Unimoon Scope of Work

I. Rust Solana Metaplex work

Testing/Stabilizing Solana L1 fork

1. Forking the Solana network and using it as a L1 into Devnet/Testnet. QA and testing the fork if already exists and stabilizing runtime of the networks.
2. Token renaming/Symbol change(Assuming most of the things are done and we need to test it).
3. Update Supply, Rent, Fees, Inflation of the default Solana configuration ("Genesis Configuration")
4. Add Project details including project logo, styling

Smart Contracts on Solana

5. Generating up-to four(4) smart contracts that cover:
    a. Smart Contract 1 – Capture user action: User will provide a transaction that records their activity, related to a media object, on a blockchain
    b. Smart Contract 2 – Identify media object uniquely; for a given media file or object, uniquely record that item on the blockchain network.
    c. Smart Contract 3 – Rank users based on user action score from Smart Contract 1
    d. d. Smart Contract 4 – On a 24-hour basis, calculate token eligibility of users. Users will be eligible for tokens based upon how many actions they have performed, as captured by Smart Contract 1, related to media objects in Smart Contract 2.

6. Integrate web-services that are used in calculation and execution of token transactions
7. Proper documentation including commented code
8. Best practices for style, formatting and correctness

II. DevOPS

9. DevOps implementation

a. Setup development network - single linux validator node
    i. configure ci/cd build from github actions and deployment to node when code changes
b. Setup test network consisting of a three(3) validator node cluster
    i. configure ci/cd build from github actions and deployment to node when code changes

c. Work with development team to setup proxy services on development network node to run block explorer (reverse proxy to nodejs app)
d. Work with dev team to setup NFT Marketplace server (Metaplex)
e. Configure Firewalls
f. Configure server and service security policies using best-practices
g. Document configurations and setup, including but not limited to:
    i. README document
    ii. Architecture diagrams
    iii. Configuration guide
    iv. Administration Guide
h. Provide on-demand operations/server support
i. Configure data backup for Testnet blockchain data

III. Resources

1. Current DevNet/TestNet set-up: http://explorer.unimoon.io/
2. https://github.com/UNIMOONnetwork/unimoon-chain - solana fork for our project
3. https://github.com/UNIMOONnetwork/unimoon-marketplace - metaplex fork with for our marketplace

IV. Team

- Tech Lead – Vishal, Aedla
- Dev Team – Einsfar, Alex
- QA Team – Daniel
- DevOps - Nirmal
- Design, front end – Client is responsible

V. High-level Implementation Steps

- Setting up project environment – Slack, Jira
- Start with Devops requirements – Set-up DevNet (Priority 1)/Test environment (Priority 2)
- Demonstrate stability and customization of Solana fork / Metaplex
- Map smart contract rules – user action tracking, token allocation
- Delier one smart contract in local environment and web service
- Write user stories, scope of project sprints
- Set-up Proxy Services, Server set-up, Firewalls
- Configuration of security
- Deliver all 4 smart contracts
- Documentation
- Configure data back-up

VI. Timelines

- Sprint 0 – 1 week – Specification definition and finalizing the Product Requirement Document
- Sprint 1 – 1 week – Testing and stabilization of Solana Fork, Deployment of anchor framework, Testing and stabilization of Metaplex (Assumption is most of the things are developed) + DevOps implementation
- Sprint 2 – 1 week – Core module development for smart contracts + DevOps implementation
- Sprint 3 – 2 weeks – Development/Integration for rest of the smart contracts + DevOps implementation
- Sprint 4 – 1 weeks – User Acceptance Test, GoLive