



# SQL Server DBA Training

Orientation Class



# About GuzzoTech

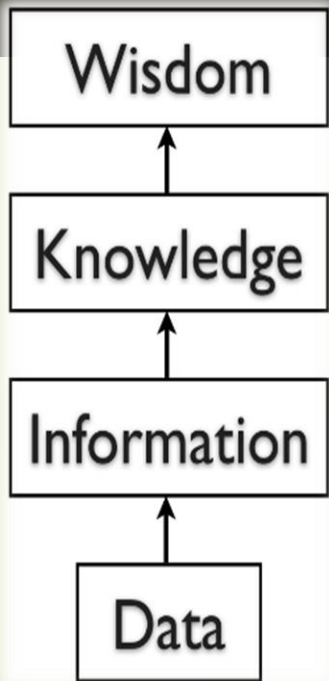
- Provide quality **job-oriented** training
- Prepare trainees for **certification**
- Assist trainees in **securing Job**
- Provide **on-job support**



# Purpose of Training

- To help trainees secure the **skills and knowledge** they need to **compete in the job market**
- To guide students become employable **Database professionals**

# What is Data?



## ➤ Information ladder

- Data are the raw bits and pieces of information **with no context**
- To be useful, it needs to be given context
- Data **into context, aggregated and analyzed** -> knowledge
- Combine knowledge and experience to produce a deeper understanding of a topic -> **Wisdom**

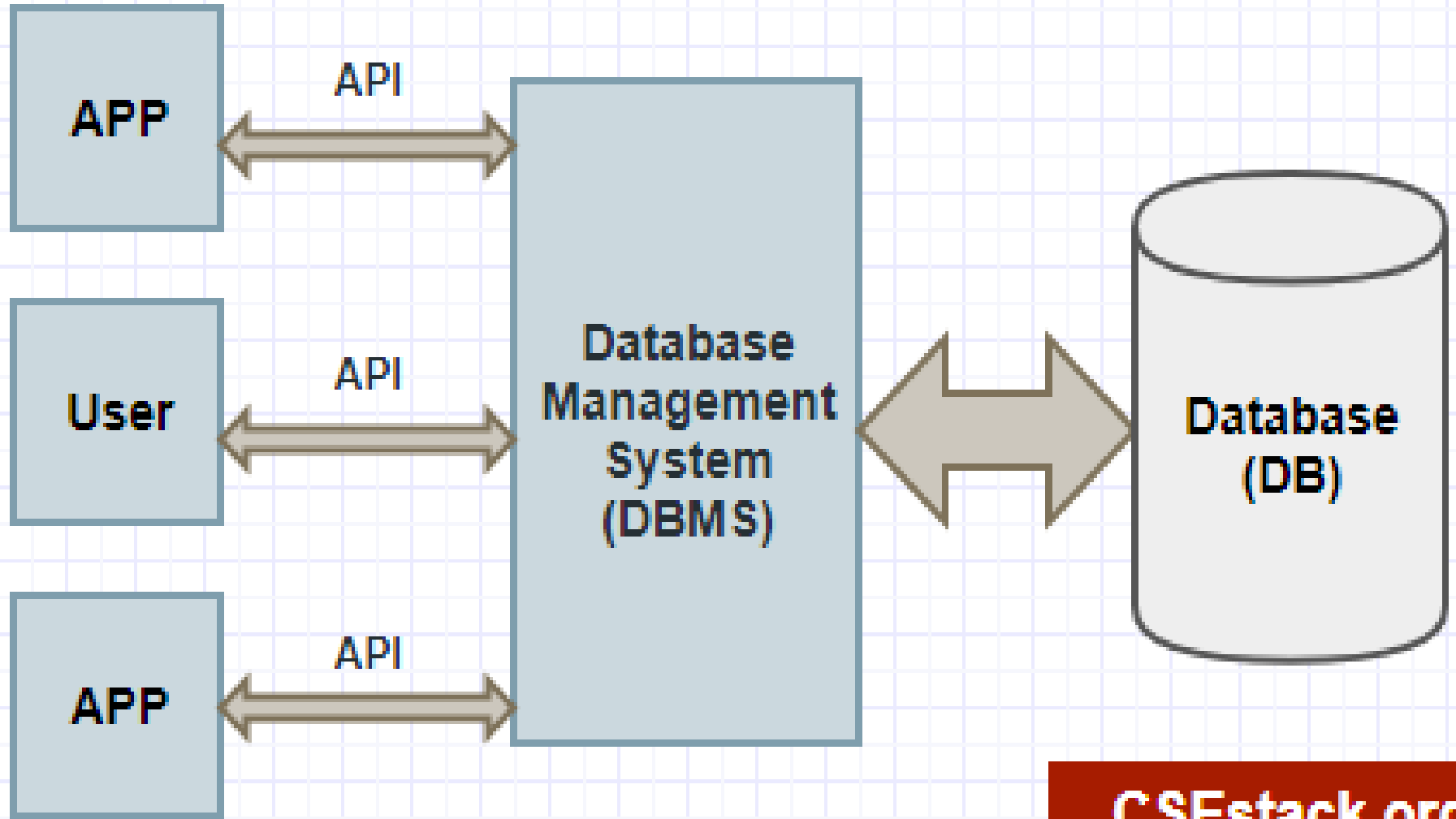
# A Database is



- a **collection of related data** organized in a way that data can be easily **accessed, managed and updated**
- can be **software** based or **hardware** based
- The **goal of many information systems** is to transform data into information in order to **generate knowledge**
- In order to do this, the system must be able to **take data, put the data into context, and provide tools for aggregation and analysis**. A database is designed for just such a purpose.

# RDBMS

- A relational database, invented in 1970, **is a tabular database in which data is defined** so that it can be **reorganized and accessed** in a number of different ways
- is a software that allows **creation, definition and manipulation** of database, allowing users to store, process and analyze data easily
- provides us with an **interface or a tool**, to perform various operations like **creating database, storing data** in it, **updating data, creating tables** in the database and **a lot more**
- provides **protection and security** to the databases. It also maintains **data consistency in case of multiple users**
- The Structured Query Language (**SQL**) is the standard user and application program interface for a relational database



# Popular DBMS's







# Why SQL Server?

- Relatively **easier to learn and manage** compared to Oracle
- It been around since 1989 –a very **matured product** with immense amount of features
- Can **integrate** with Microsoft products
- Relatively cheaper licensing
- Comes with a lot of add-ons –SSIS, SSRS, SSAS
- It can work with other RDBMS's
- Higher productivity
- Less Problem Resolution and Tuning time
- Hosted on Windows and Linux.
- Active Production Data (**OLTP**) and Data Warehousing (**OLAP**) support



# What DBA's do

## ➤ **Software installation and Maintenance**

- collaborates on the initial **installation and configuration**
- **installs the database software** and configures it for use
- **updates and patches** are required
- handles on-going maintenance
- handles the **transfer of data** from the existing system to the new platform



## ➤ Database Backup and Recovery

- create backup and recovery plans and procedures based on industry best practices
- In the case of a server failure or other form of data loss, the DBA will use existing backups to restore lost information to the system

## ➤ Security

- needs to know potential weaknesses of the database software and the company's overall system and work to **minimize risks**
- In the case of a security breach or irregularity, the DBA can consult **audit logs**



## ➤ Capacity Planning

- DBA needs to know how large the database currently is and how fast it is growing in order to make **predictions** about future needs

## ➤ Performance Monitoring

- Monitoring databases for performance issues

## ➤ Database Tuning

- proactively tune a system based on application and usage instead of waiting until a problem develops

## ➤ Troubleshooting

- DBA needs to quickly understand and **respond to problems** when they occur

# Job Market

## SQL Database Administrator Salary

Yearly Monthly Weekly Hourly Table View



### SQL Database Administrator Salary Comparison by Location

Nationwide United States	\$101,571
Saint Paul, MN Minnesota	\$102,055



# Walkthrough the Training

- It takes **16 Weeks** (4 months)
- 100% **practical** and **real-life** examples
- **Learner** based instructions
- Course materials will be provided
- Preparation for **Certification**
- **Resume** preparation and posting
- Mock **interview**

# What do you need to succeed?

- **Basic** computer skills
- **Positive** attitude
- **Commitment**: Set aside 2-3 hours daily
- **Motivation** to learn new skills
- Active **participation**
- **Laptop** /PC (Min – 4GB RAM, Core i3 and above, 100 GB free space)
- **Internet** Connection



# Session Schedule

- Slots – 2 sessions per week (Online)
  - Weekend (2hrs)
  - Weekdays (1hr)



**THE MORE YOU LEARN,  
THE MORE YOU EARN**

**- WARREN BUFFETT -**