# Introduction to Apache Spark

# After this video you will be able to..

- List the main motivations for the development of Spark
- Draw the Spark stack as a layer diagram
- Explain the functionality of the components in the Spark stack

# Why Spark?

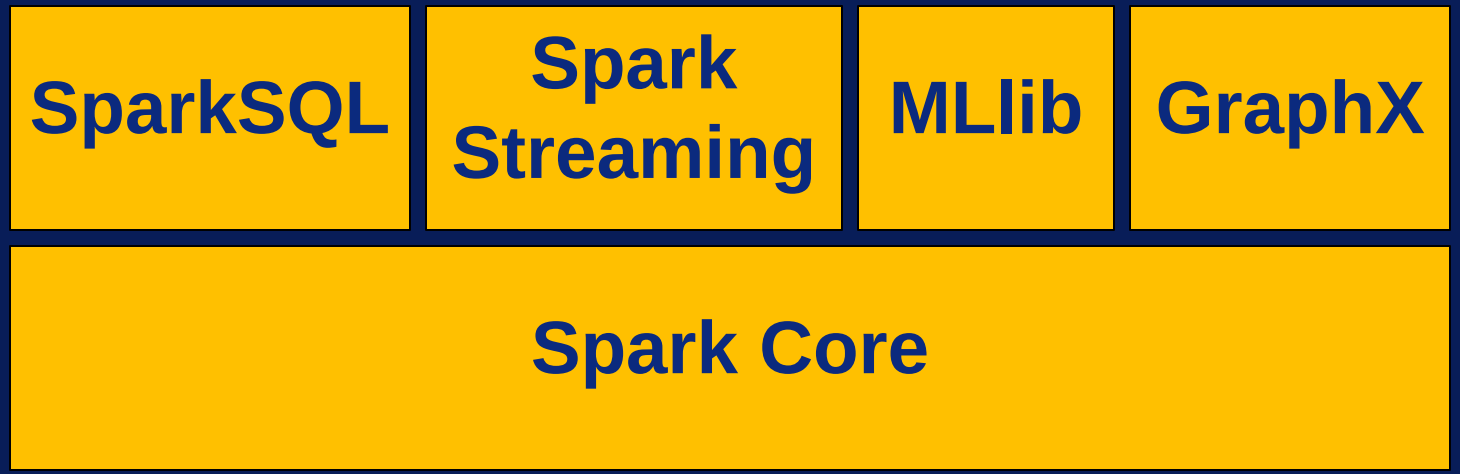
## Hadoop MapReduce Shortcomings

- Only for Map and Reduce based computations
- Relies on reading data from HDFS
- Native support for Java only
- No interactive shell support
- No support for streaming

# Basics of Data Analysis with Spark

- Expressive programing model
- In-memory processing
- Support for diverse workloads
- Interactive shell

# The Spark Stack



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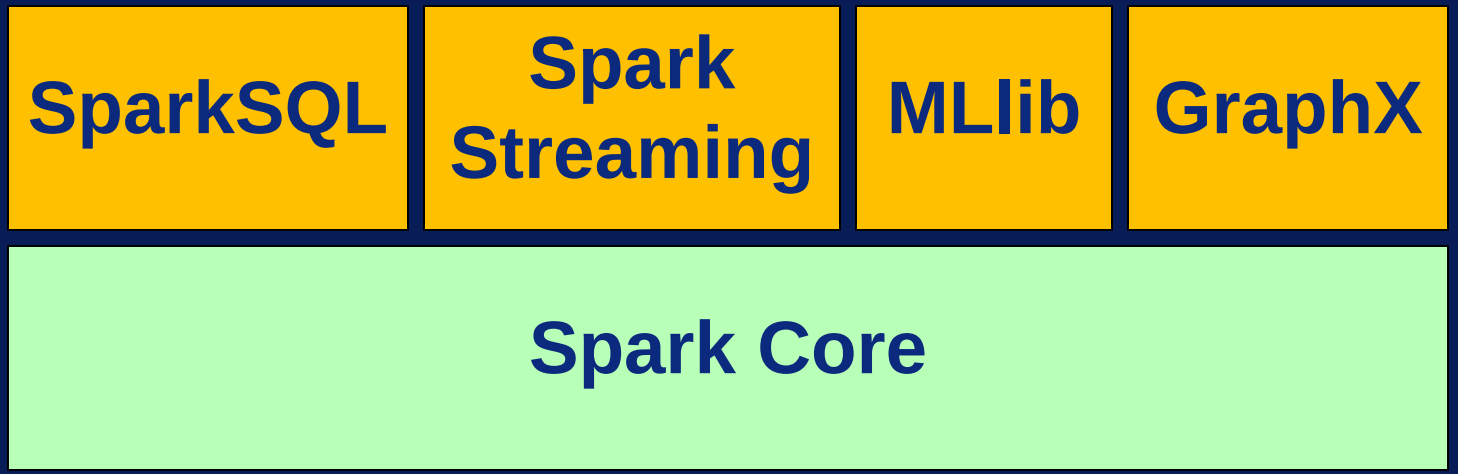

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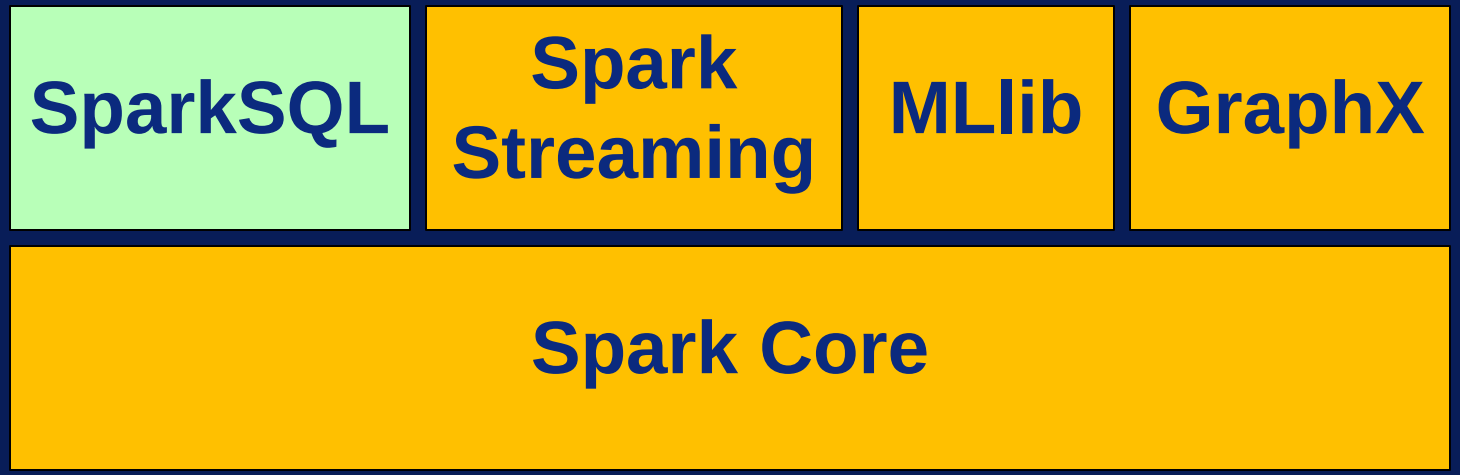

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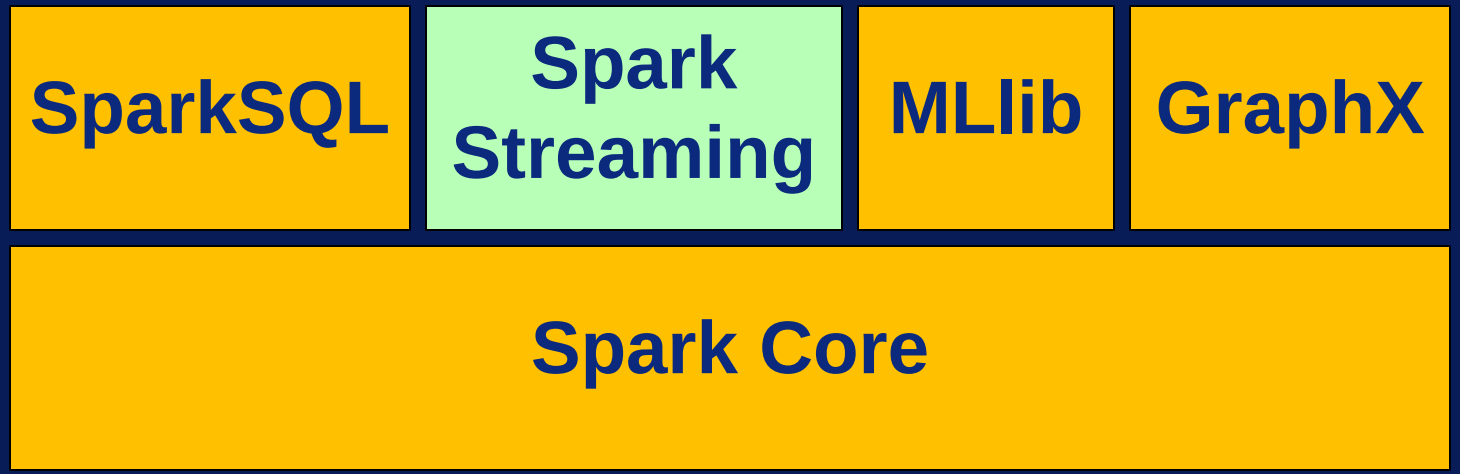

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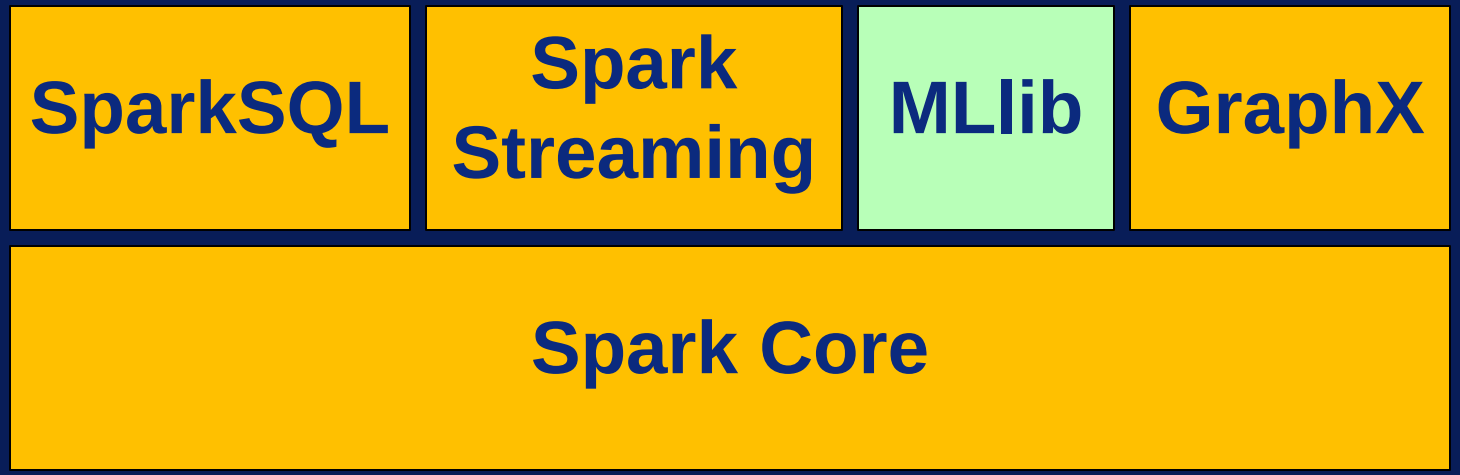

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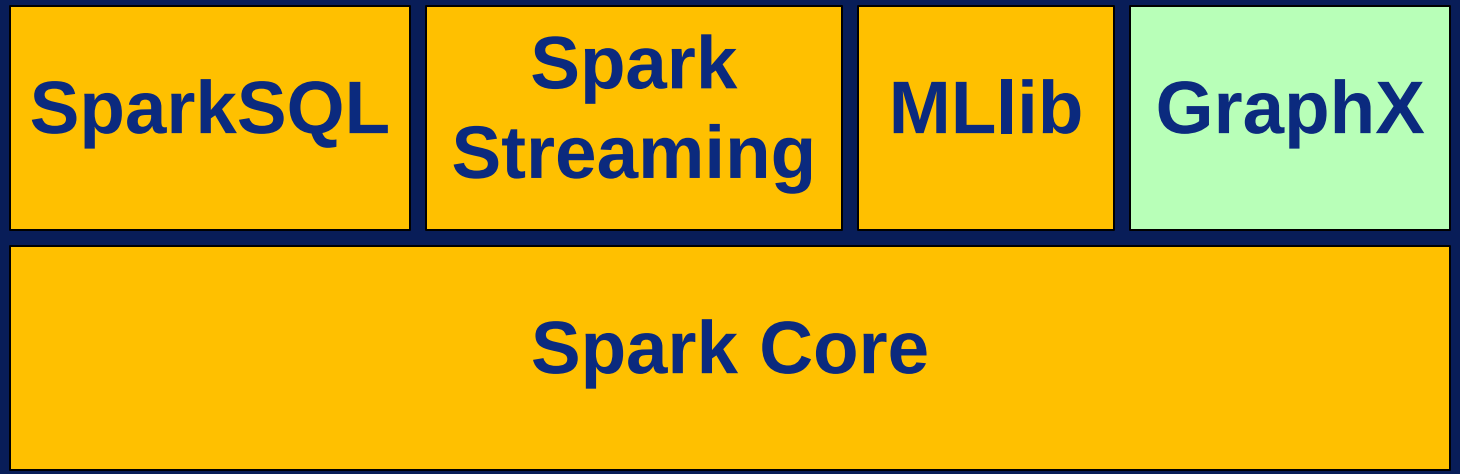

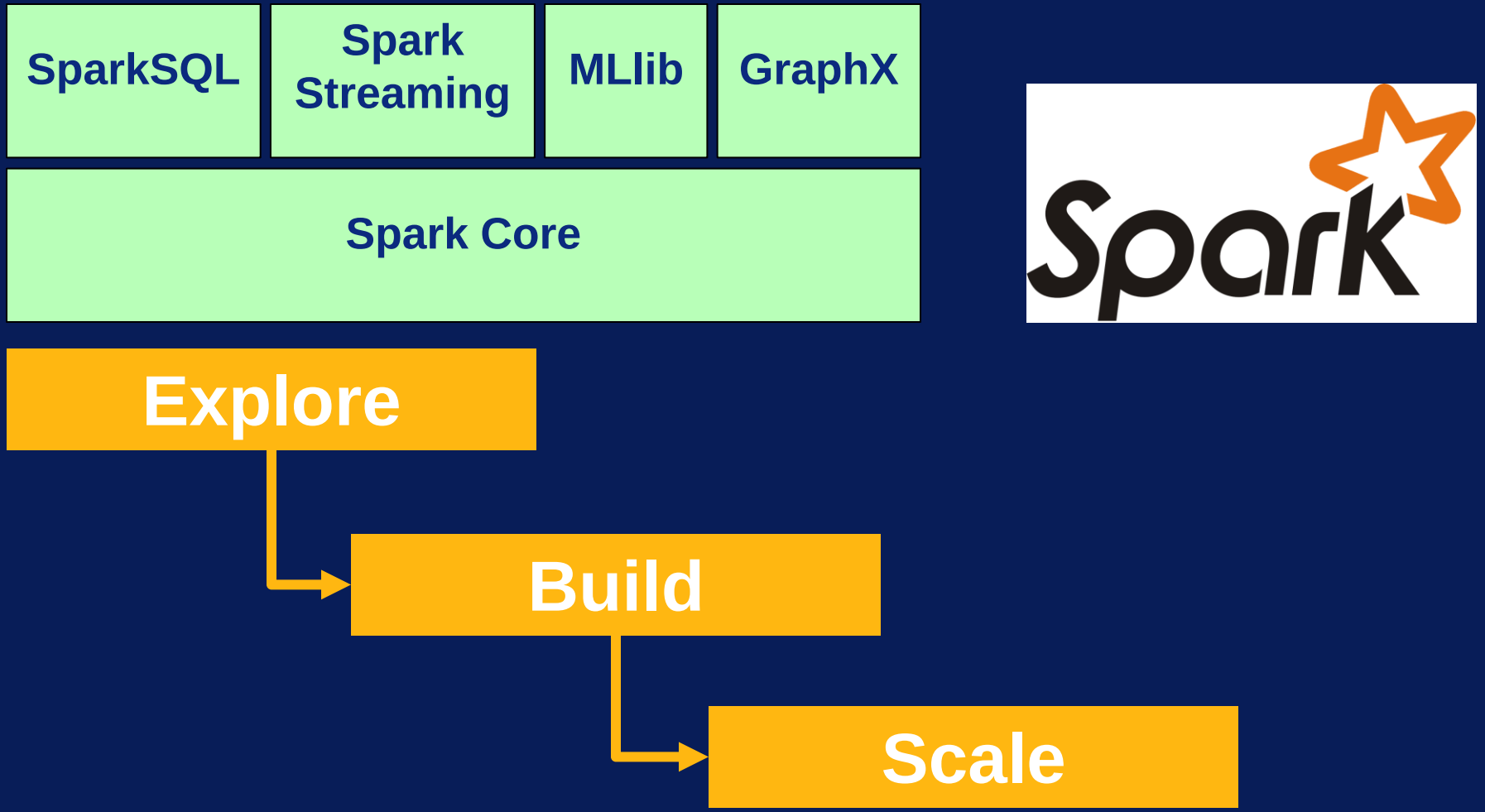
SparkSQL
Spark Streaming
MLlib
GraphX
Spark Core
Spark
Explore
Build
Scale