

# SQL DEVELOPER

Master SQL for data analysis  
and real-world projects.



## Diverse Tech Topics

- 
- Database - SQL

**ENROLL NOW**

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[www.flairtechnologies.in](http://www.flairtechnologies.in)

# PROGRAM HIGHLIGHTS



## Comprehensive Curriculum

Covers SQL fundamentals, queries, joins, procedures, optimization, and reporting for management.



## Learning Notes for Each Session

Session-wise learning notes provide structured summaries of key concepts, tools, and techniques for efficient review and retention.



## Advanced Concepts & Tools with Collaborative Environment

Gain expertise in advanced concepts via interactive, collaborative, and practical learning sessions



## Hands-On Projects with Expert Instructors

Real-time projects with in-depth training on SQL queries, joins, procedures, optimization, and reporting using datasets.



## Mock Interviews & Resume Preparation

We take mock interviews and provide you feedback which helps you how to prepare for real Interviews also we help you in resume preparation based on your skills and experience.



## 1:1 Meeting with our experts

You can have 1:1 meeting to discuss your career path and guidance on how to prepare your resume and job placements.

01

02

03

04

05

06

## INTRODUCTION TO SQL

- Flat Files vs RDBMS (Why SQL over Excel/CSV)
- Introduction to Structured Query Language
- Importance of SQL in Data Analysis & BI
- Data Types (INT, VARCHAR, DATE, FLOAT, etc.)
- Tables, Attributes, and Records
- Installation & Configuration of SQL Server / PostgreSQL / MySQL

## SQL COMMAND CATEGORIES

### DDL - Data Definition Language

- Create, Alter, Drop, Truncate

### DML - Data Manipulation Language

- Insert, Update, Delete, Merge

### DQL – Data Query Language

- Select and its variations

### TCL - Transaction Control Language

- Commit, Rollback, Savepoint

### DCL – Data Control Language

(Optional for Analysts)

- Grant, Revoke

## SQL CONSTRAINTS

- Primary Key
- Foreign Key
- Unique
- Not Null
- Default
- Check
- Composite Keys

## SUBQUERIES

- Introduction to Subqueries
- Single-row and Multi-row Subqueries
- Correlated vs Non-Correlated Subqueries
- Scalar Subqueries in SELECT/WHERE

## FUNCTIONS IN SQL

### Aggregate Functions

- SUM(), AVG(), MIN(), MAX(), COUNT()

### String Functions

- LEN(), UPPER(), LOWER(), LTRIM(), RTRIM(), SUBSTRING(), REPLACE(), CHARINDEX()

### Date and Time Functions

- GETDATE(), DATEADD(), DATEDIFF(), YEAR(), MONTH(), DAY(), FORMAT()

### Conversion Functions

- CAST(), CONVERT()

## JOINS IN SQL

- Why Joins are Needed
- Inner Join
- Left Join
- Right Join
- Full Outer Join
- Cross Join
- Self Join
- Anti Join (NOT EXISTS, EXCEPT, LEFT JOIN WHERE NULL)
- Real-world Join Scenarios



## WINDOW & ANALYTICAL FUNCTIONS

- OVER( ) Clause
- PARTITION BY, ORDER BY inside window
- ROW\_NUMBER()
- RANK(), DENSE\_RANK()
- NTILE()
- LEAD(), LAG()
- Running Totals, Moving Averages

## DATA MODELING & BEST PRACTICES

- Star vs Snowflake Schema
- Fact and Dimension Tables
- Surrogate Keys and Natural Keys
- Normalization & Denormalization
- Naming Conventions and Standards

## VIEWS AND INDEXES

### Views

- Creating and Using Views
- Updatable vs Non-Updatable Views
- Materialized Views (if supported)

### Indexes

- Clustered vs Non-Clustered
- Composite Index
- When and Why to Use Indexes
- Index Impact on Performance

## STORED PROCEDURES AND TRIGGERS

### Stored Procedures

- CREATE, EXEC, Parameters
- Use in Data Pipelines / Reporting
- Pros and Best Practices

### Triggers

- After INSERT/UPDATE/DELETE
- Use Cases in Auditing or Data Validations

## COMMON TABLE EXPRESSIONS (CTEs)

- Syntax and Structure
- Recursive CTEs
- CTE vs Subquery Performance
- Multi-CTE with Joins and Aggregations

## ADVANCED & ANALYTICAL USE CASES

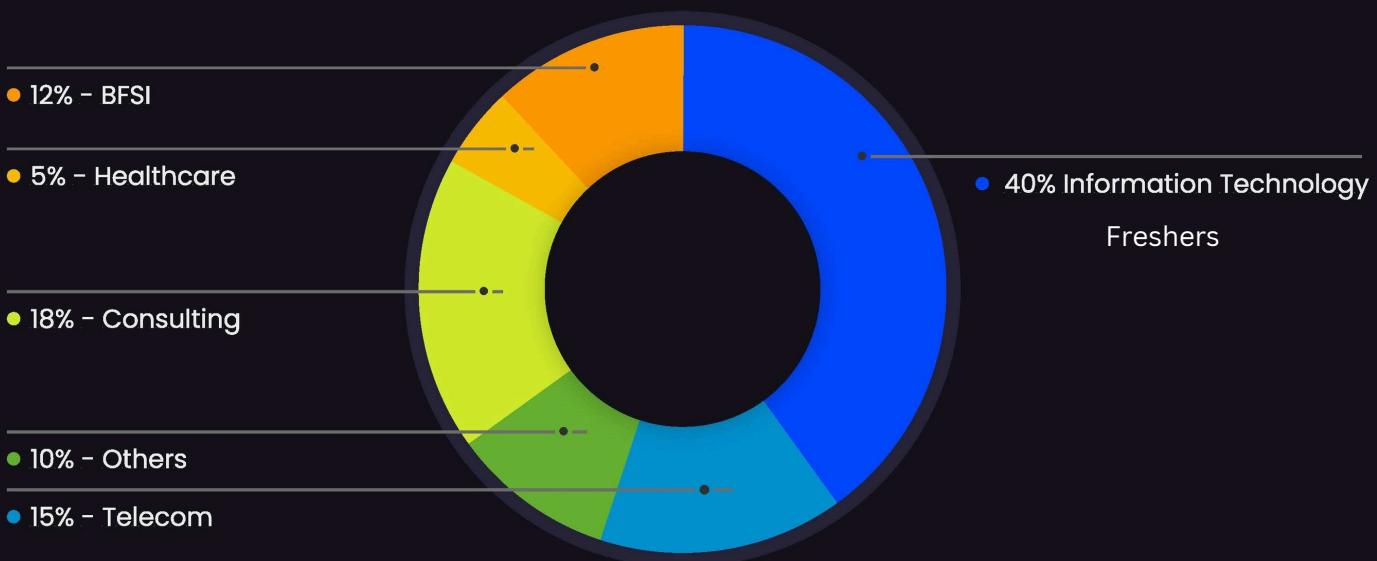
- Using SQL for KPI Analysis
- Cohort Analysis
- Funnel Analysis
- Customer Segmentation Queries
- Market Basket Analysis (via Joins/Subqueries)
- Error Handling using TRY...CATCH (SQL Server)

## REAL-WORLD REPORTING & ANALYSIS TASKS

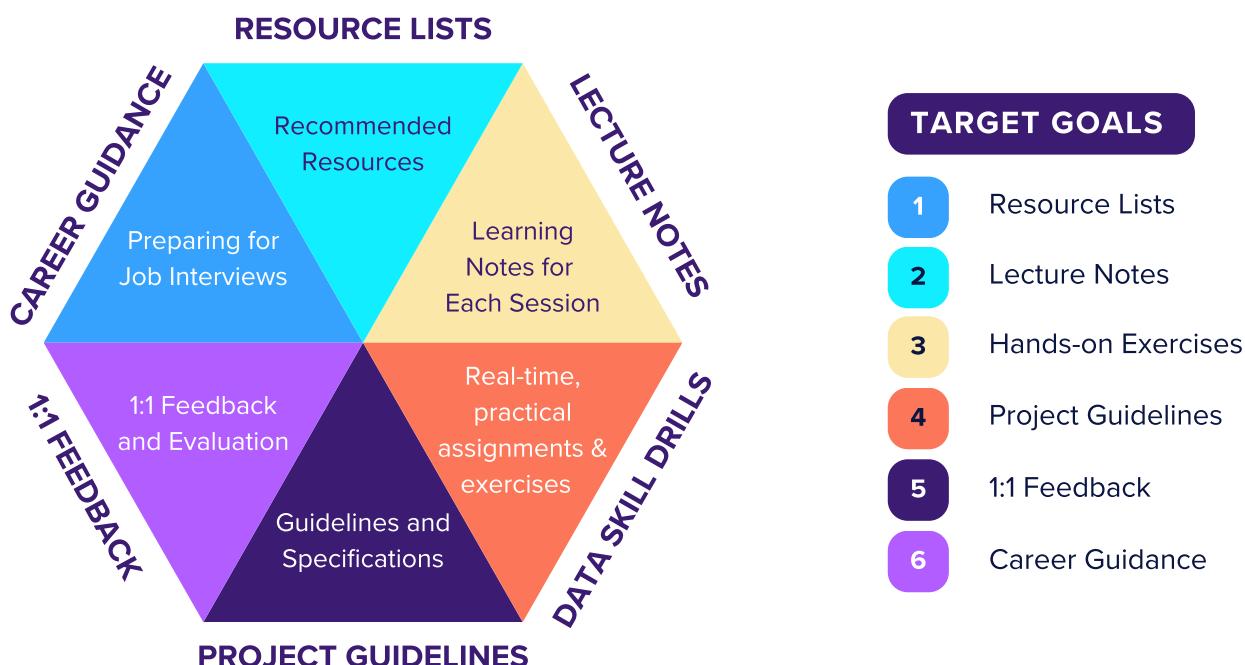
- Monthly, Quarterly, Yearly Trends
- YoY, MoM Growth Analysis
- Top N/Bottom N Products or Regions
- Contribution % Analysis (Subtotals)
- Data Cleansing with SQL
- SQL for Power BI/Tableau Backends



## Industries Our Learners Come From



## WHAT YOU ACHIEVE



We are pioneers in providing trainings by certified Instructors who are highly qualified with decades of experience in the subject matter. Flair Technologies was expertise in providing quality Industry Oriented Training with Interview Preparation and Placement Assistance.

## GOALS ACHIVED

1

Expertise in SQL

2

Ready for Interview

3

Placement in MNC

# FLAIR TECHNOLOGIES

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FLALR TECHNOLOGIES was founded in 2014 With the mission to provide high quality software Trainings. Despite facing challenges due to full-time commitments, our enthusiasm for teaching never waned.

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**Drop Us A Line**

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**Call Us Now**

**Our Location**

**Bengaluru, India**

