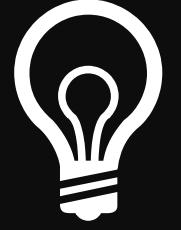


# Software Engineering

 tips

## Serialization Concepts

- Stream
- Media
- Object Graph
- Serialization
- Benefits

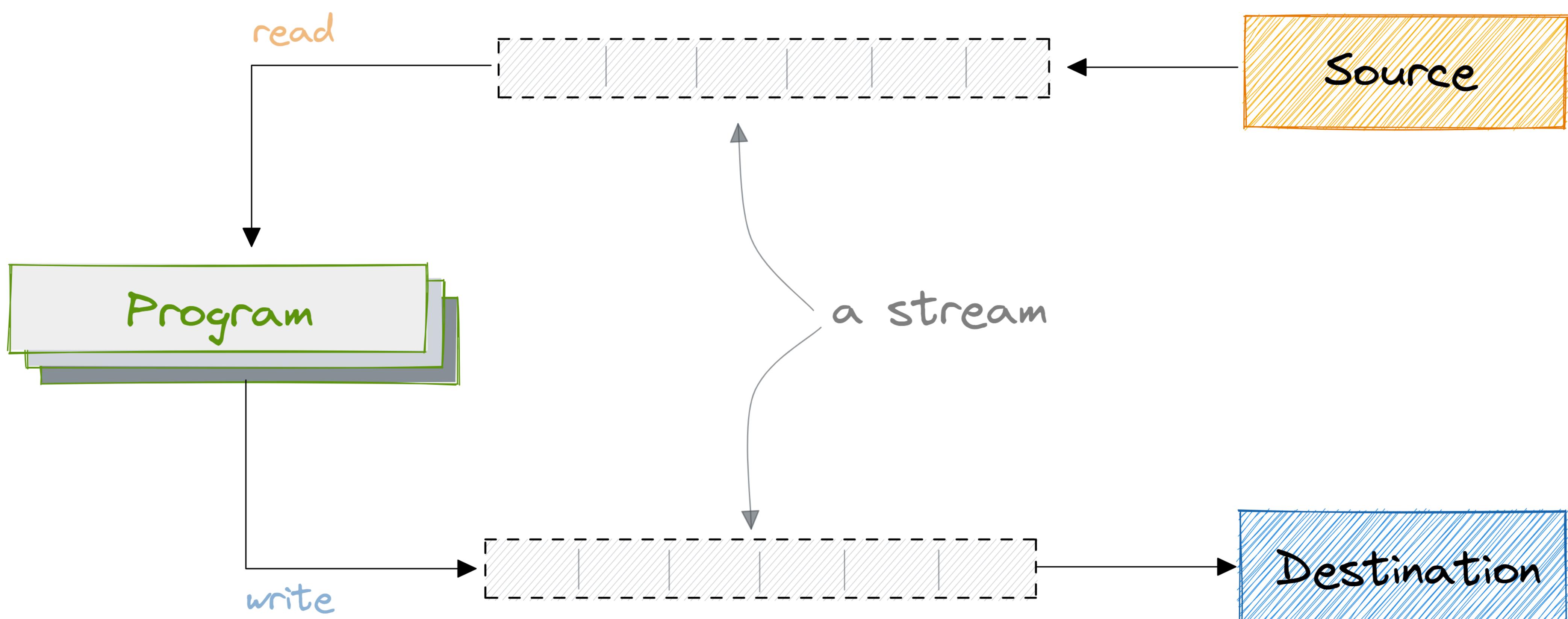
SWIPE →



Nabi Karampour

# Stream

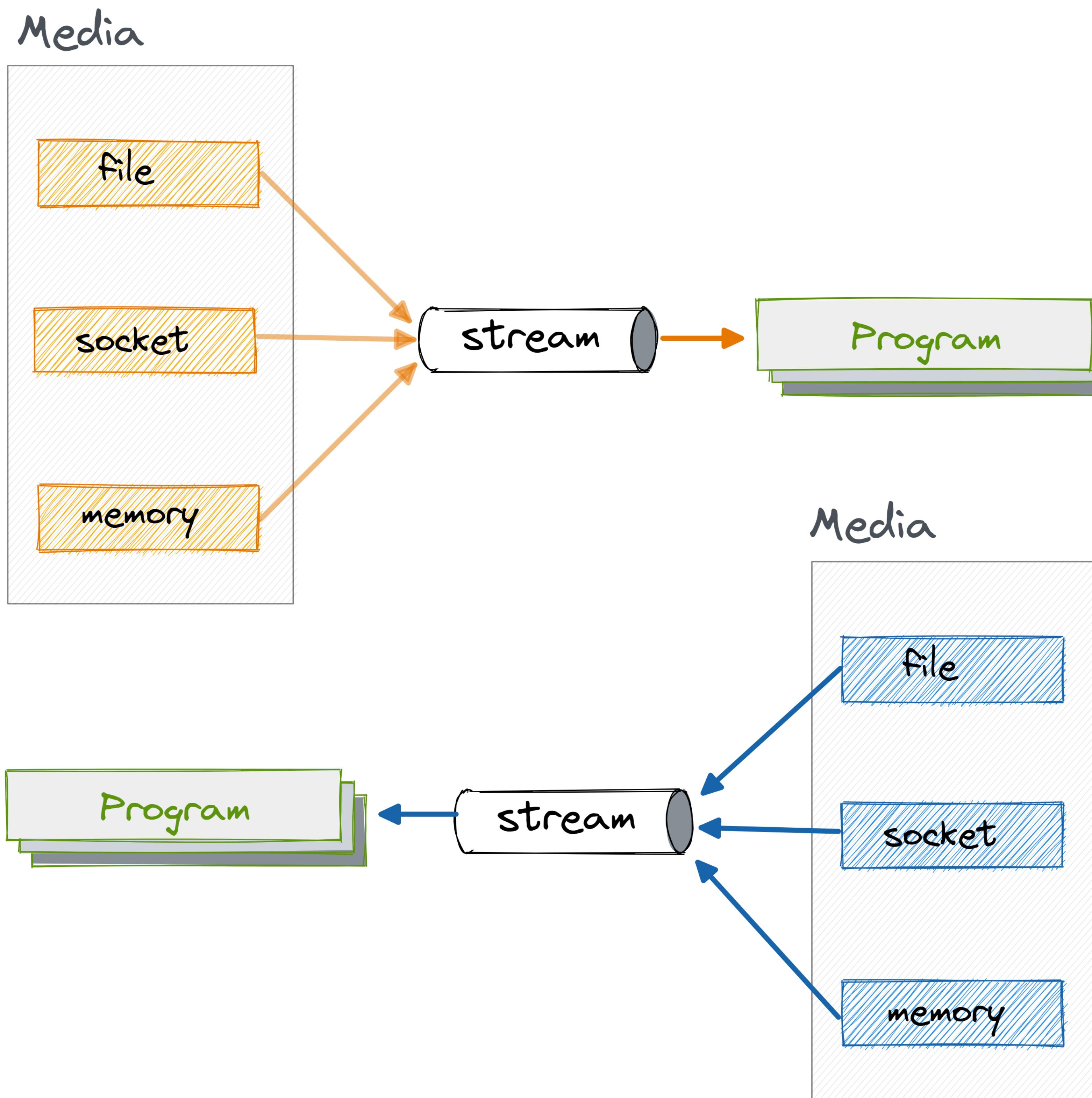
**is a sequence of bytes that can be read or written sequentially.**



It provides a convenient way to access and manipulate data stored in a variety of sources, such as files, memory, network connections, or other input/output devices.

# Media

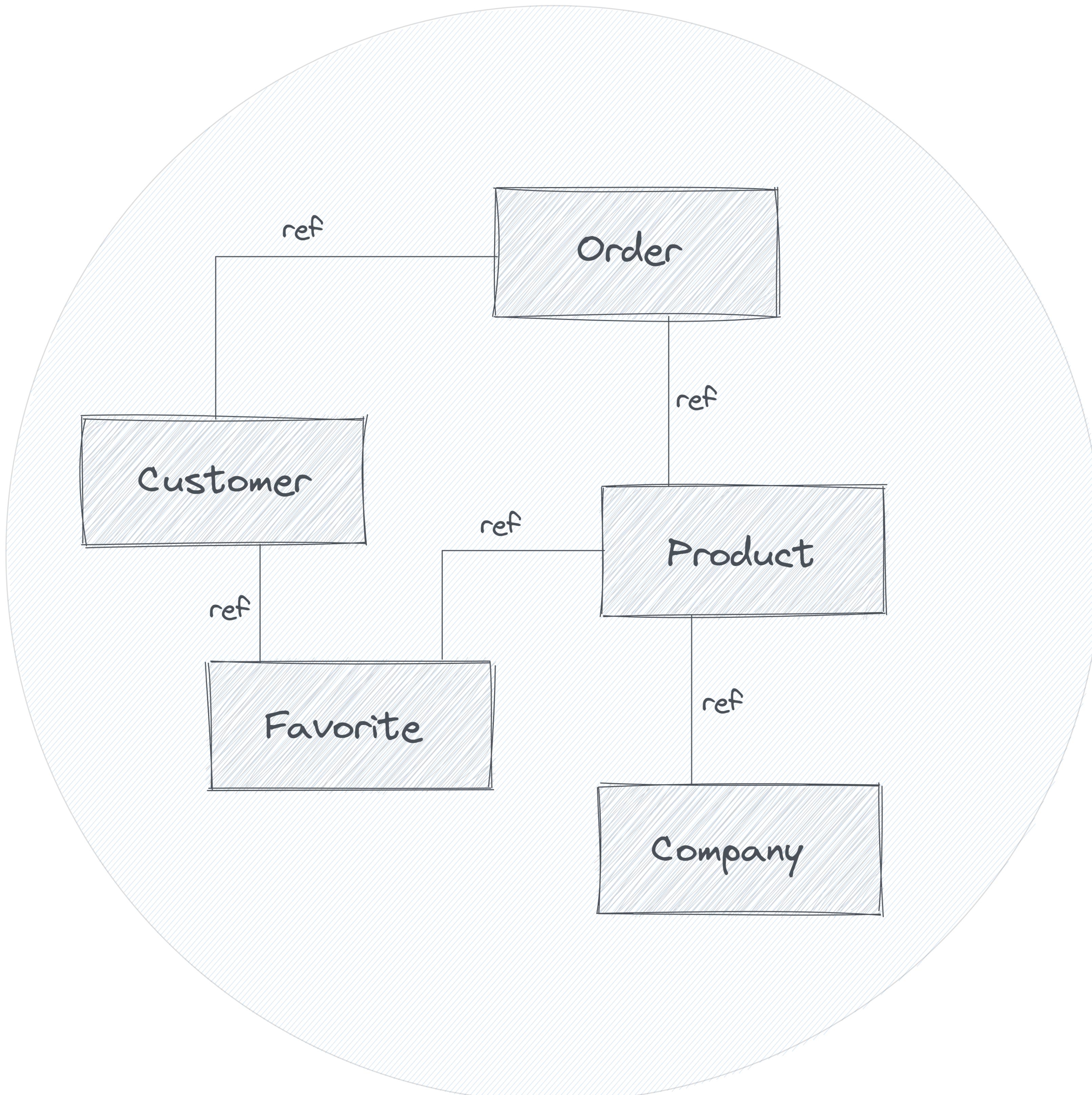
## is a place where we store the data in the form of bytes.



Files such as XML, ZIP, JSON, JPEG, and etc.

# Object Graph

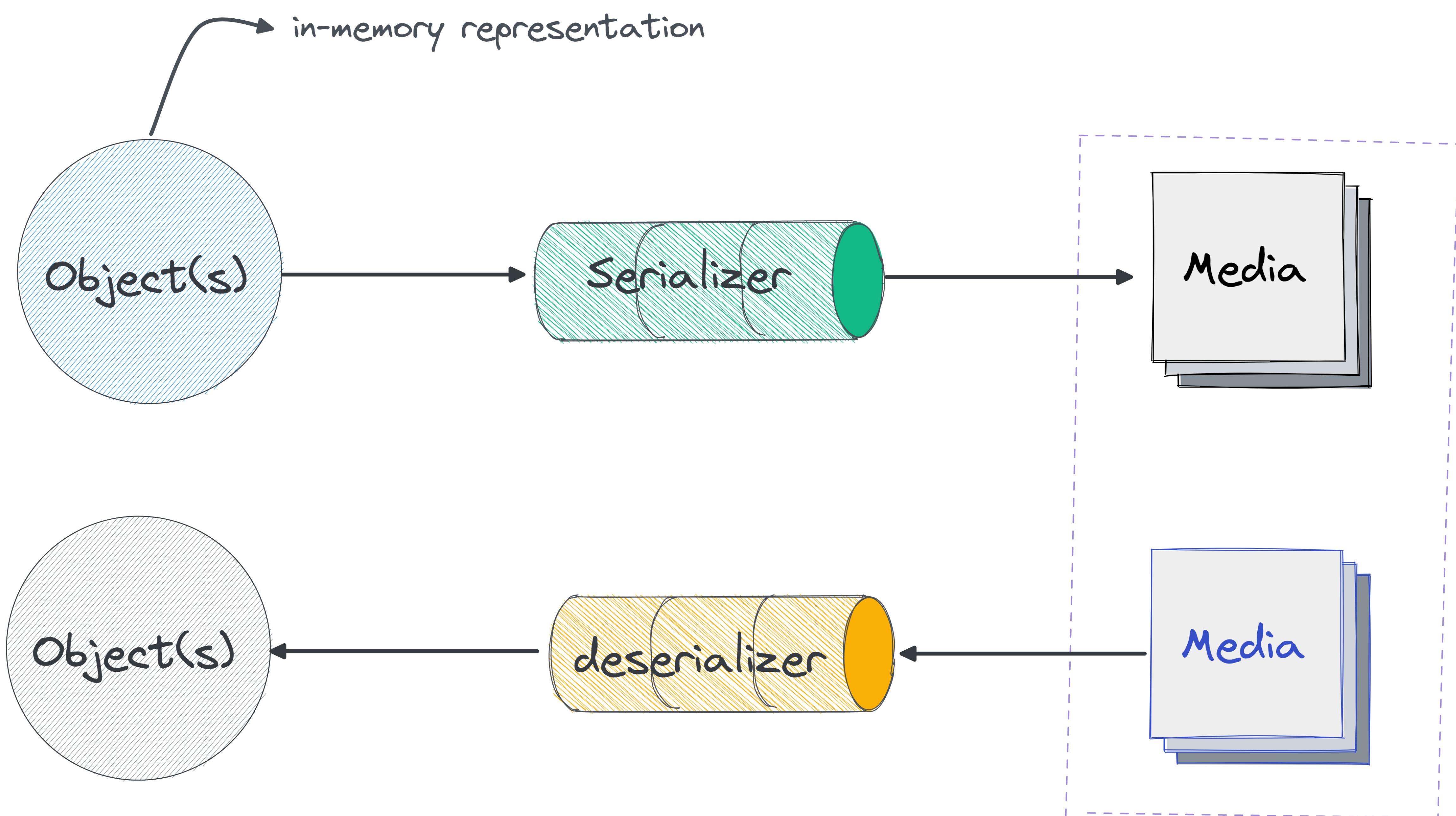
represents the state of a program's data and relationships between objects.



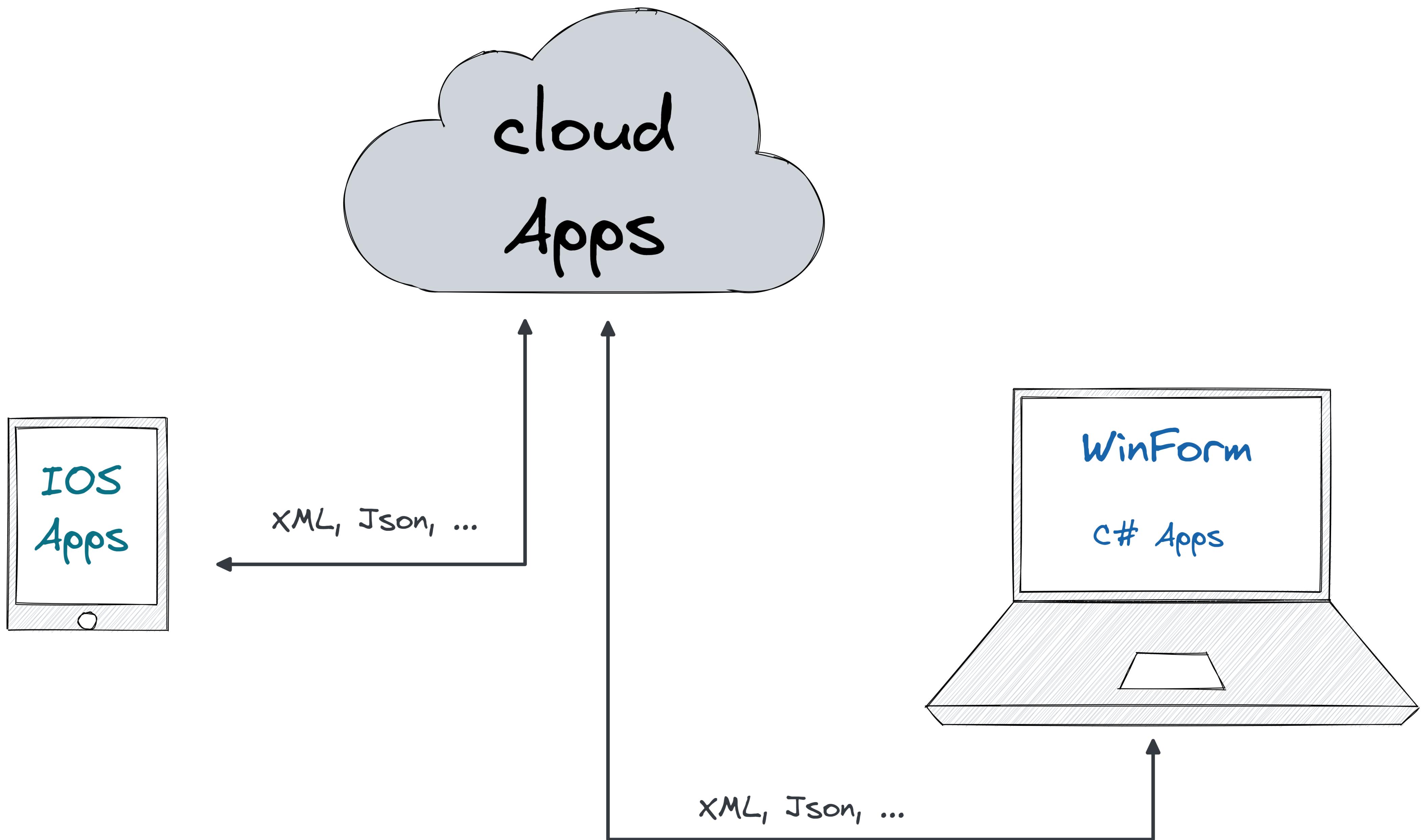
example of the in-memory representation of the objects,  
which is known as an Object Graph.

# Serialization

is a process of converting the **state** of an object into a format that can be easily stored or transmitted.

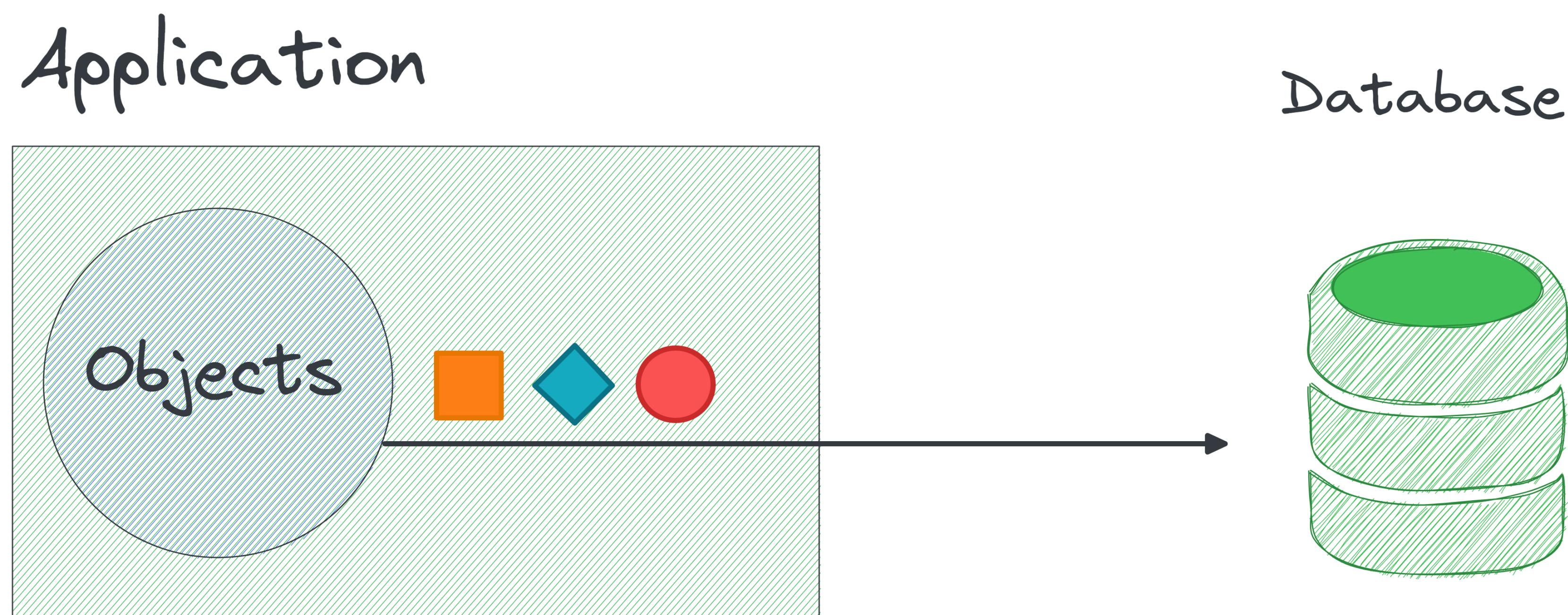


# Benefits. Platform Independence



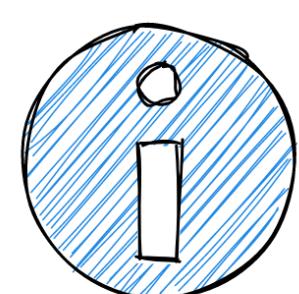
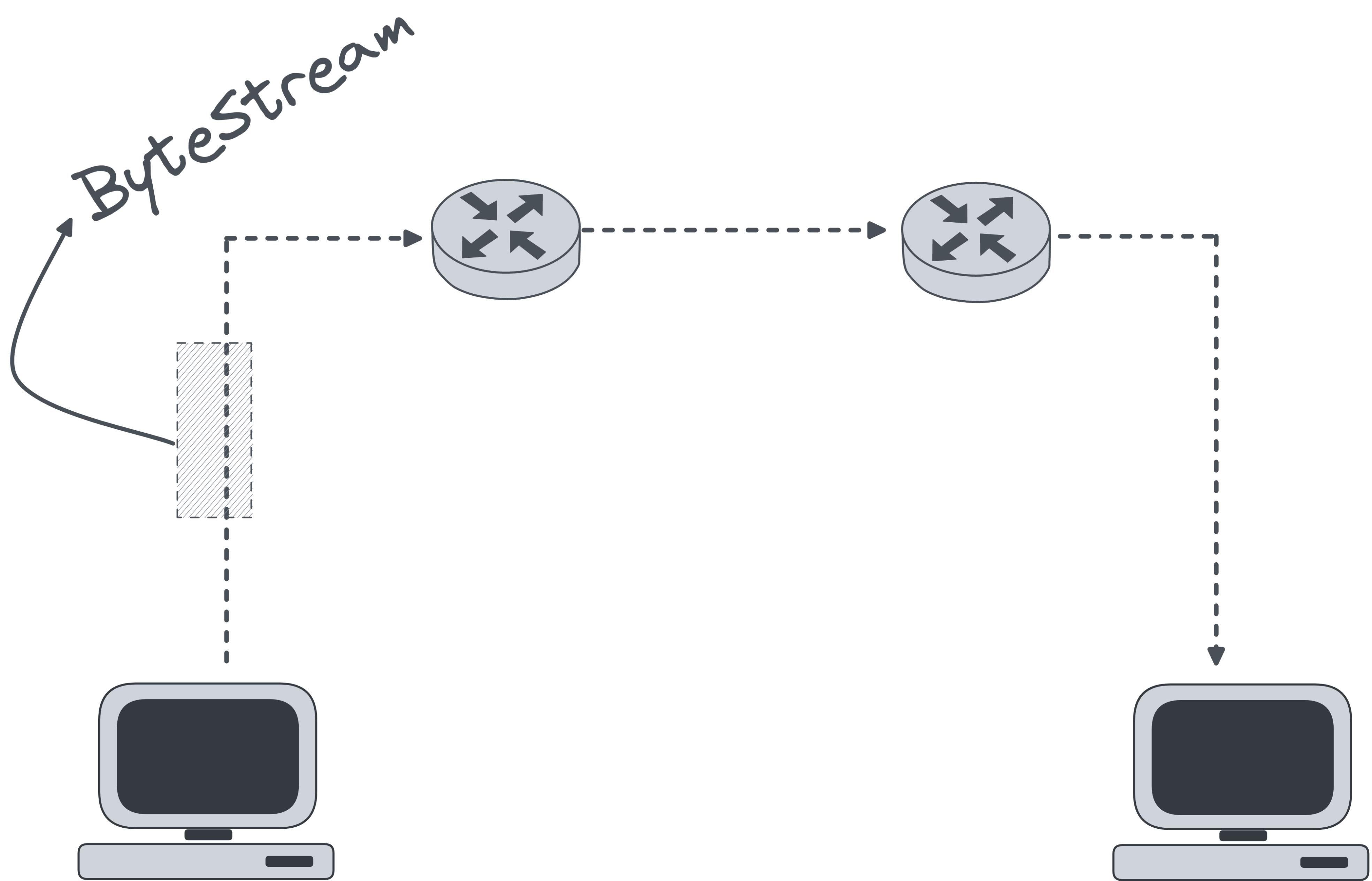
It enables sharing data across different applications/systems, regardless of operating systems, hardware, or programming languages.

# Benefits. Data Persistence



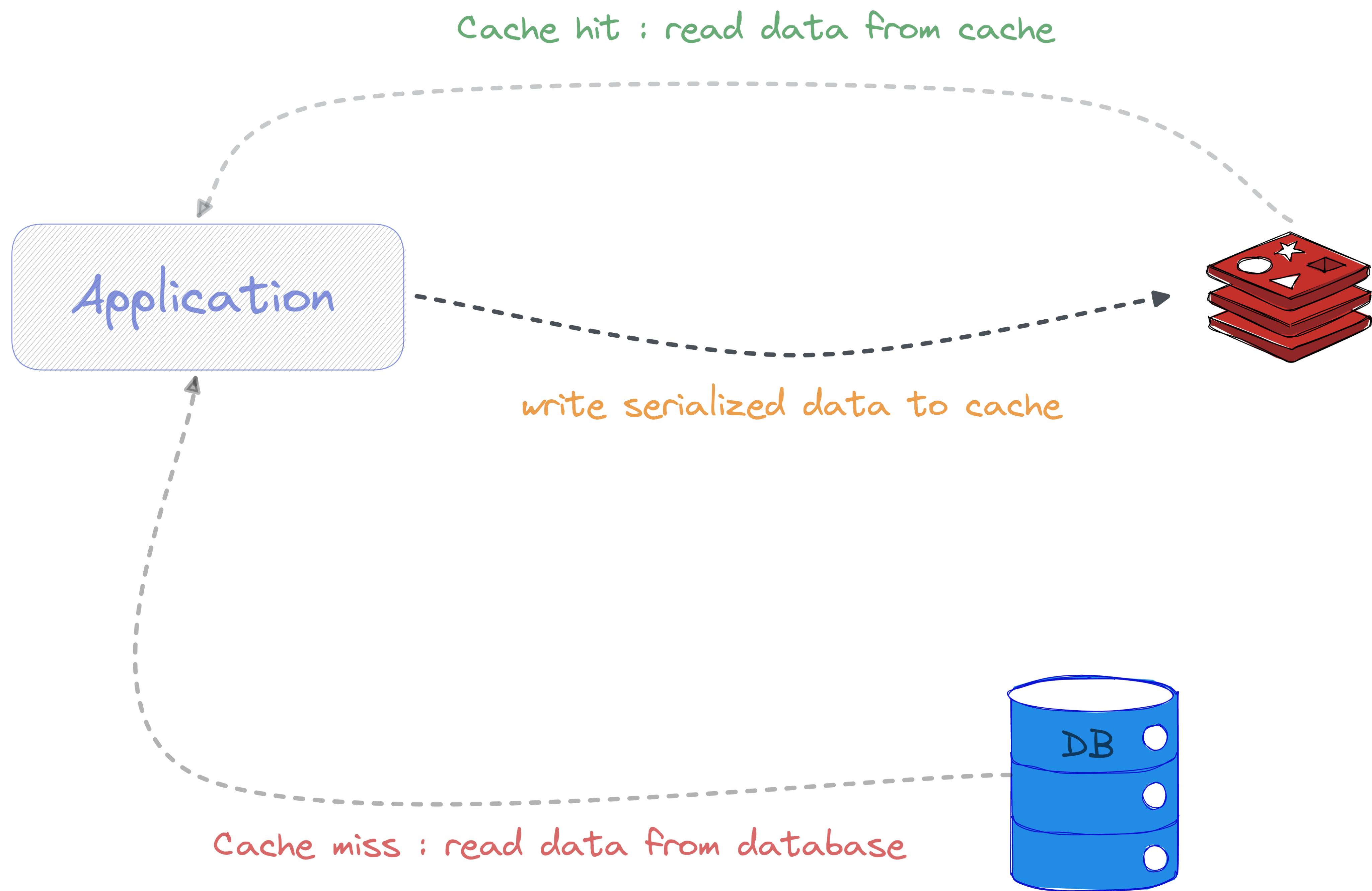
- i It enables applications to store data for long-term use, such as user preferences or application state.

# Benefits. Network Communication



It enables applications to communicate with each other, even if they are running on different machines or in different locations.

# Benefits.Caching data



# Overall

**Serialization provides a  
flexible and powerful  
mechanism for storing and  
communicating data in a  
wide variety of applications  
and systems.**

**Keep  
Learning**

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**Nabi Karampoor**