Underwater Hero Toys

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https://github.com/Dhruvnayee/Project-databasesystem.git

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Part 1: Design

1. My Business is a retail sale of underwater toys, underwater adventure books, vintage toys, underwater Activity kit for kids etc.

2. Comparison: I am comparing my business with ETSY.

ETSY

The Sales of ETSY for year 2021 is$2.32 Billion

Current number of employees are 2,402 employees.

Sales Url: https://www.statista.com/statistics/409371/etsy-annual-revenue/https://www.google.com/search?q=etsy+earnings+2021&rlz=1C1PNBB_enIN989IN989&oq=etsy+revenue+2021&aqs=chrome.1.69i59j0i22i30l2j0i390l2j69i64j69i60.14667j1j7&sourceid=chrome&ie=UTF-8

Number of employees URL: https://www.macrotrends.net/stocks/charts/ETSY/etsy/number-of-employees

1.

I required a two two tier. The two-tier architecture is like client server application. The direct communication takes place between client and server. There is no intermediate between client and server. Here the communication is one to one.

I required my system to be scalable, distributed, and be able to handle hundreds of thousands of clients in a few years. In my implementation I had to work with my data model (MS SQL) and create a distributed database (MS SQL server). I then architected a client/server system using a 3-tier system. The 3-tier system provides for multiple

consumers of the same data and multiple consumers of a particular type of data.The reach of this 3-tier system allows clients to access data from anywhere in the world.

2. A client makes a request to the server and the server responds by satisfying the client's request. In the client/server model new clients and servers can be added incrementally as more users come on-line and the demand for services increases.

Three Tier:

Presentation Layer

Business Logic Layer

Database layer

My Client Server design is based on a three-tier client server architecture. My three tier client server is designed in such a way that the top three layers contain the client server's business logic. The bottom layer of the client server contains the database that stores the data required by the business logic. The presentation layer of the client server presents the user interface and the data to the client. Each tier is described below.

Presentation Layer

The Presentation layer contains the graphical user interface (GUI) of the client server. It provides the user with information, services, and control over the functionality of the client server. It also presents the user interface. All the presentation layer consists of is the application programming interface (API) calls.

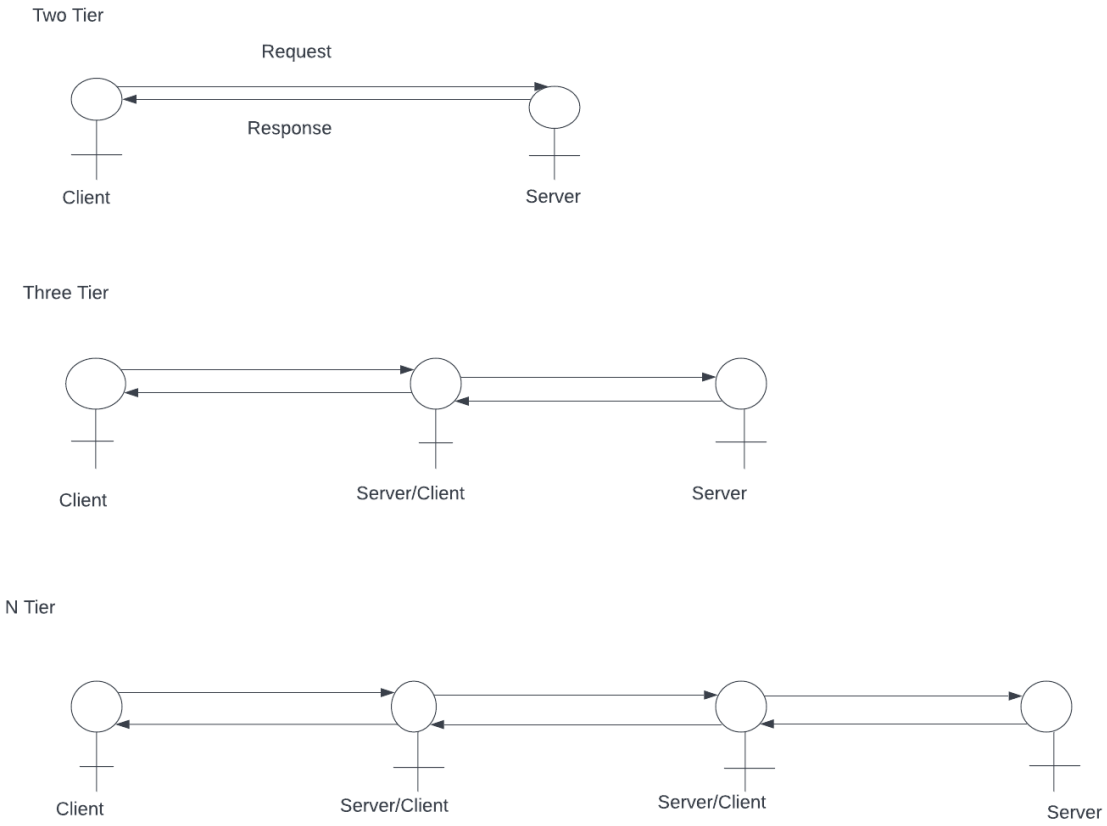
Business Logic Layer :

The business logic layer consists of the client server's business logic. It consists of a series of program functions that perform operations upon the data presented by the presentation layer. It consists of algorithms that process data stored in the database.

Database Layer

The database layer stores and retrieves the data that is stored and processed by the business logic layer. It consists of the database schema that stores and retrieves the data, and it provides a set of database functions that can be used to create and modify the data.

3.



4. Types of data that are related to my business:

- Supply Chain Management Information
- Sales data.
- Warehouse and inventory data.
- Website traffic statistics.
- Customer contact information.
- Interactions between team members, stakeholders, and customers.
- Notes of varying campaigns.
- Future business ideas and trends.

5.

The toot I required was the cloud toolkit from Azure. Azure gives you access to an Azure Storage File Service. It allows you to use SQL server to store data.

The current example is Azure SQL Database and Azure Storage File Service

The common file formats that computer systems use to transfer data between systems are Csv, PDF, xlsx, docx, image.