



# Overfitting and Underfitting

# Overfitting and Underfitting



Student A



Student B



Student C

# Overfitting and Underfitting



**Student A**



Student B



Student C

- Distracted
- Does not perform well in class

# Overfitting and Underfitting



Student A

- Distracted
- Does not perform well in class



Student B

- Memorizes Concepts
- Best performer in class



Student C

# Overfitting and Underfitting



Student A

- Distracted
- Does not perform well in class



Student B

- Memorizes Concepts
- Best performer in class



Student C

- Understands concepts
- Decent performer in class



# **Surprise Test results:**

## Understanding based Q's

# Overfitting and Underfitting



Student A



Student B



Student C

- Random guesses
- **50% overall**

# Overfitting and Underfitting



Student A

- Random guesses
- **50% overall**



Student B

- Caught off guard
- **70% overall**



Student C



# Overfitting and Underfitting



Student A

- Random guesses
- **50% overall**



Student B

- Caught off guard
- **70% overall**



Student C

- Solves methodically
- **90% overall**

# Overfitting and Underfitting



Student A

- Random guesses
- 50% overall



Student B

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Student C

- Solves methodically
- 90% overall

**Good Fit Model**

# Overfitting and Underfitting



Student A

- Random guesses
- 50% overall



Student B

- Caught off guard
- 70% overall

**Overfitting Model**



Student C

- Solves methodically
- 90% overall

**Good Fit Model**

# Overfitting and Underfitting



Student A

- Random guesses
- 50% overall

**Underfitting Model**



Student B

- Caught off guard
- 70% overall

**Overfitting Model**



Student C

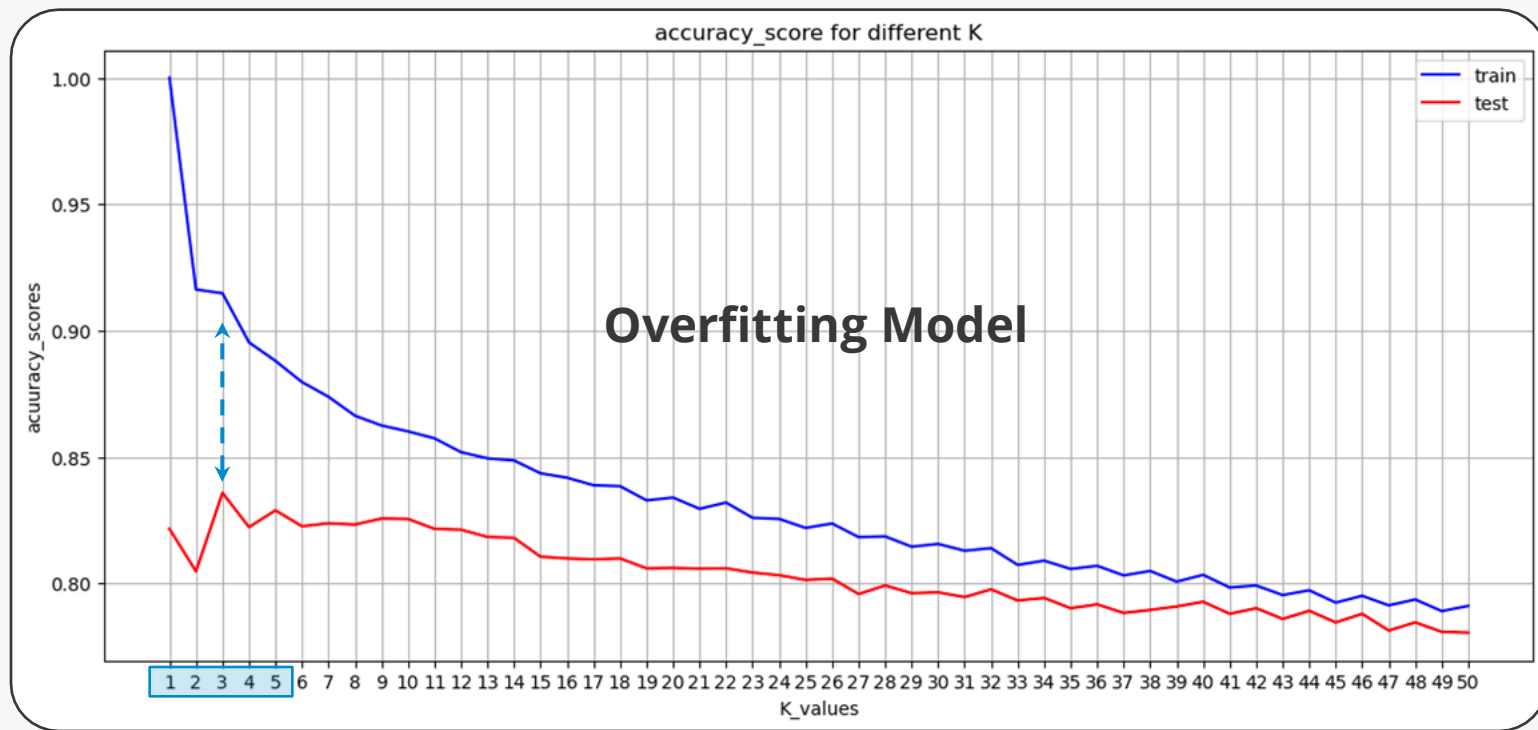
- Solves methodically
- 90% overall

**Good Fit Model**

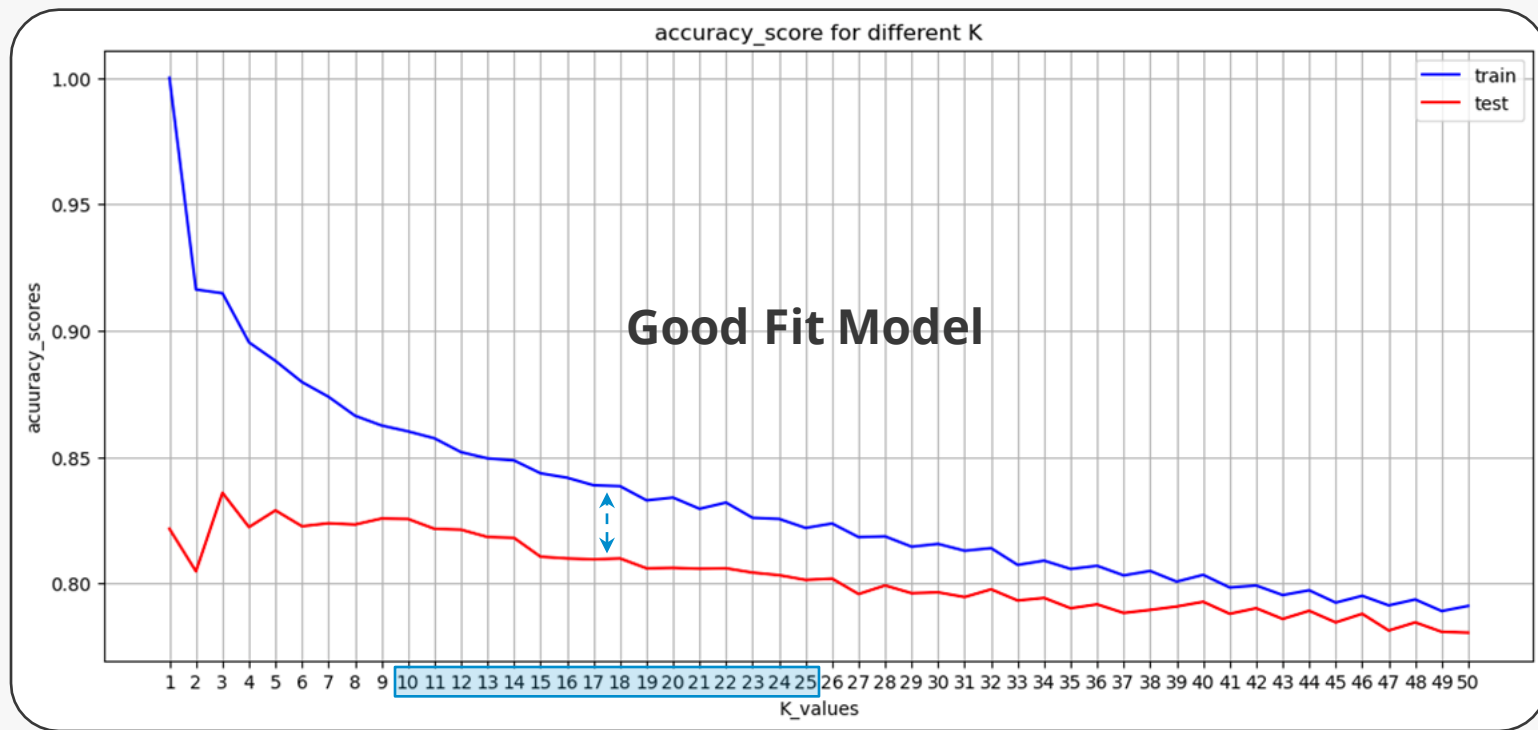


Comparing these results  
with our KNN model

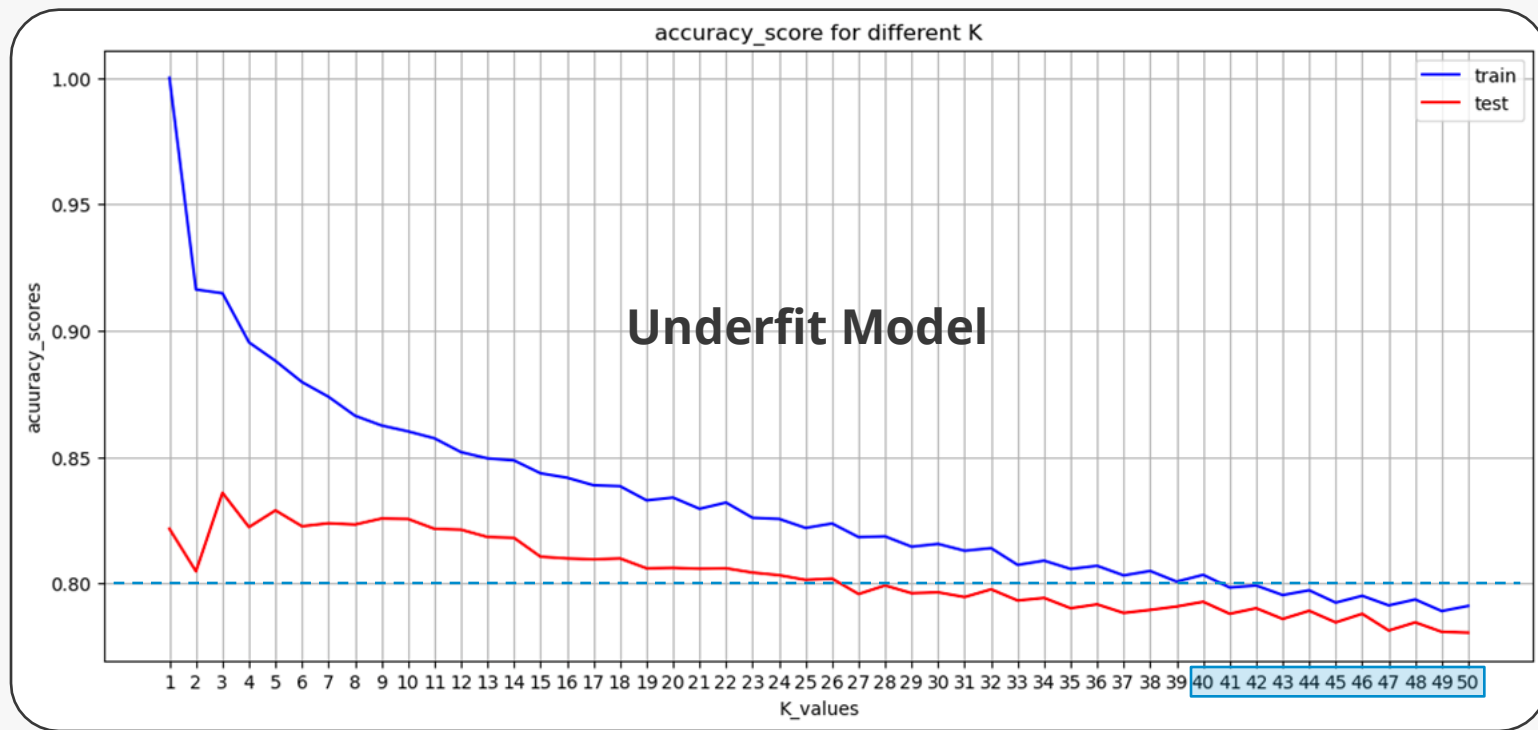
# Types of Models



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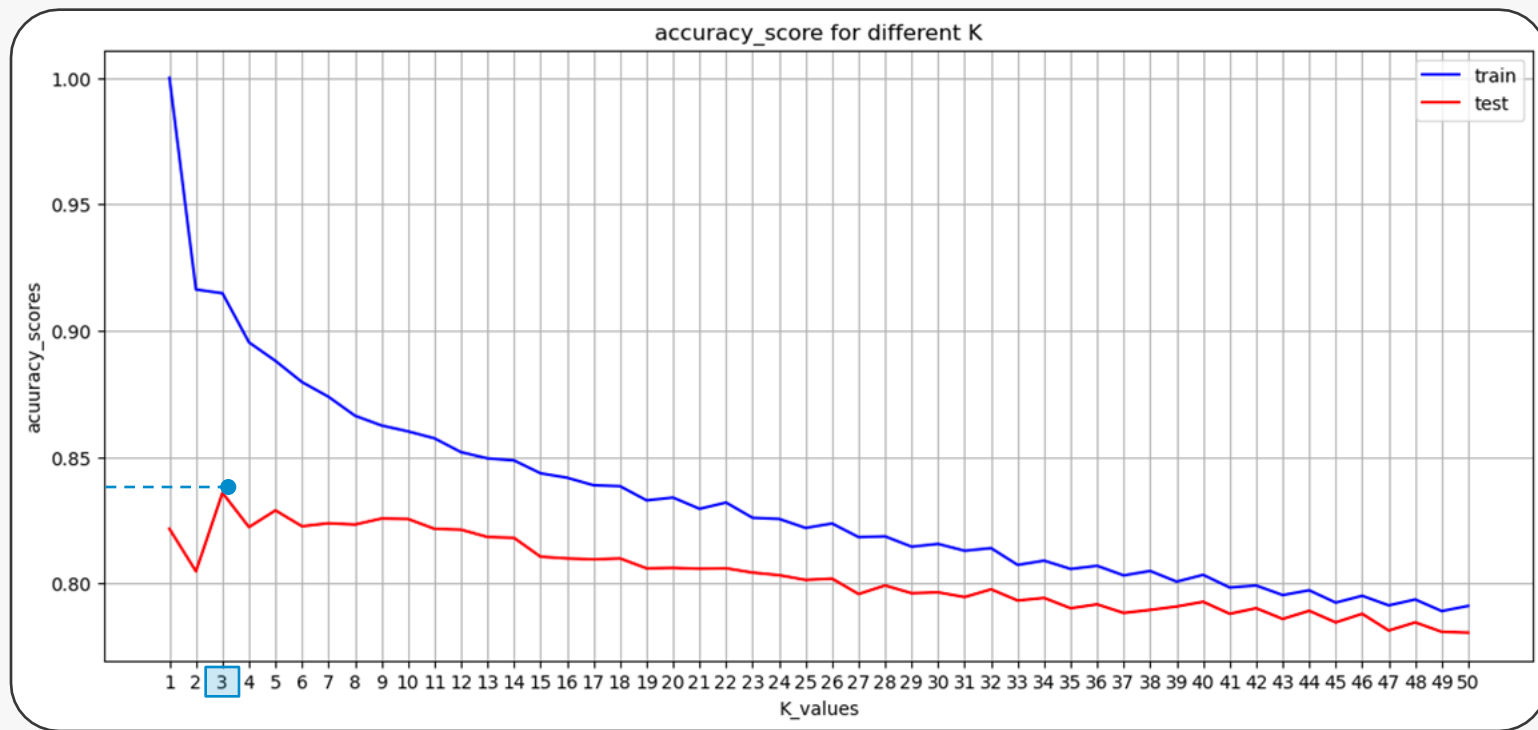






Which model should we  
choose for Synergix?

# Best-Performing Model



# Consistent Model

