



# Using Blockchain For Requirement Traceability

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Requirement Traceability maps the requirements with the test cases.



Types of Traceability:

1. Forward
2. Backward
3. Bidirectional

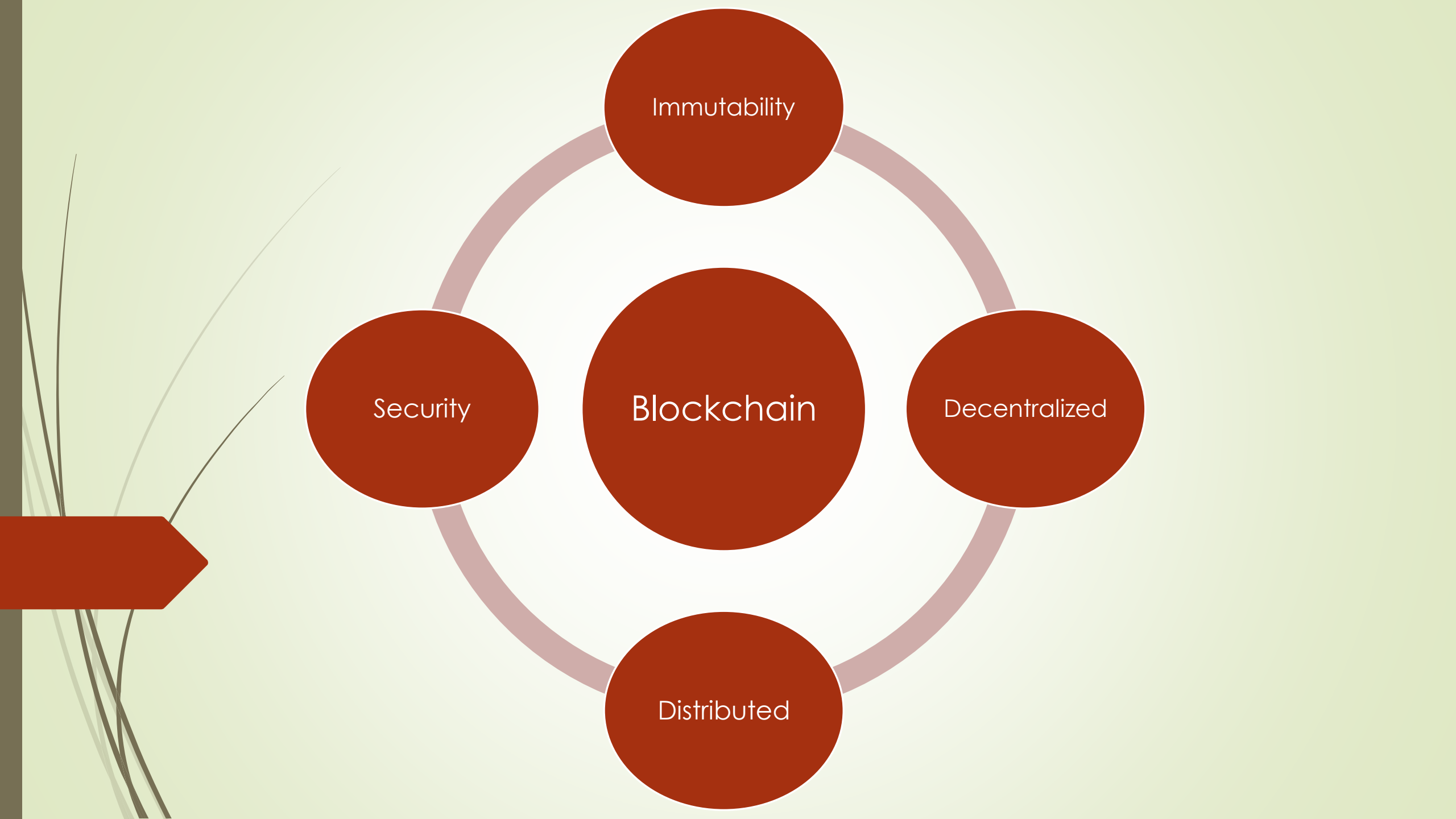
Requirement  
Traceability  
Matrix

Importance and  
application of RTM.

It eases software  
development life cycle.



Req No	Req Desc	Testcase ID	Status
123	Login to the application	TC01,TC02,TC03	TC01-Pass TC02-Pass
345	Ticket Creation	TC04,TC05,TC06, TC07,TC08,TC09 TC010	TC04-Pass TC05-Pass TC06-Pass TC06-Fail TC07-No Run
456	Search Ticket	TC011,TC012, TC013,TC014	TC011-Pass TC012-Fail TC013-Pass TC014-No Run





# Parameters in Requirement Traceability Matrix

1. Requirement ID
2. Requirement description
3. User stories
4. Test designer
5. Test Case ID
6. Status
7. Unit testing
8. System testing
9. Integration testing.



# Learning Outcomes

- With the help of basic data structures and functions in Solidity Language, we implemented Requirement traceability matrix.
- We created a structure (user defined datatype) which contains fields relevant to user requirements and their corresponding testcases.
- We have implemented functions which can modify the status of test cases and different testing methods.
- We can directly get the status of test cases in constant time using mapping data structure.



# Contribution

- Yash Shah :- Implementation and documentation
- Darshil Shah :- Documentation and Report making
- Jeel Faldu :- Research and implementation



Thank You