LANDANO

Cardano Mendix plug-in by the Landano team

Project Plan - Fund 11

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Executive Summary

Project objectives

The project aims to develop a comprehensive suite of connectors and widgets for the Mendix platform. These tools will facilitate the integration of Mendix applications with the Cardano blockchain, allowing developers to easily implement functionalities for transactions and smart contract interactions, mirroring the capabilities of the Cardano CLI.

Key stakeholders

Internal: Mendix Developers within our organization.

External: Mendix Developers from other organizations, Cardano developers interested in using Mendix, and Technical Architects who need to consider these tools in solution design.

Expected outcomes

Successful development and launch of a fully functional set of widgets and connectors on the Mendix platform.

High adoption and positive feedback from both internal and external Mendix developers.

Enhanced capability of Mendix applications to interact seamlessly with the Cardano blockchain, including transaction handling and smart contract operations.

Project Scope

Deliverables

1. Project plan (this document)
2. Export of Jira Project
3. A publicly available Github repository with the outcomes of the project
4. Review & Validation document
5. UI/UX design document
6. Report out of community event
7. Implementation plan for feedback
8. Evidence of community event
9. Initial Test outcome document
10. Feedback collection guide
11. Beta release
12. Release in Mendix Marketplace
13. Developers documentation
14. Final test outcome document
15. Fund 11 - Close out video
16. Fund 11 - Close out report

Exclusions

- Development of additional modules outside of the specified connectors and widgets.
- Post-release maintenance or updates beyond the initial beta and final releases.
- Training for developers outside of the provided documentation.
- Direct integration with platforms other than Mendix and Cardano.

Assumptions

1. Technical Environment: Assume that the existing infrastructure and technology stack are sufficient to support the development and deployment of the new tools.
2. Stakeholder Availability: Assume that all key stakeholders will be available for consultations and will provide timely feedback as required.
3. Developer Competency: Presume that the Mendix and Cardano developers possess or can quickly acquire the necessary skills to use the new connectors and widgets effectively.
4. Project Resources: Assume that the budget, personnel, and other resources allocated are adequate to complete the project within the defined scope and timelines.
5. Regulatory Compliance: Assume that the project will not face unexpected regulatory hurdles that could delay or alter the scope of work.

Roles and Responsibilities

Project team structure

1. Project Manager: Oversees the entire project, ensures milestones are met, manages risks, and communicates with all stakeholders.
2. Technical Lead (Mendix): Responsible for the technical design and development of Mendix widgets and connectors, liaises with the Cardano technical team.
3. Technical Lead (Cardano): Ensures that all Cardano-related functionalities are correctly implemented and that the development aligns with Cardano standards.
4. UI/UX Designer: Designs the user interface and user experience, ensuring it is user-friendly and meets the requirements of Mendix developers.
5. Quality Assurance Team: Conducts testing phases, reports bugs, and ensures all deliverables meet the quality standards before release.
6. Documentation Specialist: Responsible for creating comprehensive user and developer documentation, ensuring it is clear and helpful.
7. Community Manager: Organizes community events, manages feedback collection, and engages with both the Mendix and Cardano communities to increase adoption.
8. Marketing and Communications: Handles the promotion of the new tools within the Mendix marketplace and broader community, including the release announcements and close-out reporting.

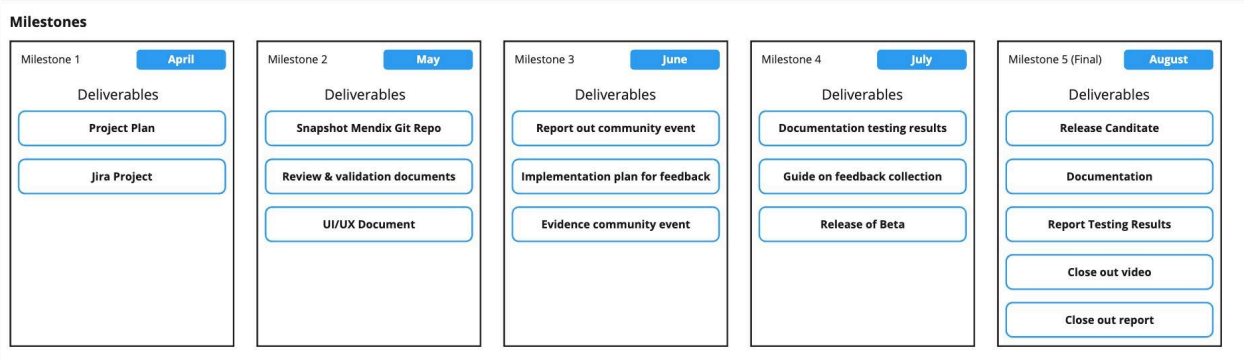
NOTE: Because of the size of our team, members can have more than one role assigned to them.

Stakeholder responsibilities

1. Internal Mendix Developers:
    - Collaborate closely with the project team to provide insights and validate the functionalities of the new tools.
    - Participate in testing and feedback sessions.
2. External Mendix Developers:
    - Engage with the community events, provide feedback on beta releases, and contribute to the refinement of the tools through real-world testing scenarios.
3. Cardano Developers:
    - Assist in ensuring that all blockchain-related functionalities are accurately implemented.
    - Provide expertise on integrating Cardano's features with Mendix technologies.
4. Technical Architects:
    - Evaluate the project deliverables to ensure they integrate seamlessly with existing and planned infrastructure.
    - Ensure that the toolset is scalable and adheres to best practices in software architecture.

Project Schedule

Timeline of major milestones



1. Milestone 1: 30 April 2024
2. Milestone 2: 31 May 2024
3. Milestone 3: 30 June 2024
4. Milestone 4: 31 July 2024
5. Milestone 5: 31 August 2024

Key activities and their dependencies

1. Requirements gathering
2. Developement Phase
    a. Architecture Design
    b. Coding
    c. Initial Testing
3. Testing & Quality Assurance
    a. Comprehensive testing
    b. Feedback loops
4. Community engagement
    a. Creation of documentation
    b. Creation of training materials
5. Release management
    a. Beta Release
    b. Final adjustments
6. Project close-out
    a. Video
    b. Report

Steps 1 to 4 will be handled using the scrum methodology. This will ensure that we have frequent feedback loops incorporated in our plan and will ensure that the product is built according to the stakeholders' needs.

Resource Plan

Personnel needs

- Developers (Mendix and Cardano specialists)
- UI/UX designers
- Quality Assurance testers
- Documentation specialists
- Community managers
- Marketing and communications staff

Technology and tools (including Jira setup)

- Software tools (Mendix platform, Cardano tools)
- Jira for project management
- GitHub for version control and code sharing
- UnitTesting module, Mendix Feedback widget

Budget requirements

- Development costs (personnel, technology licensing) 130,000 ADA
- Testing and quality assurance expenses 30,000 ADA
- Marketing and community engagement costs 10,000 ADA
- Training materials and event hosting 20,000 ADA
- Miscellaneous (contingency fund) 10,000 ADA

Total: 200,000 ADA

Risk Management

Technical Risks:

Risk: Integration issues between Mendix and Cardano platforms.
Mitigation: Conduct early proof-of-concept tests and maintain close communication with technical leads.

Schedule Risks:

Risk: Delays due to unforeseen technical challenges or stakeholder feedback loops.
Mitigation: Build buffer periods into the project timeline and use agile methodologies to accommodate changes.

Resource Risks:

Risk: Insufficient personnel or technical resources.
Mitigation: Regularly review resource allocation and have contingency plans for additional hiring or outsourcing.

Stakeholder Risks:

Risk: Misalignment of project goals with stakeholder expectations.
Mitigation: Engage stakeholders through regular updates and feedback sessions to ensure alignment.

Compliance and Security Risks:

Risk: Failure to comply with regulatory requirements or to ensure data security.
Mitigation: Consult legal and security experts to review project deliverables and practices.

Communication Plan

Communication Objectives:

Ensure transparency and timely updates on project progress by openly publishing the updates and being available for feedback.
Facilitate feedback collection and incorporation through the use of the Mendix feedback widget, Website, Discord & Twitter.

Methods of Communication:

Regular project meetings will be held weekly as part of the management meeting.
Email updates for major milestones and decisions in a newsletter.
Discord, Twitter, Website
Webinars or live sessions for community engagement. Join Townhalls and organize our own events.

Stakeholder Engagement:

Scheduled reviews with internal and external stakeholders.
Specific communication strategies tailored to different stakeholder groups.

Documentation and Reporting:

Monthly progress reports by submitting the milestones
End-of-phase review documents.
Final project report and close-out video.

Quality Assurance

Quality Objectives

Define specific quality criteria for each deliverable, such as performance benchmarks, user satisfaction, and compliance with technical specifications. This will be part of the acceptance criteria for each user story

Testing Procedures:

Detailed testing phases, including unit testing, integration testing, system testing, and user acceptance testing (UAT).
Use of automated testing tools to streamline the process and ensure consistency.
Every user story will be tested individually according to its acceptance criteria. Where applicable a Mendix unit test will be implemented.

Quality Control Measures:

Regular code reviews.
Engagement of third-party audits if necessary to ensure adherence to quality standards.

Feedback Mechanisms:

Set up processes for collecting and addressing feedback from beta testers and early adopters.
Regularly scheduled review meetings to discuss the feedback and plan necessary adjustments.
Make use of the Mendix feedback widget to collect feedback, setup a form on the website to retrieve feedback. Review feedback and if applicable create bugs or user stories to handle the feedback accordingly.