

2024 Design Ex

Payments System Design Exercise

Introduction

Our company specialises in international money transfers, requiring seamless integration with a multitude of banking systems worldwide. We aim to provide merchants with a straightforward and efficient interface for sending payments to their recipients. The challenge involves handling diverse payment methods, accommodating specific data requirements for each, and ensuring a secure, reliable, and user-friendly process from initiation to completion.

Objective

Your task is to conceptualise the design of an application that facilitates this process, adhering to the following key requirements:

Diverse Payment Methods: The system must support various payment methods (bank transfers, cheques, credit cards, PayPal, etc.), each with country-specific requirements (e.g., sort codes and account numbers in the UK, IBANs in the EU).

Flexible Payment Initiation: Users should be able to initiate payment requests through the UI for single payments or via batch files for multiple payments.

Real-Time Payment Tracking: Merchants need the ability to view detailed information and the current processing status of payments or batches.

Integration with Banking Systems: Your design must account for integrating with banking systems through various methods (SFTP, SOAP, HTTP POST requests, etc.), handling the technical and security complexities of these interactions.

Design Considerations

How would you build the UI to accommodate these diverse requirements and provide a seamless experience for users?

What backend architecture would be required to support your design and fulfil the application's functional requirements?

Consider the scalability, security, and reliability of your proposed solution, especially in the context of integrating with various banking systems and handling sensitive financial transactions.

Guidelines for Sharing Your Design

While specific deliverables are not prescribed, you are encouraged to use tools such as [Flowchart Maker & Online Diagram Software](#) or Miro to create and share your design artifacts during the interview.

Allocate no more than a couple of hours to prepare your design proposal. The focus should be on presenting a coherent, innovative solution that addresses the exercise's requirements within a realistic time frame.