Divine Toys Database System

*Akash Sajja*

https://github.com/AkashSajja26/DBS-Project.git

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Description: -

1. DivineToys was founded in 2022. The company mainly known for the innovative toys based on various animes and games. The products that we sell includes Nendoroids, Scales, Figmas, Gachapons and Model kits. As of today, the total employees are 20 and it is situated in 2 countries. The organization is situated in India and Japan. The goal of the company is to generate half a million dollars in the first year of its release.
2. The similar business to the Divine is Spin Master. The total revenue of Spin Master in 2021 is nearly **$2,042.4 million**. The total number of employees that are working in Spin Master is more than 2000 employees. Check out this company website for latest news and updates <https://www.spinmaster.com/en-US/corporate/our-story/#:~:text=Twenty%2Dseven%20years%20later%2C%20Spin,and%20more%20than%202%2C000%20employees>.
3. In this database system, we use 3-Tier Architecture which consist of client, server and database. The first tier is called presentation tier which is built on HTML, CSS and JS which communicates with the other tier using APIs. The second tier is called application tier which consists of business logic and written in JAVA. The third tier is called data tier which consists of a database and a program for managing read and write access to a database. Middleware is needed in this 3-Tier Architecture because if client machine sends the request to server machine the request is received by the middle layer and then it is obtained to server and in the same way the response is first received by the middle layer and then it is obtained to client. The server machine takes care of the Database Layer. The 5 tier functions that we use are presentation, UI, Business Logic, Data Access, Data Storage.

**Presentation: -** This function is used to show the application to the user. This can be done by using JavaScript in React, Angular.

**UI: -** In this function the user interactions are interpreted. Example – When we click on the cancel button, how the operation is interpreted is done in this layer.

**Business Logic: -** This function is used for data validation, security, processing, etc.

**Data Access:** - This function is used to do operations like insert, delete, etc.

**Data Storage: -** This function is used for the database servers where we can insert, delete data on the servers.

**Diagram:-**

Diagram, schematic

Description automatically generated

1. The types of data that are related to the business are Sales Data, Warehouse and Inventory Data, Customer Contact Information, Marketplace Data, Technical specifications of the product data.
2. The tool that is mentioned in the class that performs data translations from one system to another is middleware. The example of that tool includes
3. Integration
4. Transactions
5. Data Access
6. Application Framework
7. Game Engines
8. Robot Middleware

**URL: -** <https://simplicable.com/new/middleware>

The three common data formats that computer systems use to transfer product data between systems are Delimited Text, JSON, XML