ROYAL COLLEGE

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Empowerment through Value Education

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DEPARTMENT OF COMPUTER SCIENCE

Class: TYBSc   Roll. No. 26

                                                          Seat No._____

Certificate

Certified that **Naqi Ansari** of T.Y.BSc Semester-VI has
successfully completed the project as prescribed by the University of
Mumbai on **Genesis** as partial fulfillment of requirement for completing
Bachelor's Degree in Computer Science during the academic year 2022-2023.

Signature of Project Guide
Date: _____

Signature of Examiner
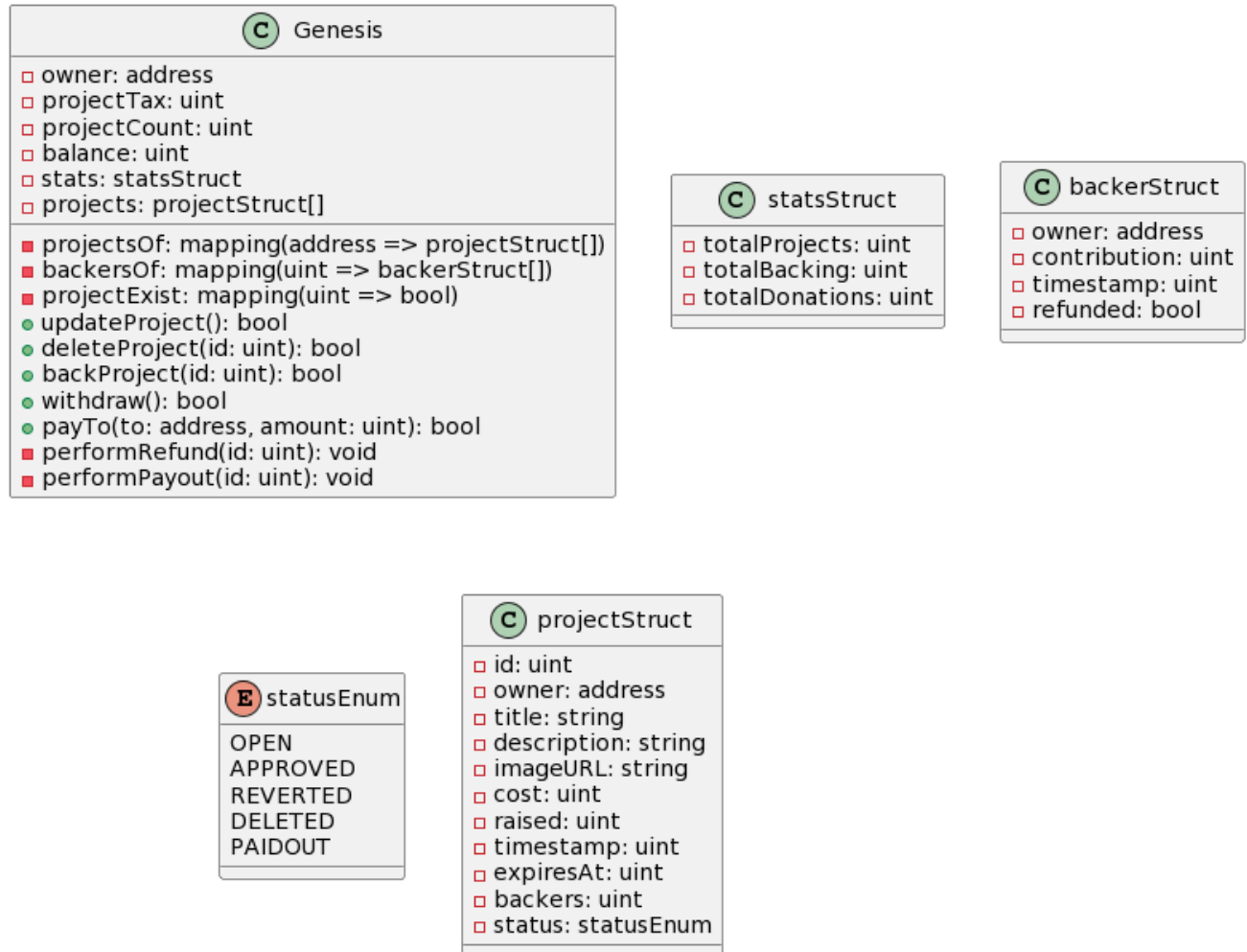Date: _____

                                        H.O.D
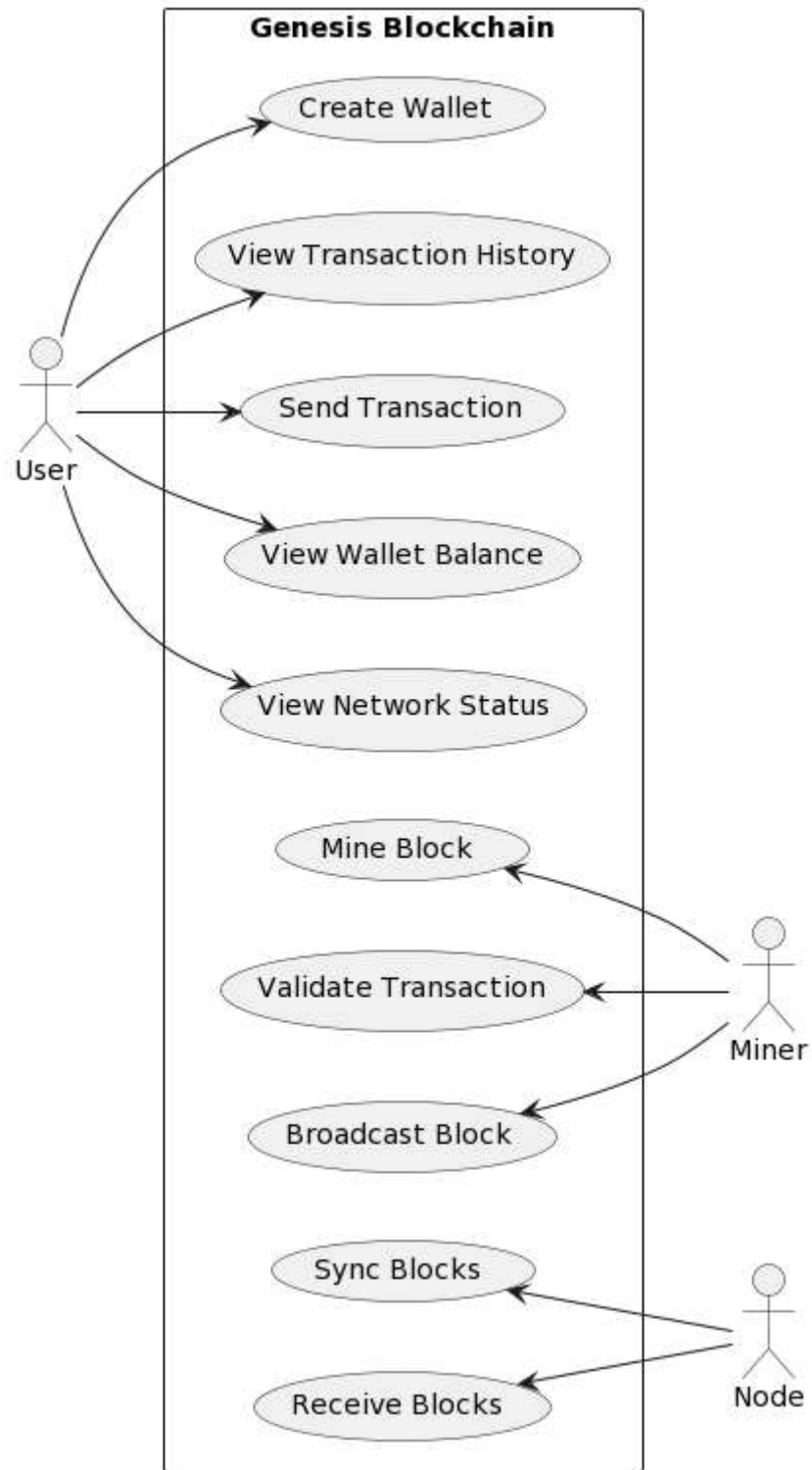

                                        Dept. of Computer Science

Gantt Chart

TYBSc Computer Science Semester 6 Project Gantt Chart		Time Requirement	Year 2019 - 20 Weeks												
			December		January				February				March		
			W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3
I	Preliminary Investigation	Estimated	🟩	🟩											
		Actual	🟧	🟧											
II	Requirement Gathering	Estimated			🟩	🟩									
		Actual			🟧										
III	System Analysis	Estimated					🟩	🟩							
		Actual				🟧	🟧	🟧							
IV	System Design	Estimated						🟩	🟩	🟩					
		Actual						🟧	🟧	🟧					
V	System Coding	Estimated								🟩	🟩	🟩	🟩		
		Actual								🟧	🟧	🟧	🟧	🟧	
VI	Testing	Estimated										🟩	🟩		
		Actual										🟧	🟧		
VII	Implementation	Estimated												🟩	
		Actual												🟧	
VIII	Deployment	Estimated													🟩
		Actual													🟧

Estimated	🟩
Actual	🟧

Class Diagram

C Genesis

- □ owner: address
- □ projectTax: uint
- □ projectCount: uint
- □ balance: uint
- □ stats: statsStruct
- □ projects: projectStruct[]

- ■ projectsOf: mapping(address => projectStruct[])
- ■ backersOf: mapping(uint => backerStruct[])
- ■ projectExist: mapping(uint => bool)
- ● updateProject(): bool
- ● deleteProject(id: uint): bool
- ● backProject(id: uint): bool
- ● withdraw(): bool
- ● payTo(to: address, amount: uint): bool
- ■ performRefund(id: uint): void
- ■ performPayout(id: uint): void

C statsStruct

- □ totalProjects: uint
- □ totalBacking: uint
- □ totalDonations: uint

C backerStruct

- □ owner: address
- □ contribution: uint
- □ timestamp: uint
- □ refunded: bool

E statusEnum

OPEN
APPROVED
REVERTED
DELETED
PAIDOUT

C projectStruct

- □ id: uint
- □ owner: address
- □ title: string
- □ description: string
- □ imageURL: string
- □ cost: uint
- □ raised: uint
- □ timestamp: uint
- □ expiresAt: uint
- □ backers: uint
- □ status: statusEnum

Use Case

Genesis Blockchain

- Create Wallet
- View Transaction History
- Send Transaction
- View Wallet Balance
- View Network Status
- Mine Block
- Validate Transaction
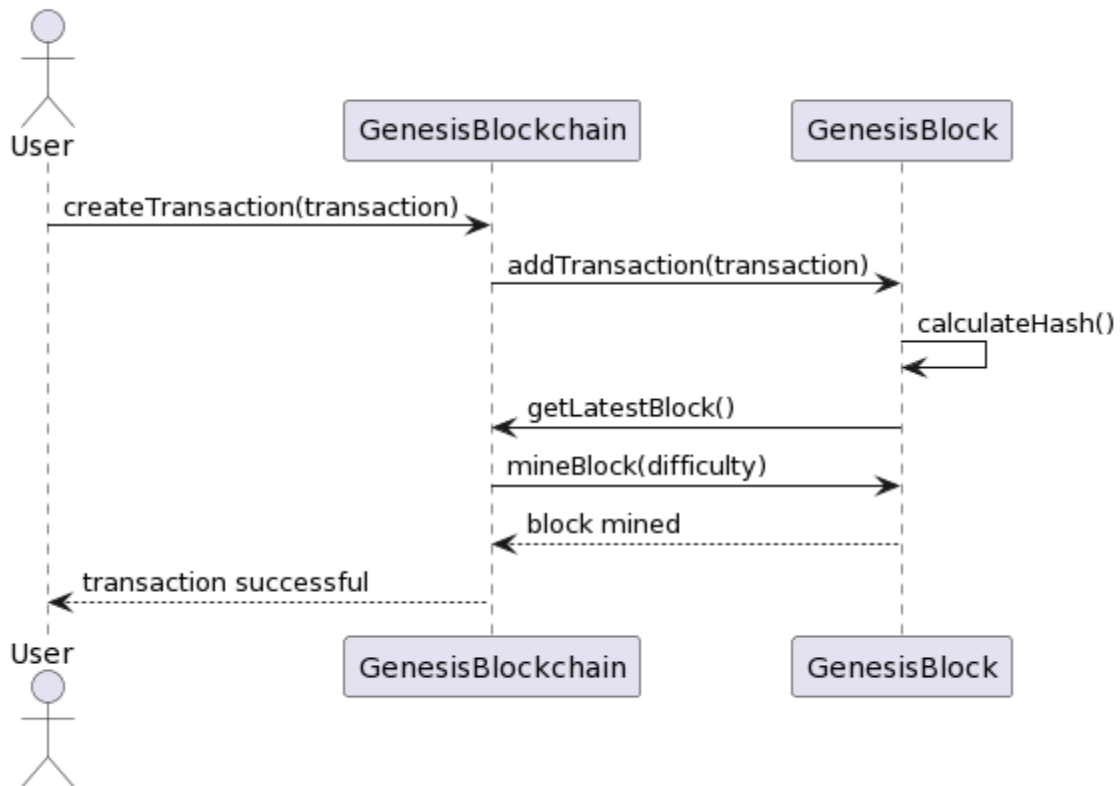- Broadcast Block
- Sync Blocks
- Receive Blocks

User

Miner

Node

Sequence Diagram

Genesis Blockchain - Sequence Diagram

Snapshot