**Project Status Report no 2**

**Project Information:**

* **Project Name:** NBP Crasher
* **Project Manager:** Przemysław Kowalski
* **Report Date:** 07.01.2025
* **Project Duration:** 08.12.2024 – 31.01.2025

**Management Summary:**

* The backend phase of the project has been completed successfully.
* Unit tests were utilized to ensure code quality and reliability.
* Technologies used include Python and communication with NBP API.
* Key milestones achieved in this phase include:
  + Input data validation,
  + Integration with NBP API,
  + Validation of sample response from NBP API,
  + Validation of statistical calculator (measures specified in requirements specification). During unit tests phase 2 edge cases were caught and handled regarding creation of dynamic ranges used for rates change distribution calculation. Those cases are:

1. Max and Min value in the passed set are the same
2. Values presenting same step along all set

In the first scenario step is taking value of max value, in the second step is   
 hardcoded to step with a value of 0.5.

* Automated tests via GitHub service.
* Automated builds and releases.

**Key Achievements:**

* Backend development completed.
* Successful implementation of unit tests to validate various components.

**Current Status:**

* **Milestones Progress:** Completed backend phase.
* **Tasks Completed:** Backend development, unit tests implementation.
* **Current Tasks Overview:** Preparing for frontend and API integration phase.
* **Project Completion Percentage:** 50% (includes initial frontend implementation).

**Risks:**

* **Risk Identification:**
  + Sudden NBP API failure.
  + Integration issues between frontend and backend.
* **Impact and Likelihood Assessment:** High impact, medium likelihood for both risks.
* **Mitigation Strategies:** Continuous monitoring of NBP API, thorough testing of integration phase.

**Upcoming Milestones and Tasks:**

* Integration of frontend with API.
* Frontend (UI) development.
* Frontend unit tests.
* Manual tests.

**Recommendations:**

* Begin frontend development to proceed with API integration.
* Continuously monitor NBP API to mitigate potential failures.

**Attachments:**

* [Detailed project status information](https://github.com/orgs/IIS-ZPI/projects/23/views/4?pane=issue&itemId=90935696&issue=IIS-ZPI%7CZPI2024_zaoczni_NBP_Crasher%7C33)