

# Query Tuning in the Real World

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**Jared Westover**

Data Specialist

@westoverjared [sqlhabits.com](http://sqlhabits.com)



# Introduction



## Real-world examples

### Covering queries

- Include all the columns

### Filtered indexes

- Limitations

### Index column order

- Does it matter?

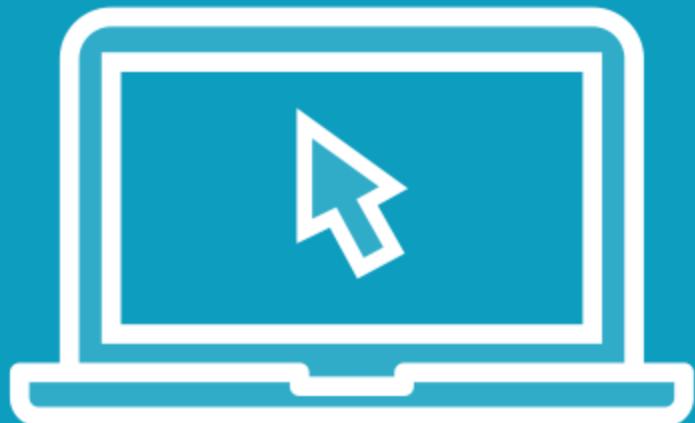
## Next steps to take



**Practice your skills in the real world**



## Demo

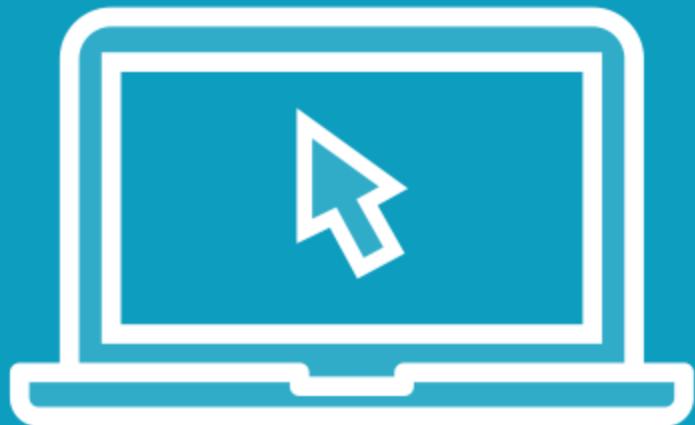


### Create a covering index

- Drop a duplicate index



Demo

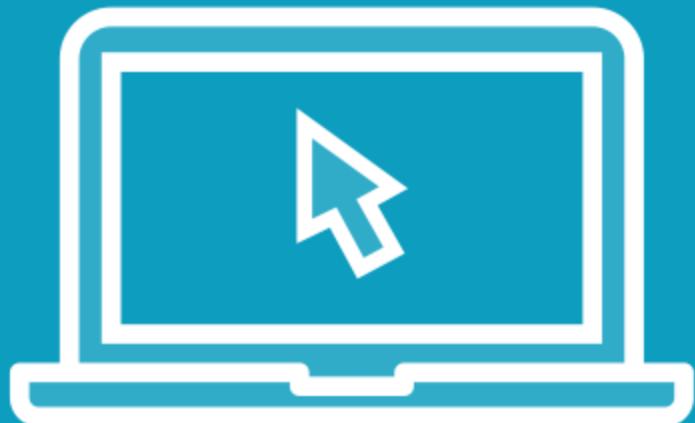


## Add a filtered index

- Limitations



## Demo



**Does index column order matter?**

- Let's find out





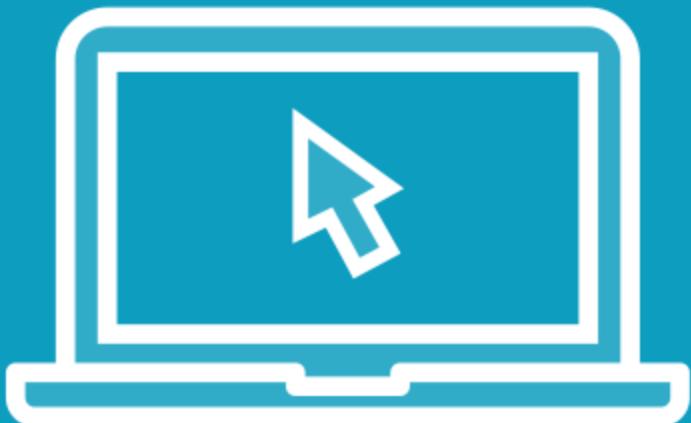
# **Helpful Pluralsight Course**

## **SQL Server: Indexing for Performance**

Kimberly L. Tripp



Demo



## Compress an index

- Additional resource





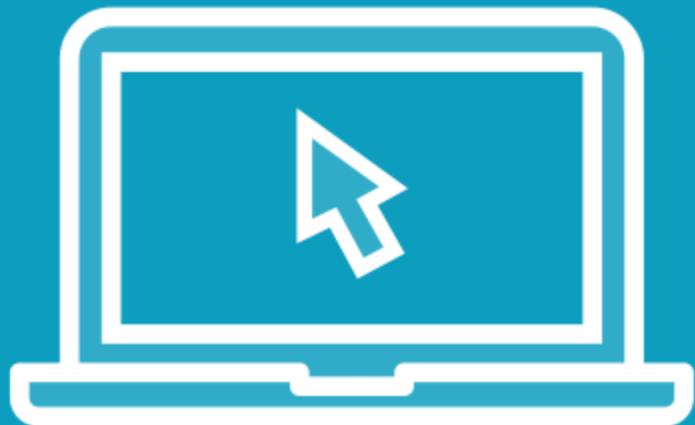
# **Helpful Pluralsight Course**

## **Improve SQL Server Performance with Compression**

Kathi Kellenberger



Demo

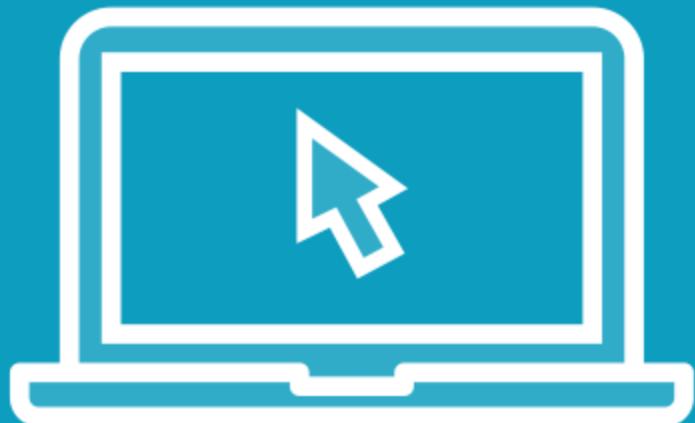


## Rethinking a cursor

- Set-based operation



# Demo



## Scalar user-defined functions

- SQL Server 2019 improvements





**Where should you start?**

- Take baby steps

**Find the top 3 low-performing queries**

- Glenn Berry scripts
- Ask questions

**Develop an action plan**

**Determine page count**

- STATISTICS IO

**Can you reduce the pages?**

**Create indexes and add filters**



# Thank you!

