

Functional and Non-functional Project Checklist For NBP Exchange Rate Analysis Tool

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Functional Checklist

- ☒ Integration with the NBP API (<http://api.nbp.pl/>)
- ☒ Session count analysis:
 - ☒ rising, falling, unchanged sessions
 - ☒ for periods: 1 week, 2 weeks, 1 month, 1 quarter, half a year, 1 year
- ☒ Calculation of statistical measures:
 - ☒ median
 - ☒ mode
 - ☒ standard deviation
 - ☒ coefficient of variation
 - ☒ for periods: 1 week, 2 weeks, 1 month, 1 quarter, half a year, 1 year
- ☒ Change distribution analysis histogram:
 - ☒ monthly and quarterly
 - ☒ for selected currency pairs (e.g., EUR/USD)
 - ☒ graphical presentation
- ☒ Export of data to CSV available

Non-functional and Project Checklist

- ☒ Use of SCRUM - 2 sprints, one in English
- ☒ Creation of backlog GitHub Projects
- ☒ Documentation in English
- ☒ GitHub repository
 - ☒ source code
 - ☒ README.md file containing:
 - ☒ project technology
 - ☒ how to run / deployment location
 - ☒ location of documentation
 - ☒ location of backlog
 - ☒ description of CI and unit testing
 - ☒ testing and fixing reports
- ☒ Version tagging starting from 2.0.0
- ☒ CI configuration (locally or remotely):
 - ☒ pipeline triggered for: **main, release, develop**
 - ☒ config file or report in CI_CFG folder
- ☒ Automated testing:
 - ☒ unit tests
 - ☒ functional tests
 - ☒ automatic test execution after pull request
 - ☒ release generation upon successful test (with tag and build)
- ☒ Project documentation:
 - ☒ acceptance test report
 - ☒ architecture description
 - ☒ component diagram
 - ☒ sequence diagram

- ☒ activity diagram
- ☒ Bug and fix documentation - BugFix issue
- ☒ Communication and instructor descriptions in English
- ☒ Clean, readable code with comments