

Milestone Deliverable Review Report

Deep Funding Round: 4

Project code: DFR4-RFPD2

Project title: Reputation & Voting Weight System

Milestone number: 2

Milestone deliverable:

<https://docs.google.com/document/d/1Bz72IEzMQftFLbg8Ebqgm9zuEreJ68zlt9jliXGgPfA/edit?tab=t.0#heading=h.gjdgxs>

Date: 12/12/2024

Status: Accepted

Feedback (Why accepted, why rejected?):

Review DFR4-RFPD2 M2

Milestone 2 Review: High-Level Requirements for Microservices

Objective

The goal of Milestone 2 was to define the high-level requirements for two essential microservices: the Blockchain Data Exporter and the Engagement Metrics Collector. These microservices are designed to enhance data integration and processing for reputation and voting weight calculations, enabling a transparent and dynamic system for community decision-making.

Evaluation

Strengths

Comprehensive Documentation:

Detailed API endpoints for retrieving proposal milestones, reviews, and user interactions are provided.

Status: Achieved.

Technical Algorithm Design:

Algorithms for engagement calculation, voting weight adjustments, and manipulation prevention are well-documented.

Status: Achieved.

ETL Processes:

The repository suggests the use of dbt (Data Build Tool) as the primary tool for data transformation and management workflows. dbt's modular structure aligns well with the project's goals of scalability and interoperability.

Status: Achieved.

API Design:

Modular and functional APIs align with scalability goals and provide a structured approach to data collection and export.

Status: Achieved.

Weaknesses and Areas for Improvement

Integration with External Sources:

The lack of detailed plans for incorporating external data, such as social media engagement, limits the system's scope.

Status: Partially Achieved.

Scalability Testing:

Absence of scalability benchmarks introduces uncertainties in the system's ability to handle high data volumes.

Status: Partially Achieved.

Security and Privacy:

No evidence of compliance with GDPR or data protection protocols is presented.

Status: Not Achieved.

Testing and Validation:

The lack of defined testing plans, including unit, integration, and performance tests, presents a reliability risk.

Status: Not Achieved.

Recommendations

Immediate Priorities

Enhance Security Measures:

Establish protocols for GDPR compliance and broader data protection.

Define and Execute Testing Frameworks:

Implement testing methodologies to validate unit-level and integrated functionalities.

Medium-Term Actions

Expand Data Integration:

Develop integration strategies for external platforms to improve data diversity and utility.

Conduct Scalability Benchmarks:

Ensure performance consistency under varied data loads.

Conclusion and Verdict

I had to utilize data provided by the team, along with external public data, to conduct a fair analysis, and these references are available at the end of this report.

Milestone 2 demonstrates substantial progress in documentation, algorithm design, and ETL processes, providing a strong foundation for subsequent phases. However, significant gaps remain in testing, scalability validation, and security measures. While these issues highlight areas for future improvement, they do not undermine the overall trajectory and potential of the project.

Verdict: Approved with recommendations for addressing the identified weaknesses in subsequent milestones.

References

API Specification:

File: api_spec_proposal.yml.

Details: Comprehensive API endpoints for proposal milestones, reviews, and engagement metrics.

Algorithm Details:

Document: Voting Algorithms.pdf.

Focus: Engagement scores and voting weight adjustments.

ETL Processes and Reports:

Files: Photrek SNET DF2 CCS Report 1.pdf and Photrek SNET DF2 CCS Report 2.pdf.

Content: SQLite ETL workflows and data validation methodologies.

Engagement Metrics:

Document: engagement score calculation and final voting weight based on data.pdf.

Insights: Algorithms for engagement score calculations and contribution weights.

GitHub Repository:

Link: Photrek Community Governance - CES Tool.

Content: Implementation and additional microservice documentation.

YAML API Specification:

Source: api_spec_proposal.yml.

Content: API design for data collection and processing.

Milestone 2 Report:

Document: DFR4-RFPD2 M2.pdf.

Content: Detailed report on the milestone objectives, accomplishments, and deliverables, including the high-level architecture for modular microservices and user interface recommendations.

Microservices Layer Report:

Document: SNET DF4-RFPD2 - M2.pdf.

Content: Functional requirements and technical specifications for microservices architecture, user interface, and scalability.

Additional References:

Miro Board: Link.

RFP Document: Link.

Google Drive: RFP Document.

If rejected, suggested changes: