

CSE – 302

Database Management System Sessional

INDEX

INDEX

- A index is a pointer to data in a table, similar to an index in the back of a book.
- It is a **special lookup table** that the database search engine can use to speed up data retrieval.
- Indexes can be created or dropped with no effect on the data.
- Make search faster.

CREATE INDEX

Basic Syntax:

```
CREATE INDEX index_name ON table_name;
```

Single Column Index:

```
CREATE INDEX index_name ON table_name  
(column_name);
```

Example:

```
CREATE INDEX idx_lastname_Customer ON Customer  
(LastName);
```

INDEX CONT...

Composite Indexes:

CREATE INDEX index_name on table_name (column1, column2);

Example:

CREATE INDEX idx_Customer ON Customer (LastName, FirstName);

INDEX CONT...

Unique Indexes:

```
CREATE UNIQUE INDEX index_name on table_name  
(column_name);
```

Example:

```
CREATE UNIQUE INDEX idx_lastname_Customer  
ON Customer (LastName);
```

```
CREATE UNIQUE INDEX idx_Customer ON Customer  
(LastName, FirstName);
```

DROP INDEX

Basic Syntax:

```
DROP INDEX index_name;
```

Example:

```
DROP INDEX idx_Customer ;
```

CAUSE OF INDEX AVOID

- Should not be used on small tables.
- Columns that are frequently manipulated should not be indexed.
- Columns that contain a high number of NULL values.

THANK YOU