

Orzeł_1

Currency analysis reports

Project documentation

1. Introduction

This document provides a comprehensive overview of the system, including system architecture, and key technical diagrams. The document consists of the following sections:

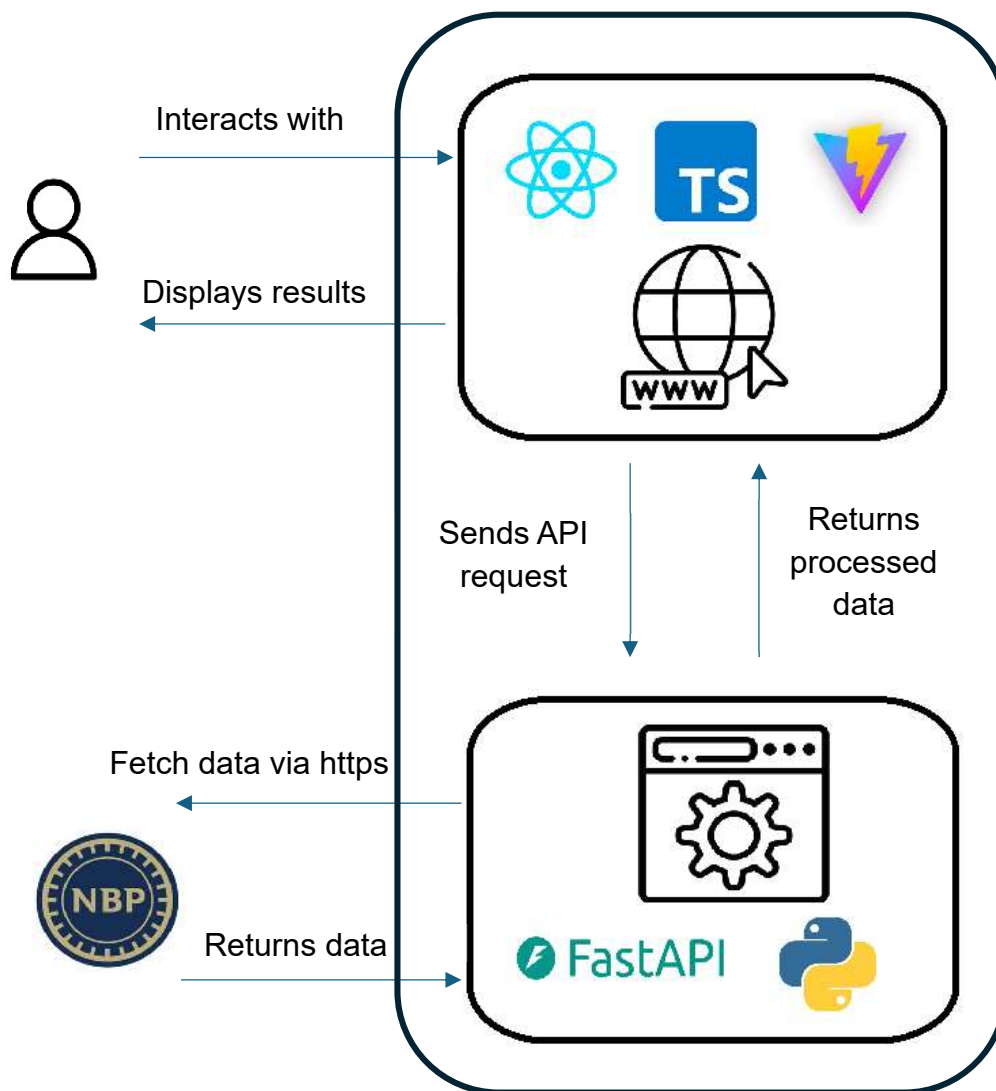
- **System Architecture Description** – An overview of the system's components and how they interact.
- **Component Diagram** – A high-level representation of the main system components and their interactions.
- **Sequence Diagram** – A step-by-step illustration of how the frontend, backend, and external API interact.
- **Activity Diagram** – A visual representation of the workflow from user input to displaying computed results.

This document is intended for developers, system architects, and stakeholders to understand the system's behaviour and structure.

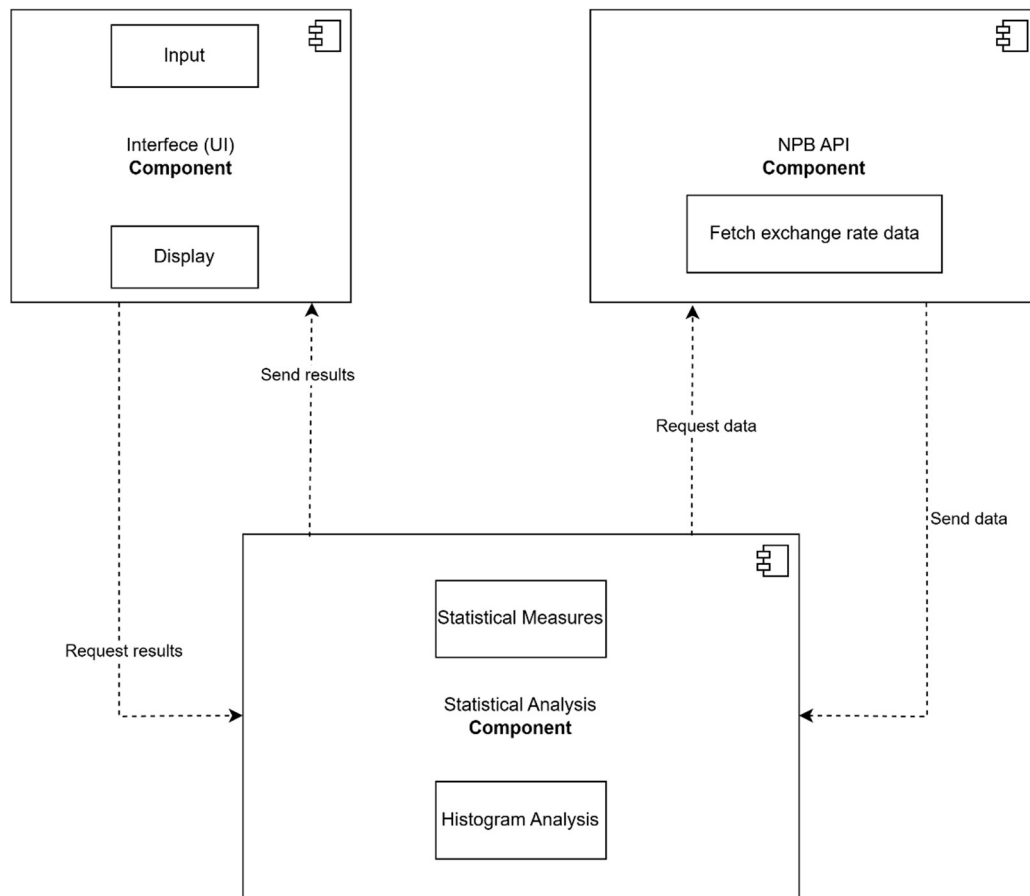
2. System Architecture Description

The system consists of the following components:

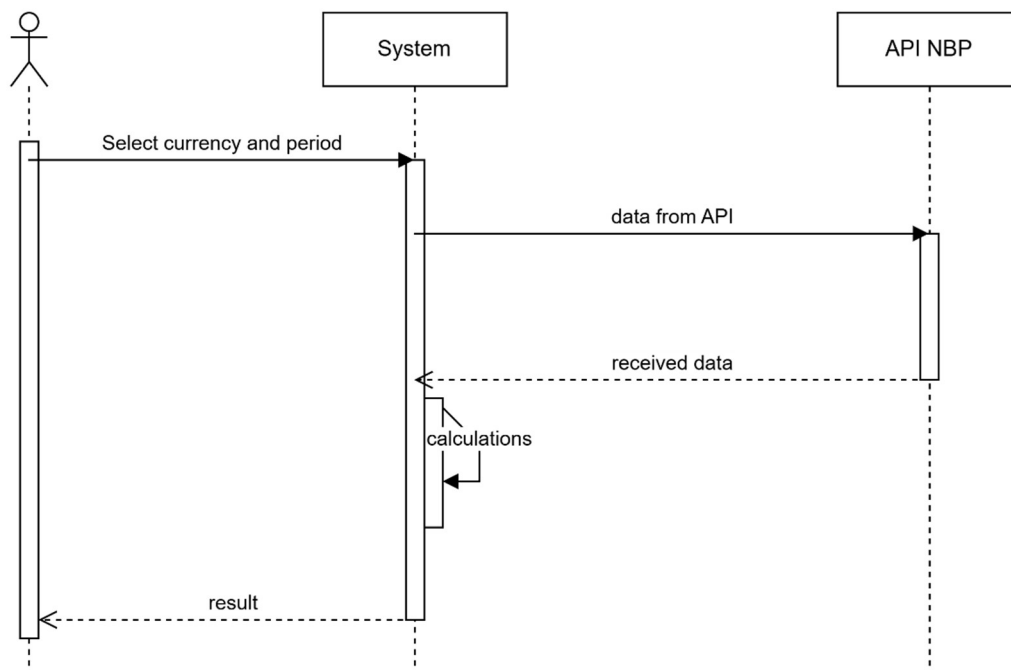
1. **Frontend:** A React (Vite) application hosted on GitHub Pages, allowing users to enter currency pairs and time periods for analysis.
2. **Backend:** A FastAPI-based service deployed on Render, handling requests, fetching exchange rate data from the NBP API and performing analysis. API is open – it does not require any authorization to call services.
3. **NBP API:** The external data provider supplying exchange rate statistics.



3. Component Diagram



4. Sequence Diagram



5. Activity Diagram

