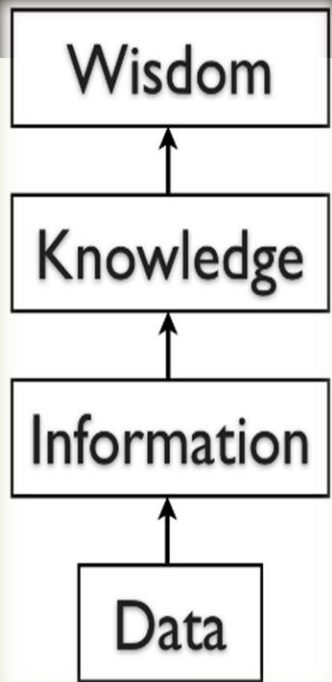# About GuzzoTech

- Provide quality **job-oriented** training

- Prepare trainees for **certification**

- Assist trainees in **securing Job** in their field

- Provide **on-job support** for trainees

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?

Wisdom

Knowledge

Information

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**
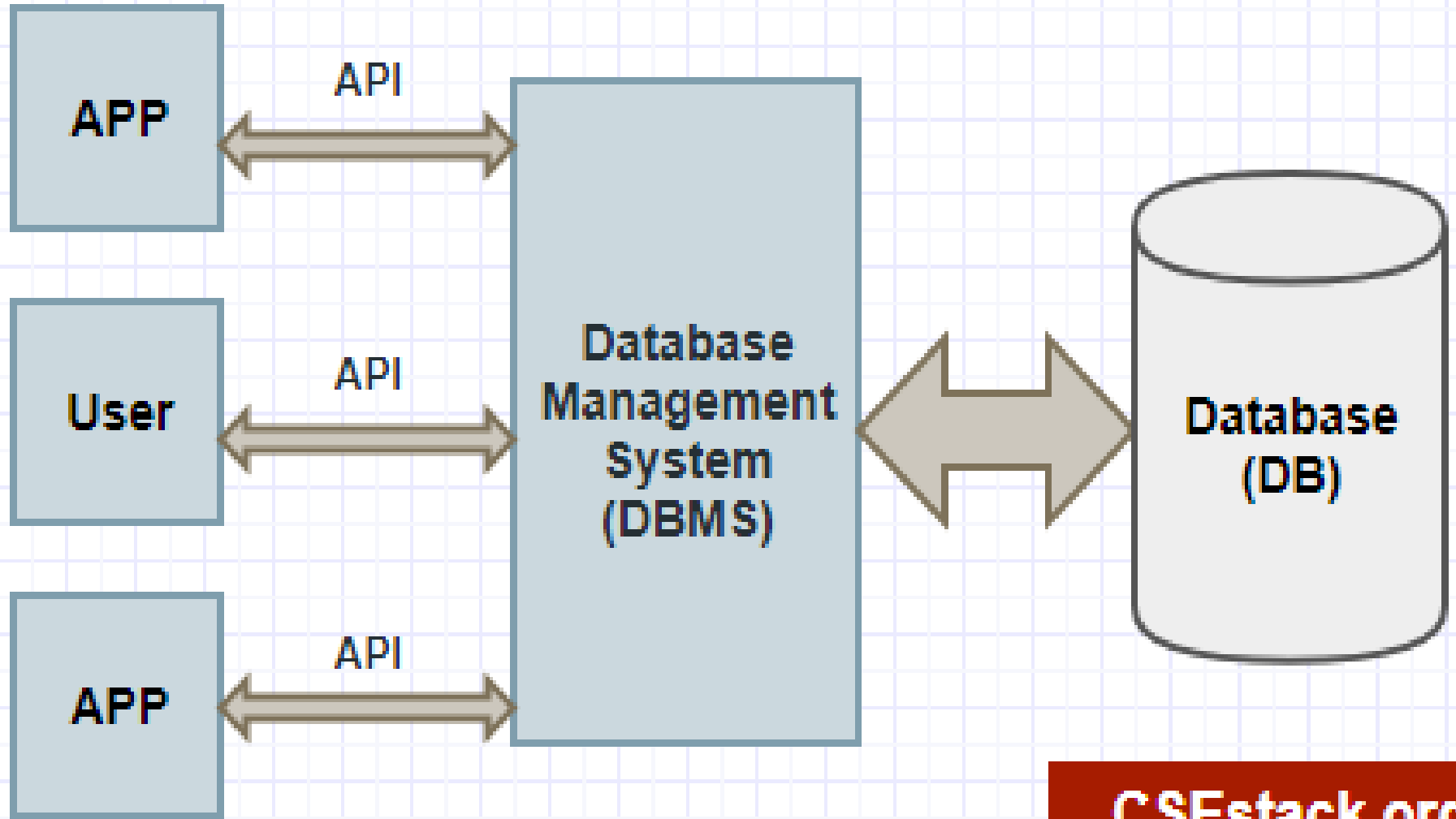
A Database is

- 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, with one sole purpose, storing data

- 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 mange** 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**
  - system administrator sets up hardware and deploys the operating system for the database server, then the DBA **installs the database software** and configures it for use
  - **updates and patches** are required, the DBA handles this on-going maintenance
  - And if a new server is needed, the DBA handles the **transfer of data** from the existing system to the new platform

- **Data Extraction, Transformation, and Loading**

- **Specialized Data Handling**
  - Managing a very large database (**VLDB**) may require higher-level skills and additional monitoring and tuning to maintain efficiency

- **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**

Authentication

- control who has **access** and what type of access they are allowed

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

Location

United States

Popular Jobs	Average Salary	Salary Distribution

Database Administrator
5,243 salaries reported
Database Administrator Jobs

$94,788 per year

$35,000 $182,000

SQL Developer
1,496 salaries reported
SQL Developer Jobs

$85,518 per year

$35,000 $182,000

Senior Database Administrator
958 salaries reported
Senior Database Administrator Jobs

$106,480 per year

$35,000 $182,000

Source: Indeed.com

Walkthrough the Training

- It takes **14 Weeks** (3 months and two weeks)

- 100% **practical** and **real-life** examples

- **Learner** based instructions

- Corse 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 3-4 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

  ➡ Weekend – **Classroom**

  ➡ Weekdays (6PM - 8PM) – **Online**