Project Design Phase-II
Data Flow Diagram & User Stories

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Team ID	Team-591245
Project Name	Project On Tata Power Stock Analysis
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Data Flow Diagrams:

Creating a Data Flow Diagram for the Tata Power Stock Analysis project can help visualize how data enters and flows through the system, what processes it undergoes, and where it's stored.

Here's an overview of the key components of the DFD :
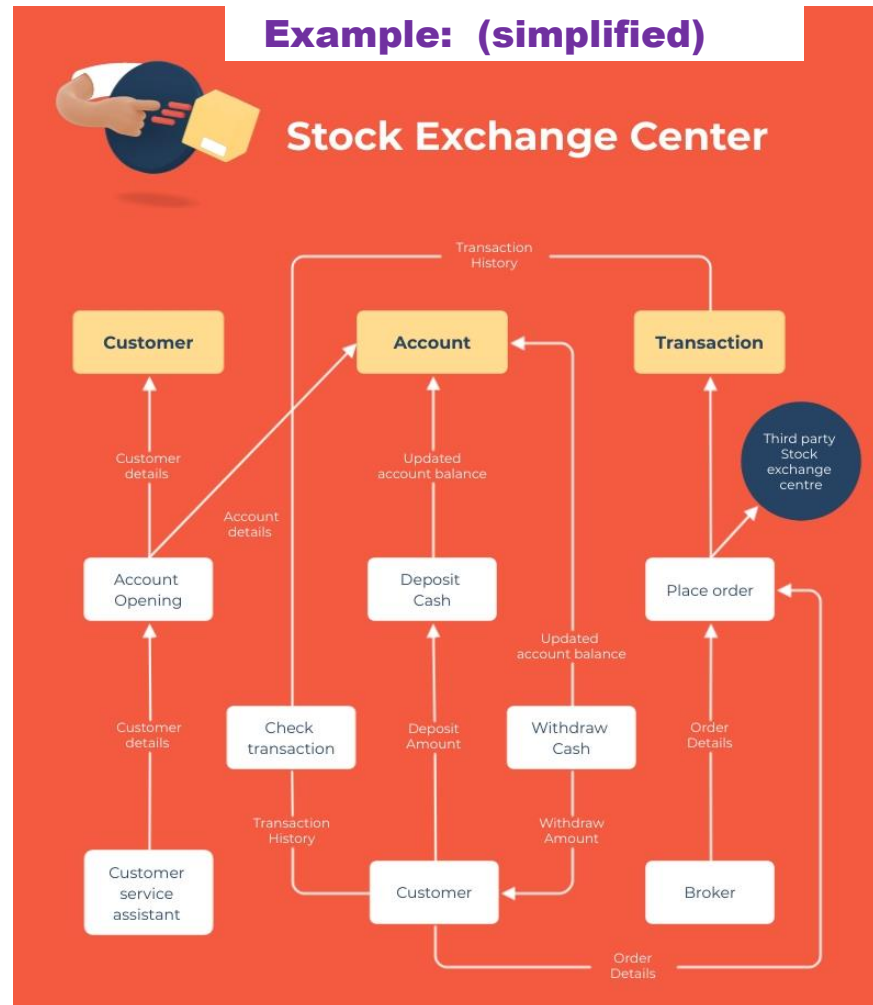
➢ **Level 0: Context Diagram**

This DFD level focuses on high-level system processes or functions and the data sources that flow to or from them. Level 0 diagrams are designed to be simple, straightforward overviews of a process or system.

➢ **Level 1: Process Decomposition**

While level 1 DFDs are still broad overviews of a system or process, they're also more detailed — they break down the system's single process node into subprocesses.
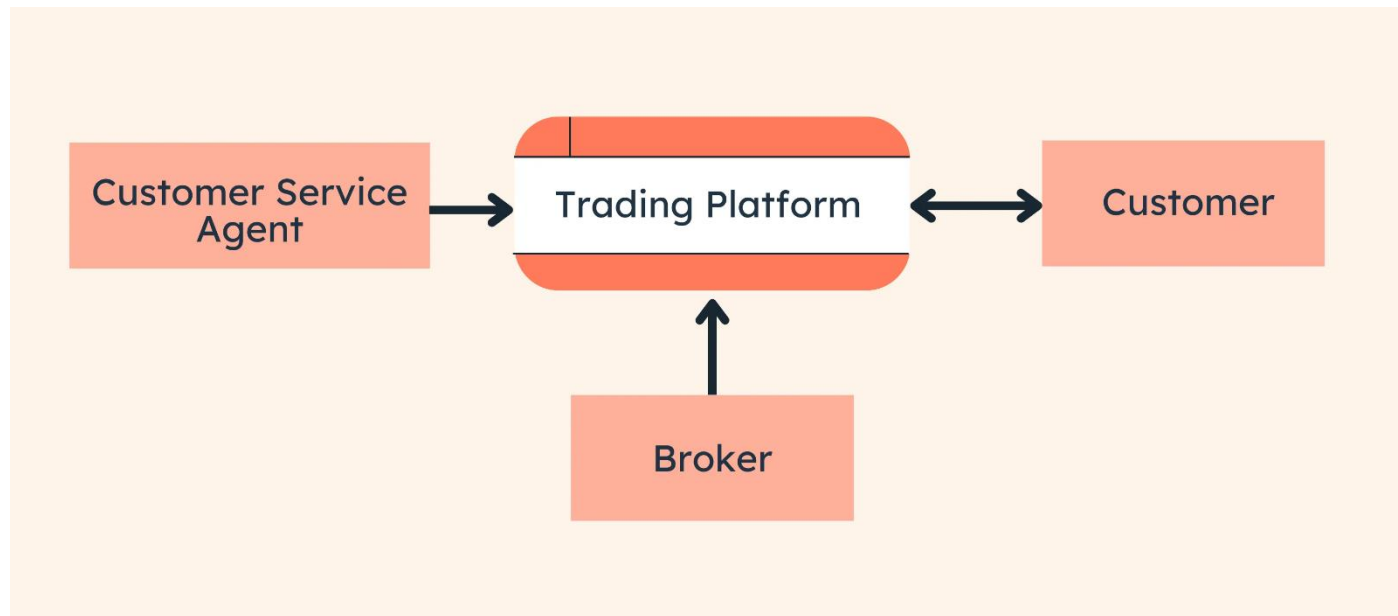
➢ **Level 2: Deeper Dives**

The next level of DFDs dives even deeper into detail by breaking down each level 1 process into granular subprocesses.

Creating a Data Flow Diagram (DFD) for Tata Power Stock Analysis.This involves representing the various components and their interactions in a visual manner. Here's a simplified DFD for placing a stock order:
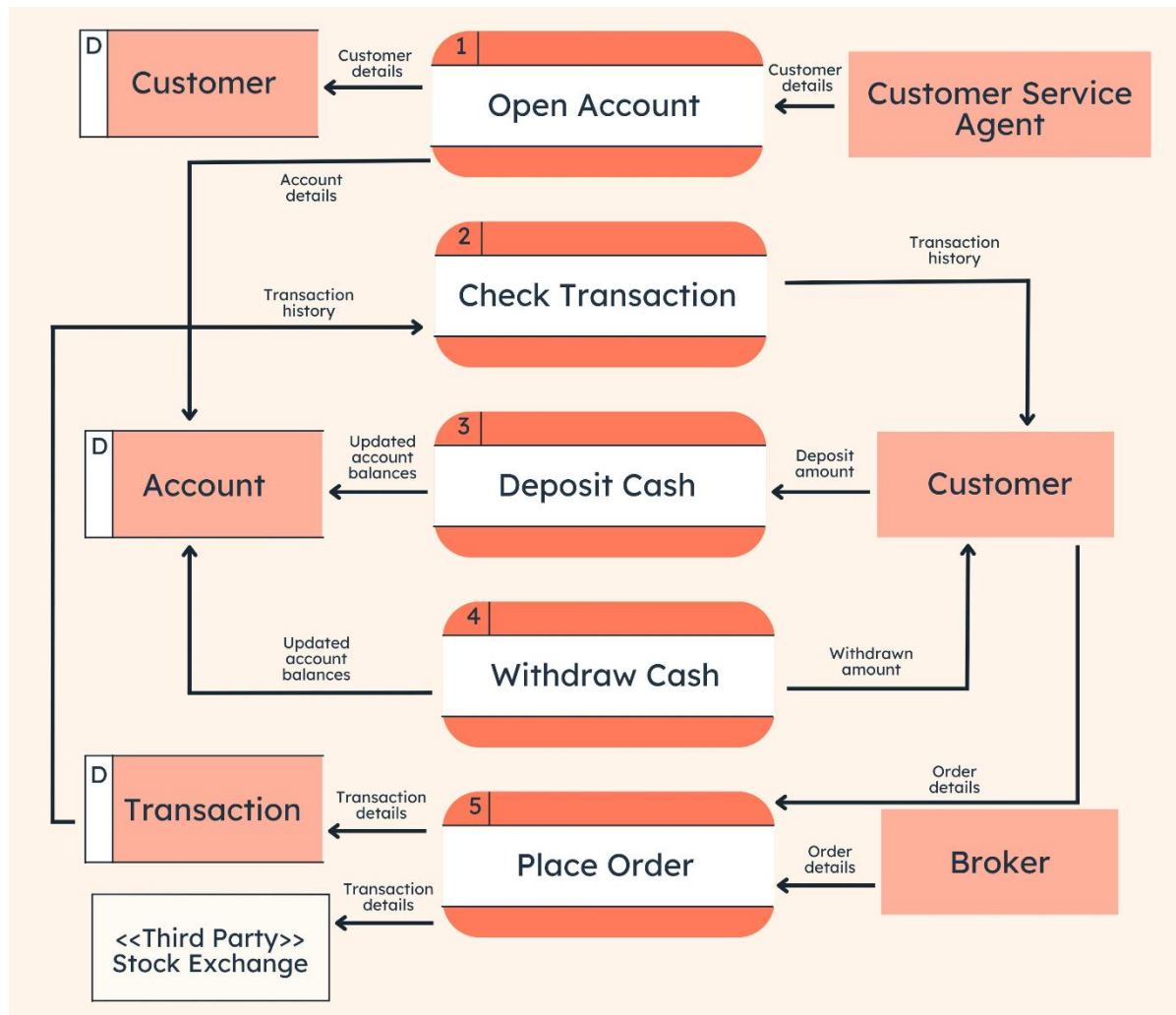
1. Level 0 DFD

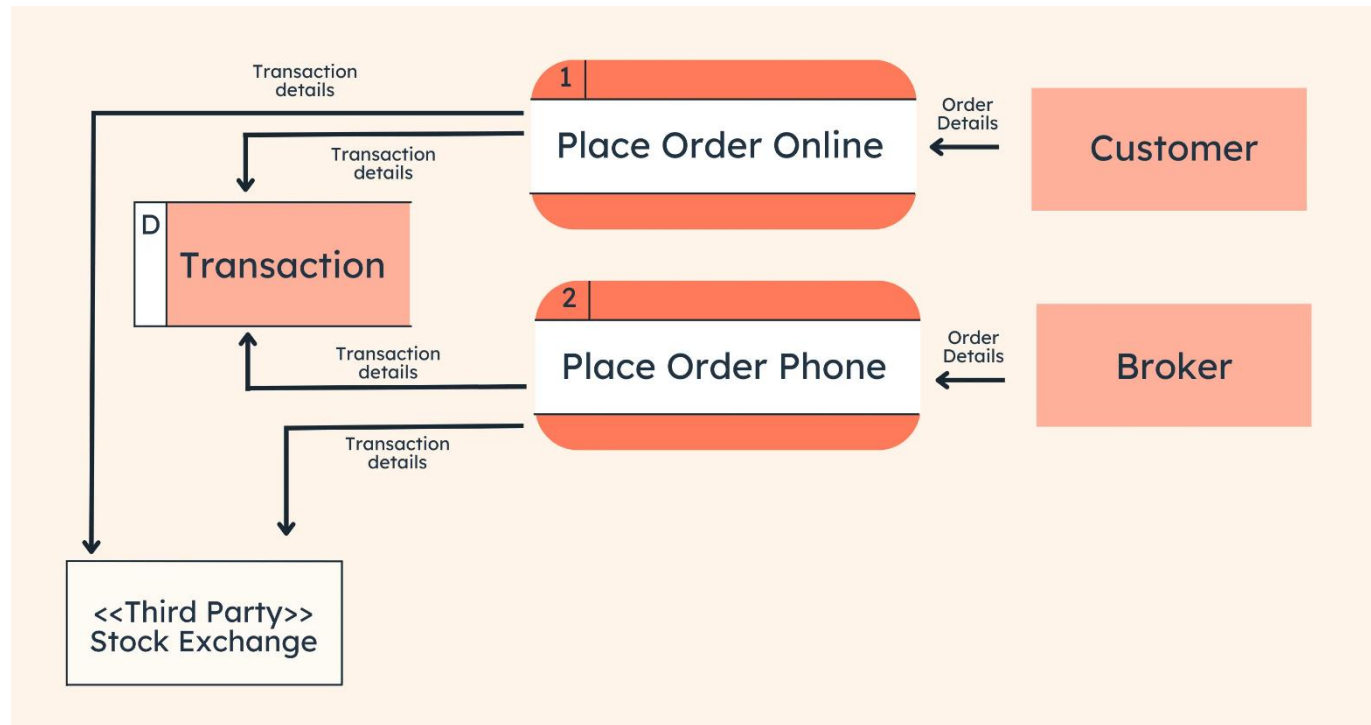This Level 0 DFD provides a contextual map of a securities trading platform.

Data flows in one direction from the customer service assistant and the broker to the platform. It also flows in two directions from customers to the platform and back again.

2. Level 1 DFD

This Level 1 DFD breaks down the customer process in more detail, expanding it to include account creation, cash withdrawals, and eventual securities transactions.

3. Level 2 DFD

This Level 2 DFD decomposes the "Place Order" process to contextualize the steps required to place an order — either by a customer or by a broker.

It even accounts for a third-party stock exchange center where transaction details are forwarded after an order is placed.

User Stories

Here's a set of user stories for the "Project On Tata Power Stock Analysis"

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Analyst	Historical Data Access	1	As an analyst, I want access to historical stock price data for Tata Power.	The system provides a user-friendly interface to input date ranges and stock parameters.	High	1.0
		1.1		It retrieves and displays historical stock price data for Tata Power within the specified range.	High	1.0
Trader	Technical Analysis	2	As a trader, I want access to technical analysis indicators for Tata Power stock.	The system offers a range of technical indicators such as moving averages, RSI, and MACD.	High	1.0
		2.1		Users can apply these indicators to Tata Power's historical stock data.	High	1.0
Analyst	Data Analysis Reports	3	As an analyst, I want to generate comprehensive reports on Tata Power's historical stock performance.	The system allows me to generate reports that include historical stock price charts, technical	High	1.0

				indicators, and relevant statistics.		
		3.1		Reports can be customized for specific timeframes and analyses.	High	1.0
Researcher	Correlation Analysis	4	As a researcher, I want to perform correlation analysis between Tata Power's stock and macroeconomic variables.	The system provides tools to import external data for macroeconomic variables.	Medium	1.1
		4.1		Users can perform correlation analysis and visualize the results.	Medium	1.1
Data Scientist	Machine Learning Models	5	As a data scientist, I want access to pre-trained machine learning models for predicting Tata Power stock prices.	The system offers pre-trained machine learning models for stock price prediction.	Medium	1.1
				Users can input historical data and receive predictions and trading signals.	Medium	1.1
User	User Interface Enhancement	6	As a user, I want a more intuitive and user-friendly interface for easier navigation.	The system improves the interface for better user experience and customization options.	Medium	1.1

These user stories encompass different aspects of the Tata Power Stock Analysis project, including data access, analysis tools, report generation, external data integration, and user interface improvements. You can adjust priorities and releases according to your project's specific needs and timeline.

By

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