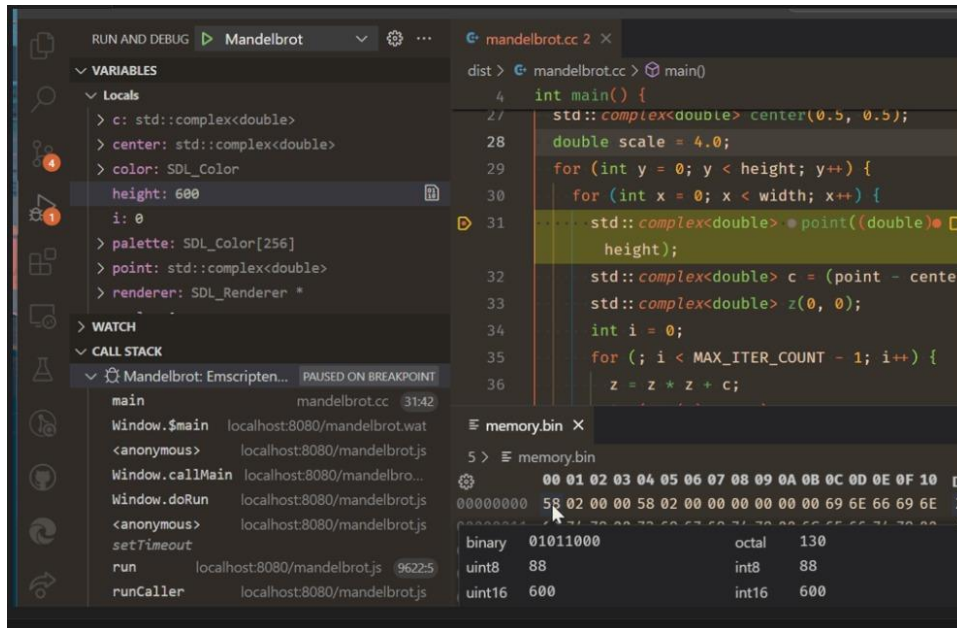
8.PERFORMANCE TESTING:

8.1 PERFORMANCE METRICS



9.RESULTS:

9.1 OUTPUT



10.ADVANTAGES & DISADVANTAGES:

ADVANTAGES

Some important advantages are: Reduction of product losses in transportation and storage. Increasing of sales. Dissemination of technology, advanced techniques, capital and knowledge among the chain partners.

DISADVANTAGES

Modern farming methods have overused the natural resource base. Increased use of fertilizers has led to the loss of soil fertility. The

use of groundwater for tube well irrigation has led to water depletion. Modern farming methods require a great deal of capital.

11.CONCLUSION:

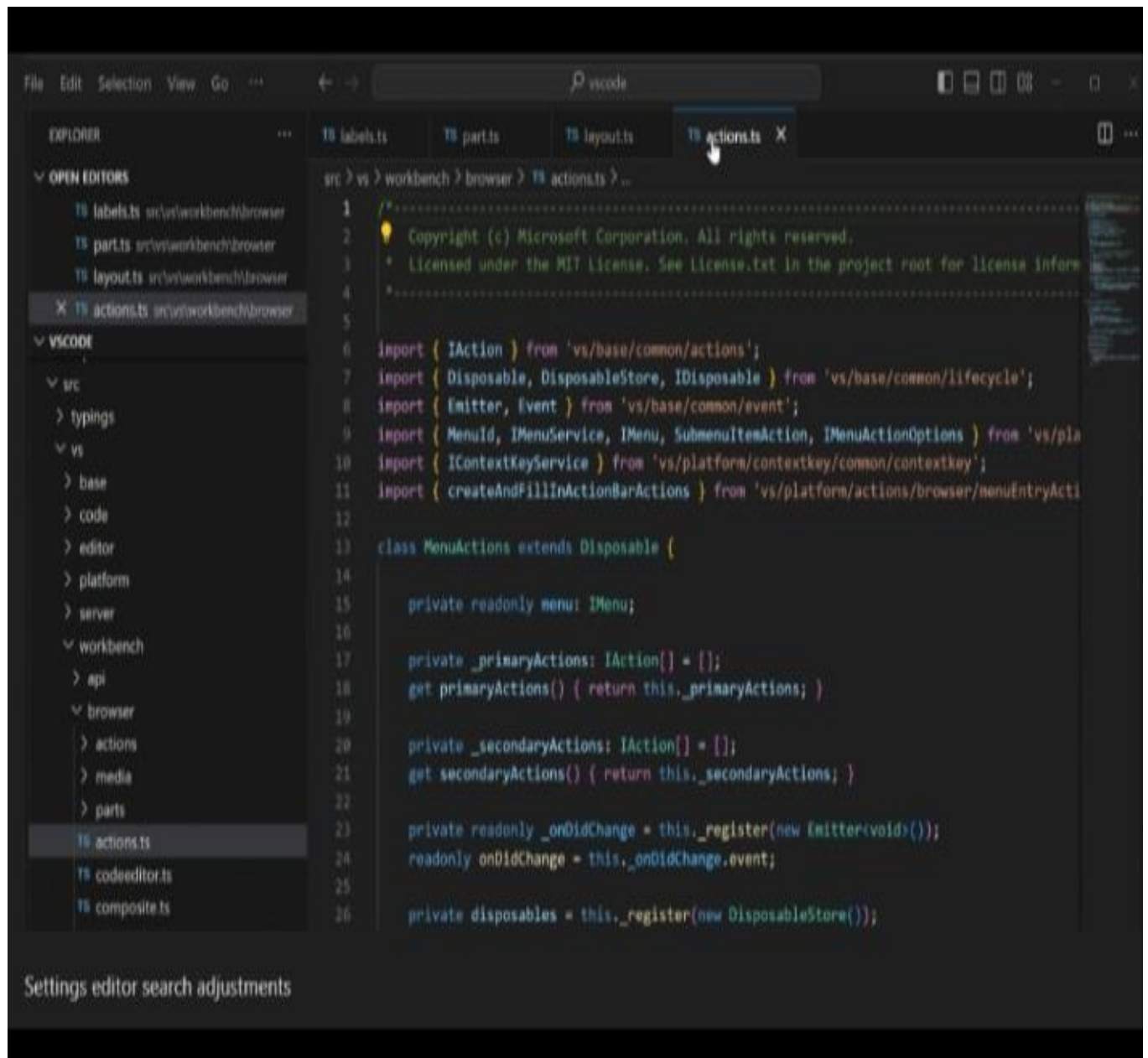
Using block chain for agriculture has enabled farmers to earn more returns as compared to traditional approaches. In the future, the implementation of block chain technology offers a promising solution to create a safer, more reliable, sustainable, and more efficient agri-food system.

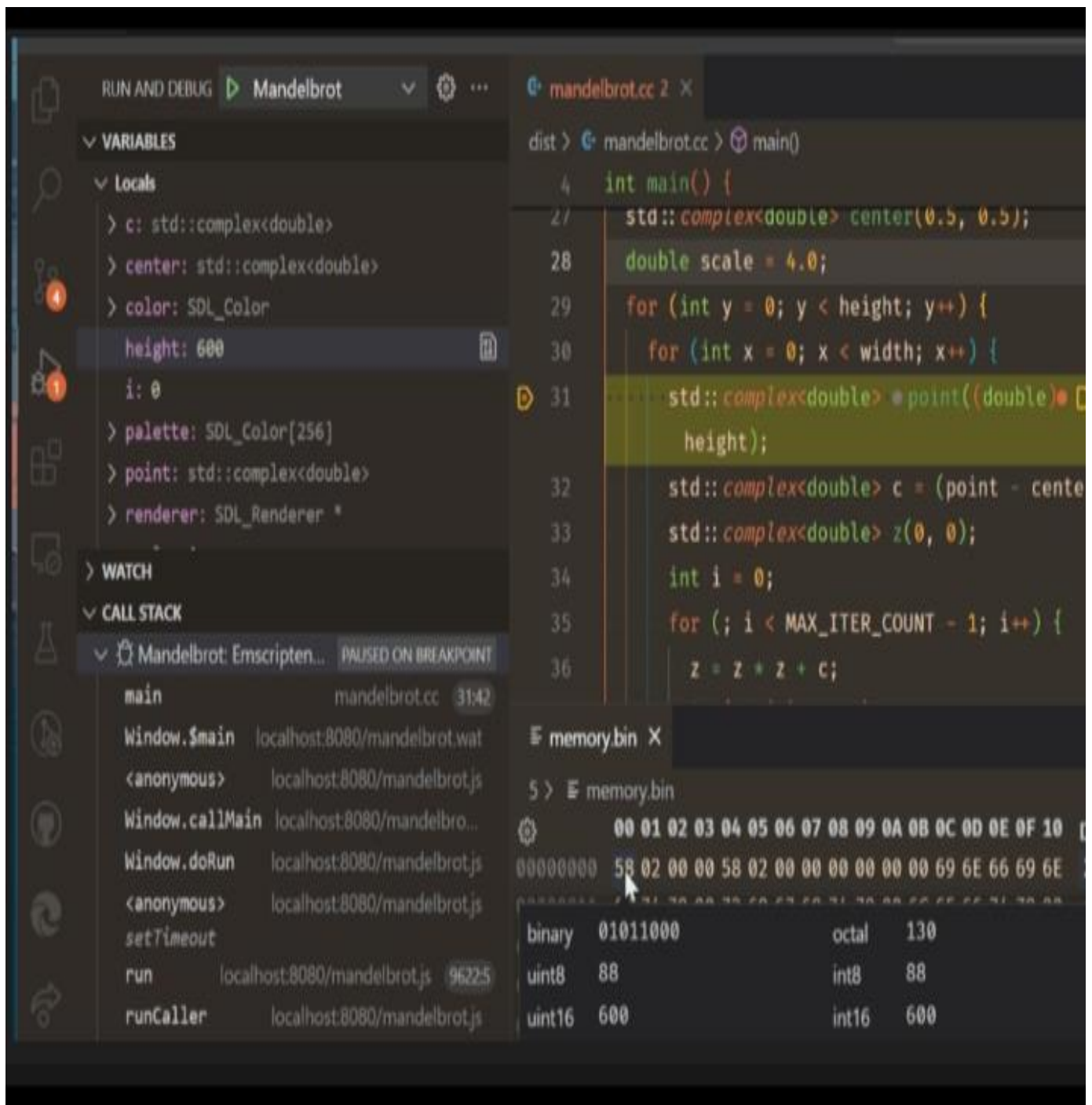
12.FUTURE SCOPE:

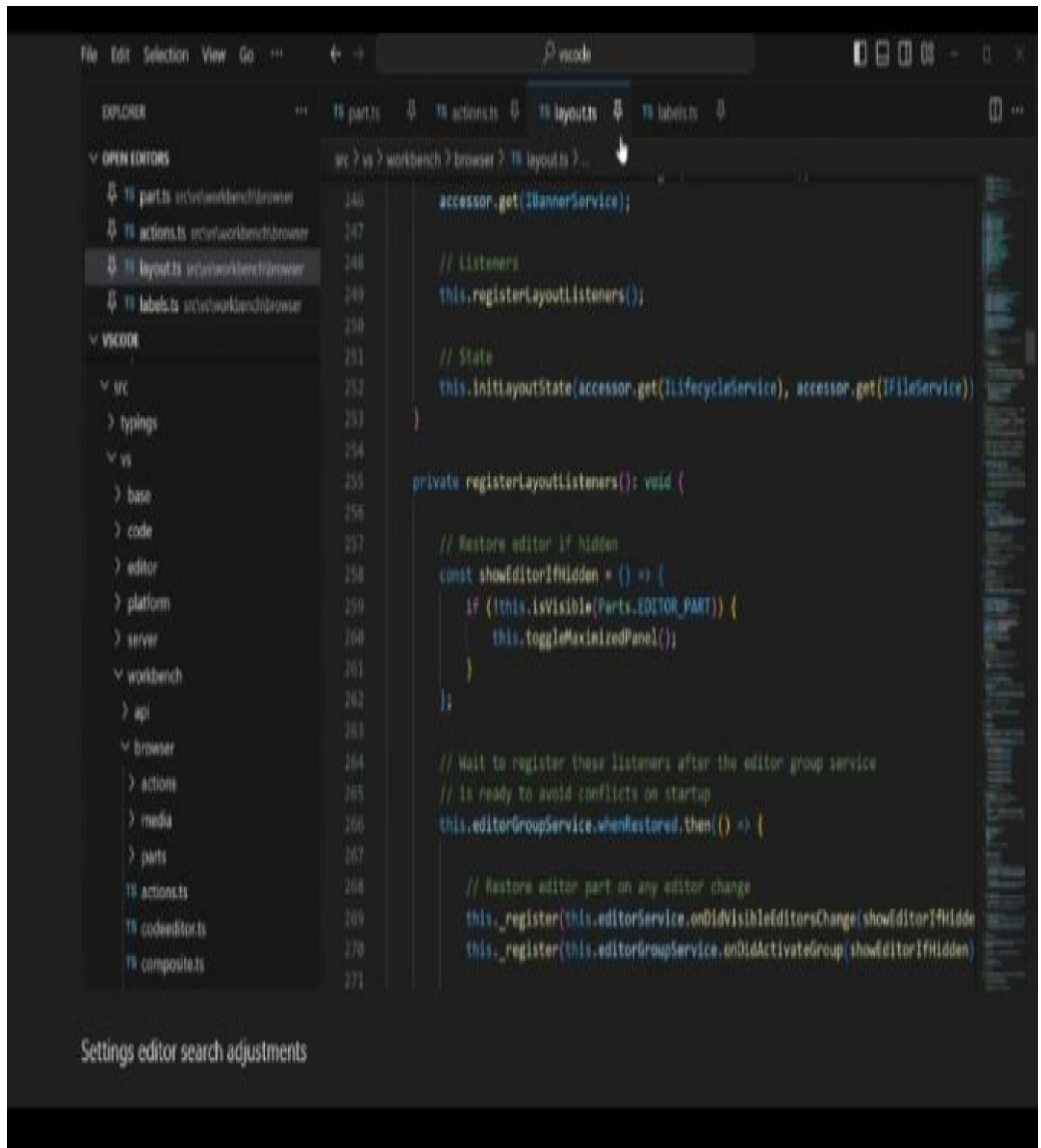
Using blockchain for agriculture has enabled farmers to earn more returns as compared to traditional approaches. In the future, the implementation of blockchain technology offers a promising solution to create a safer, more reliable, sustainable, and more efficient agri-food system.

With blockchain, supply chain companies can document production updates to a single shared ledger, which provides complete data visibility and a single source of truth. Because transactions are always time-stamped and up to date, companies can query a product's status and location at any point in time.

13.APPENDIX: SOURCE CODE







GITHUB LINK: <https://github.com/P-ABINAY/NM2023TMID01235>

PROJECT DEMO LINK : https://youtu.be/MDqemcrLlj4?si=z-J_CDAg3ew1FhgK