

An Introduction and Overview of Clotho 3.0 for the iGEM Audience

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CIDAR (Densmore Lab)
Boston University

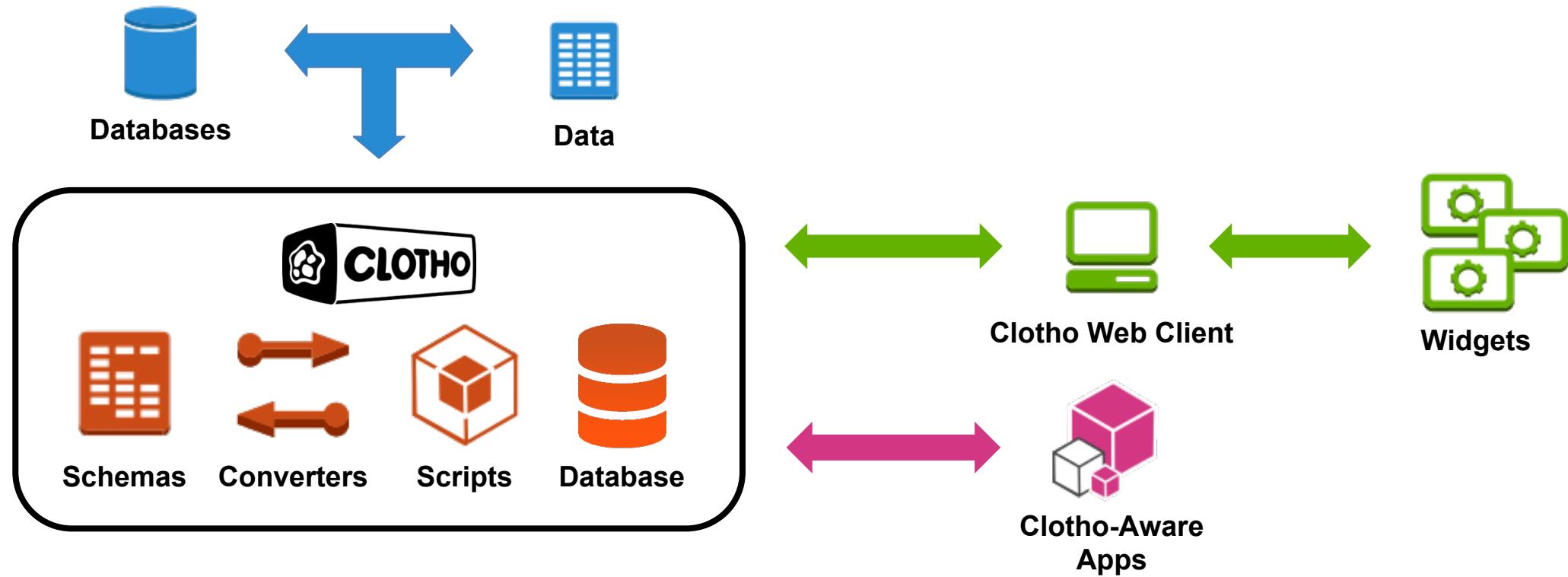
Why Clotho 3.0?

- Synthetic biologists need to store, query, process, and exchange large amounts of complex data related to their biological designs.
- Many existing database management systems are not specialized to handle biological data for the purpose of design.
- Web-aware software environments are needed to coordinate the diversity of applications required for advanced synthetic biology.

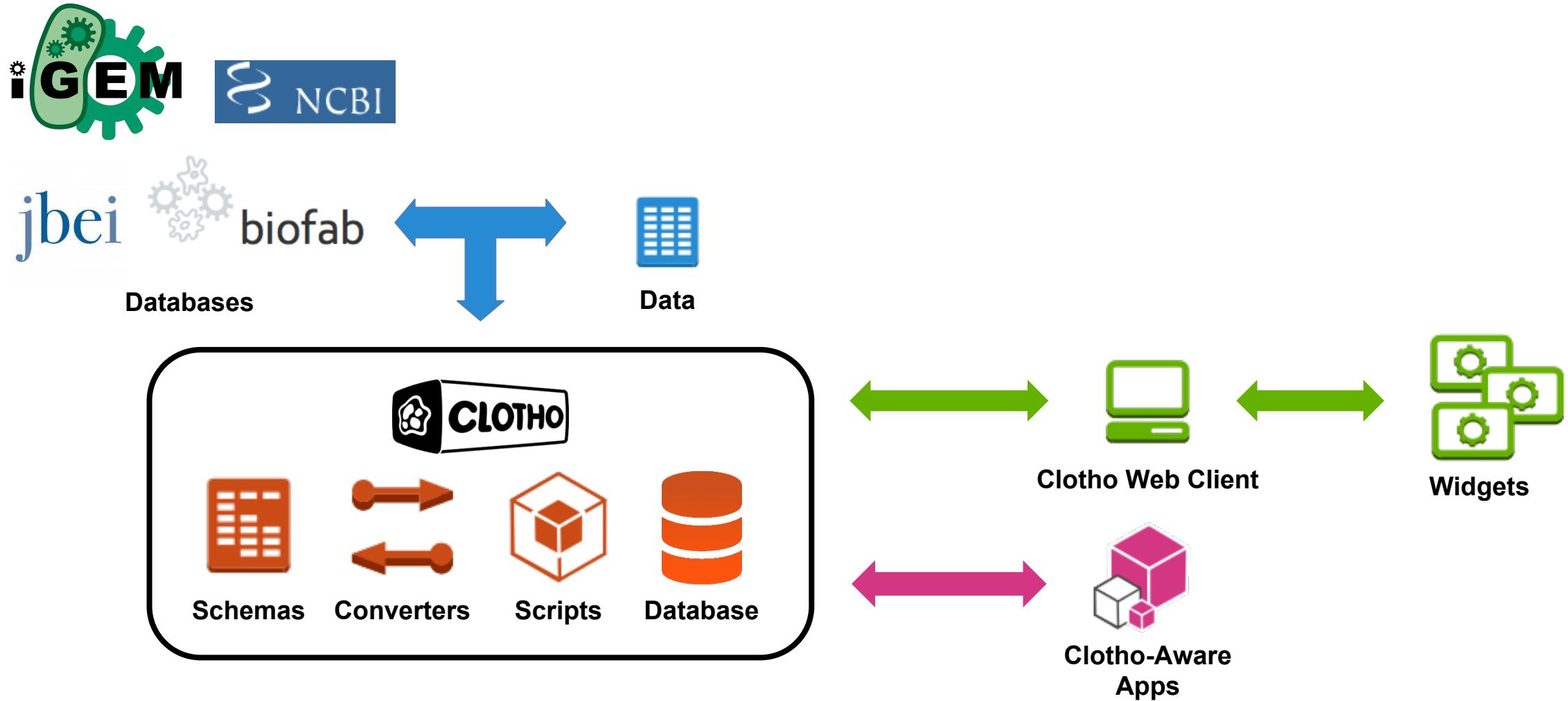
Talk Outline

- Overview of Clotho 3.0
- Description of demo

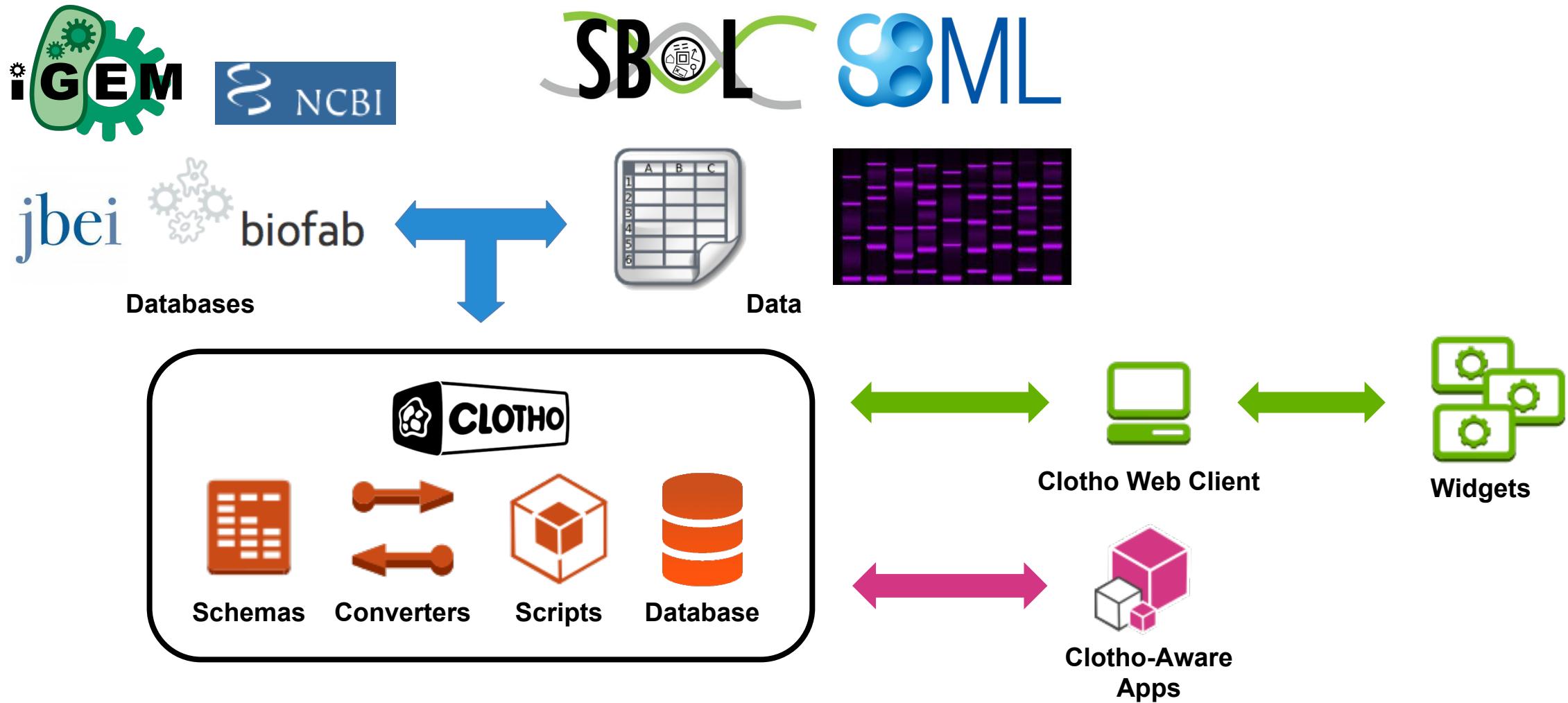
An Overview of Clotho 3.0



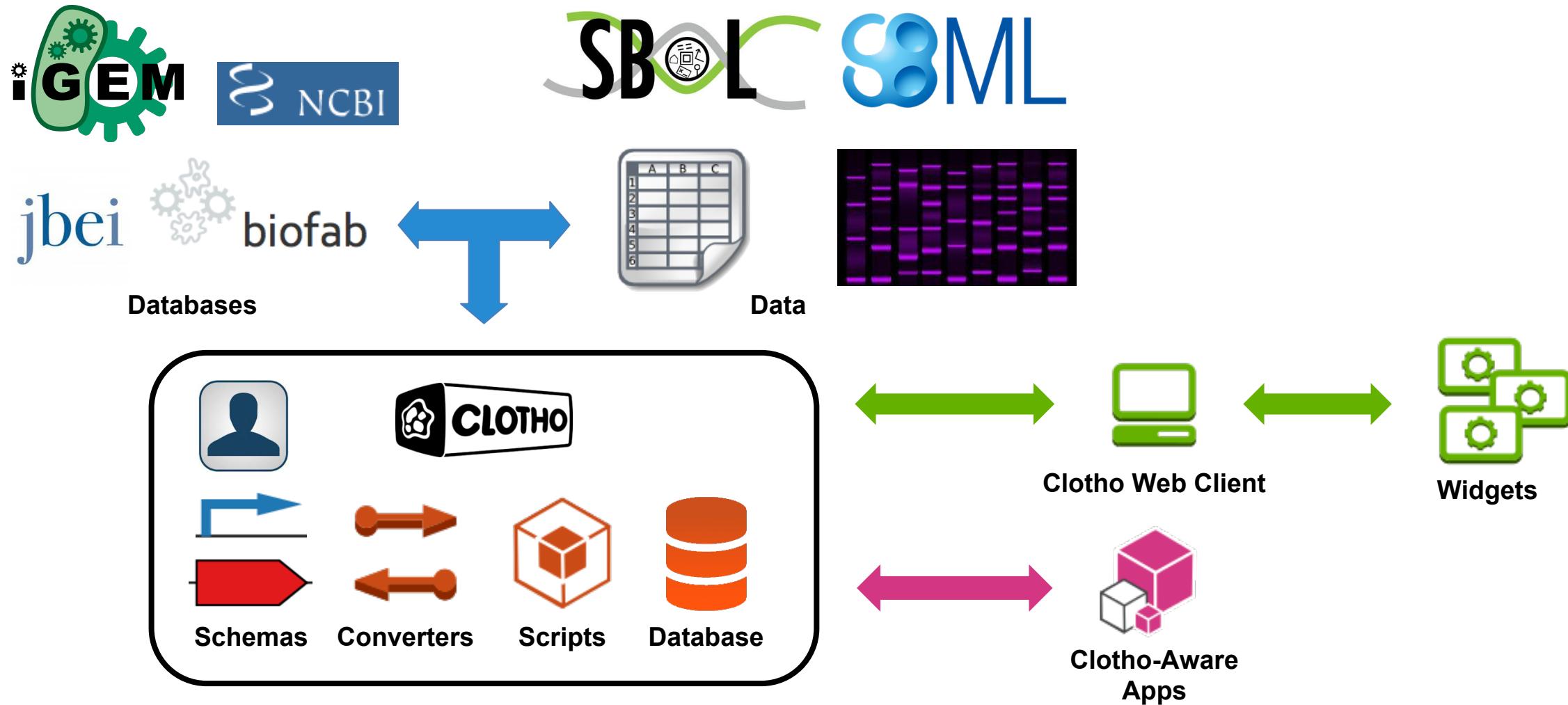
An Overview of Cloho 3.0



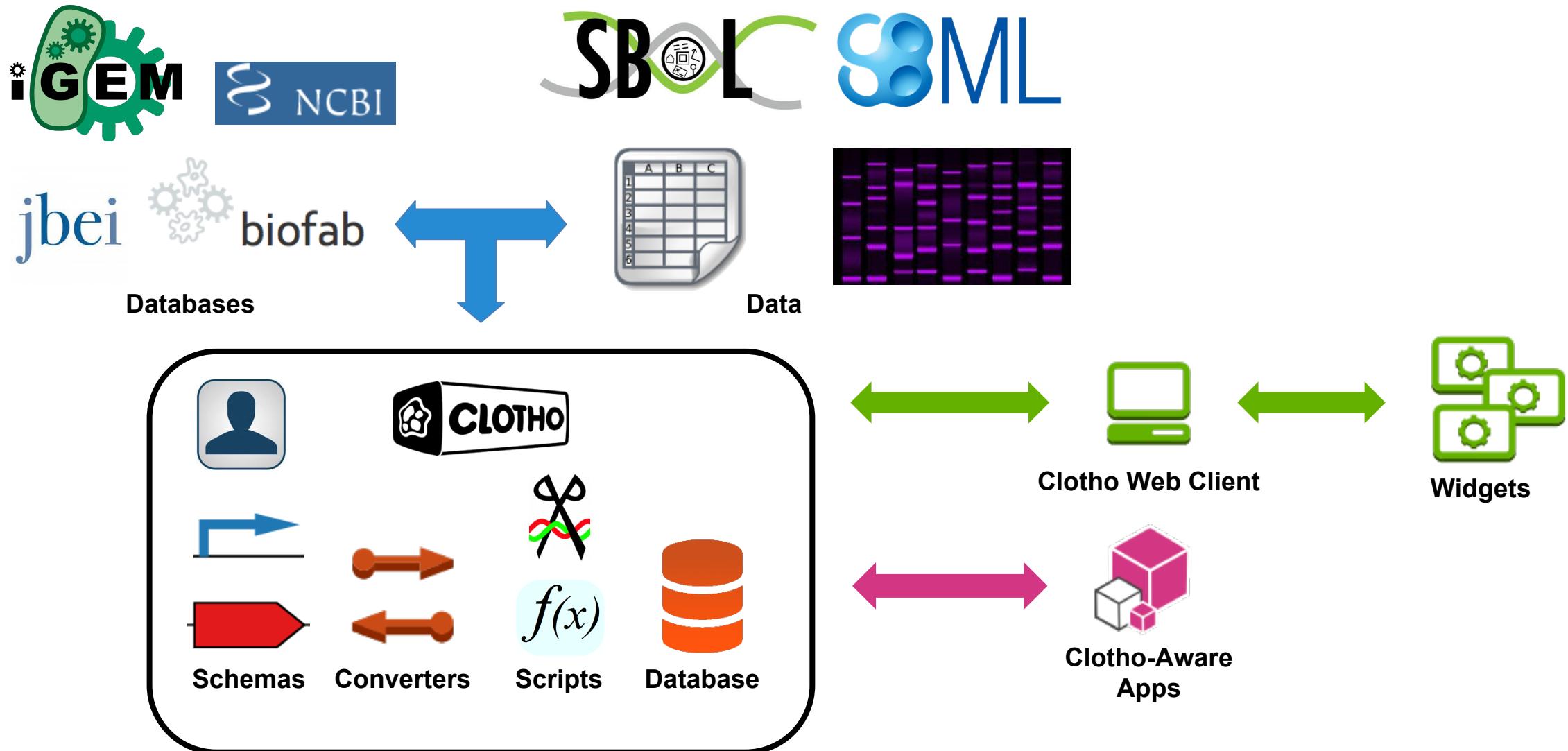
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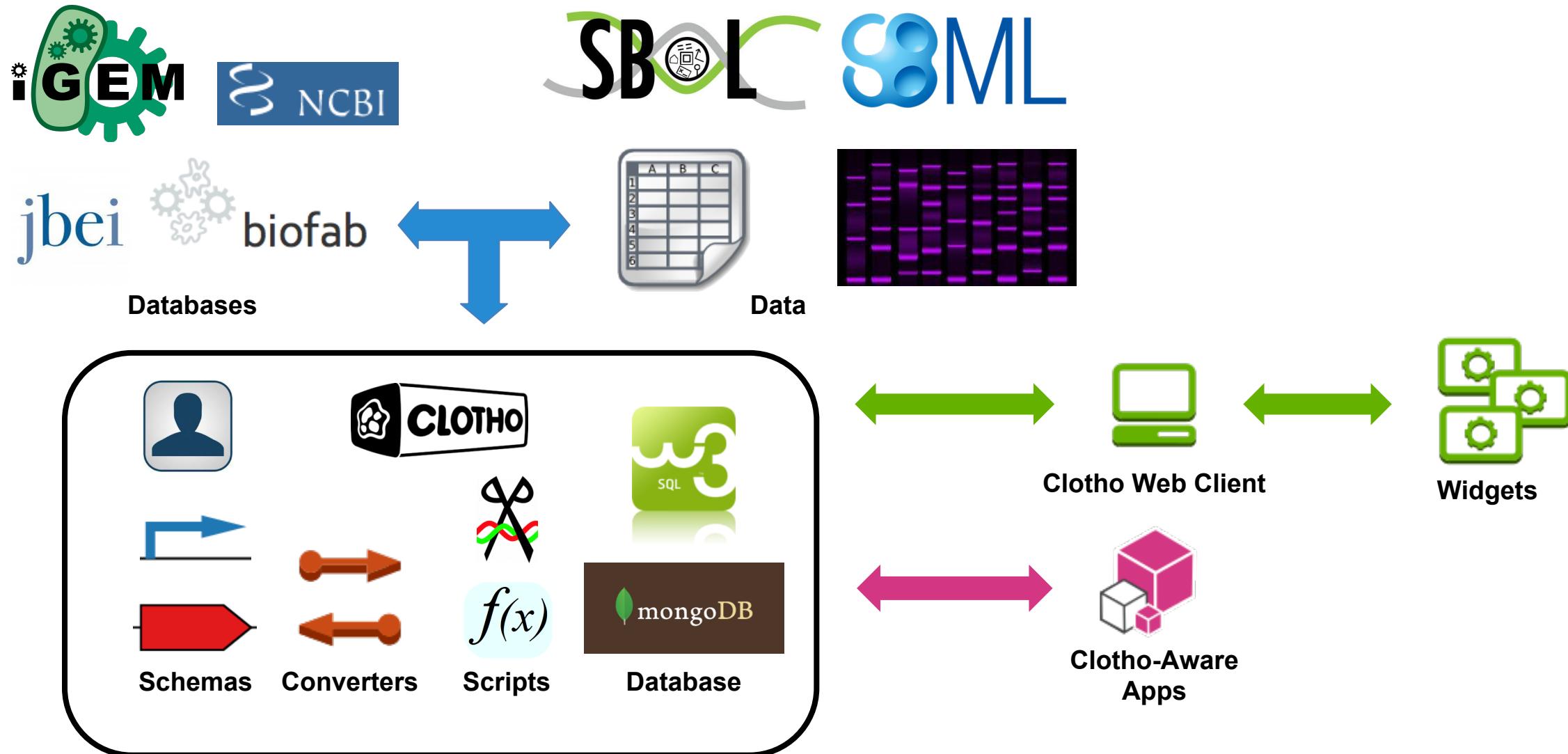
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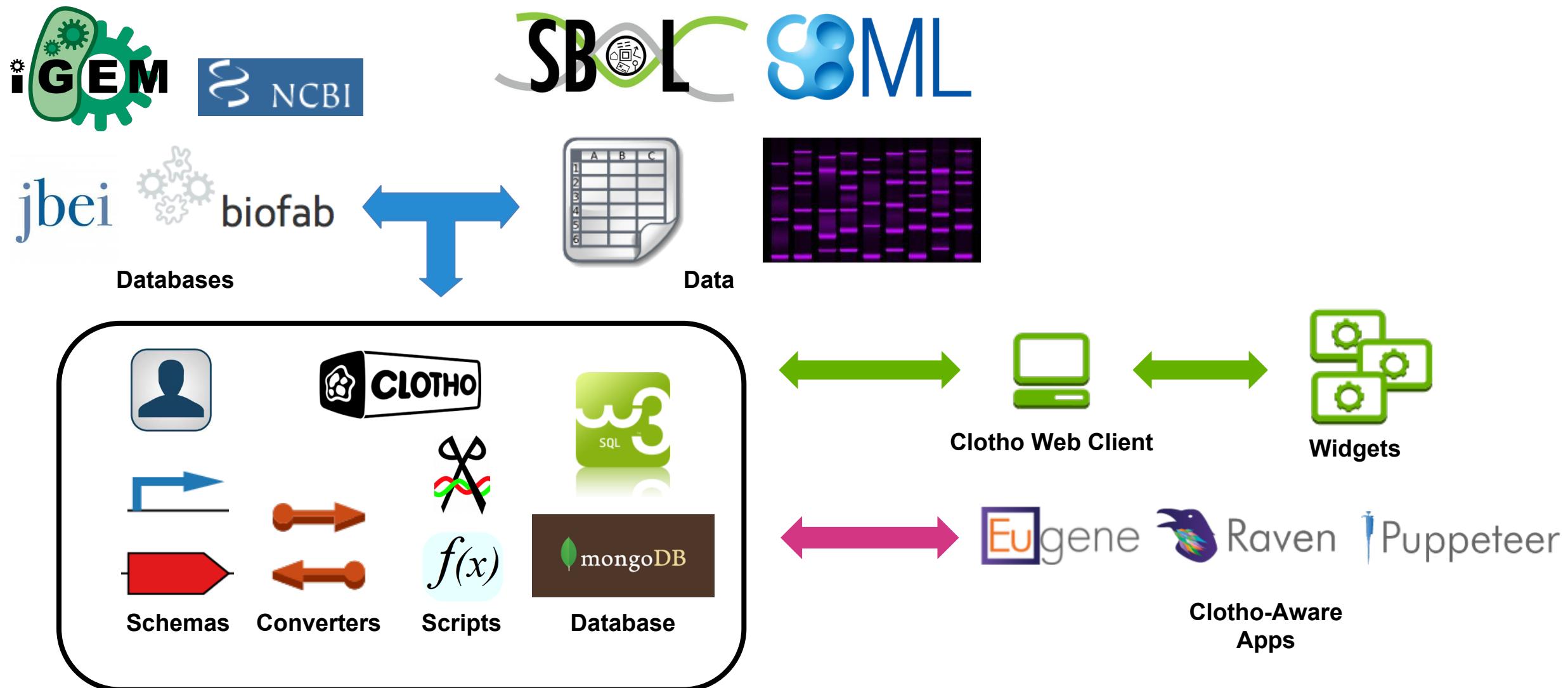
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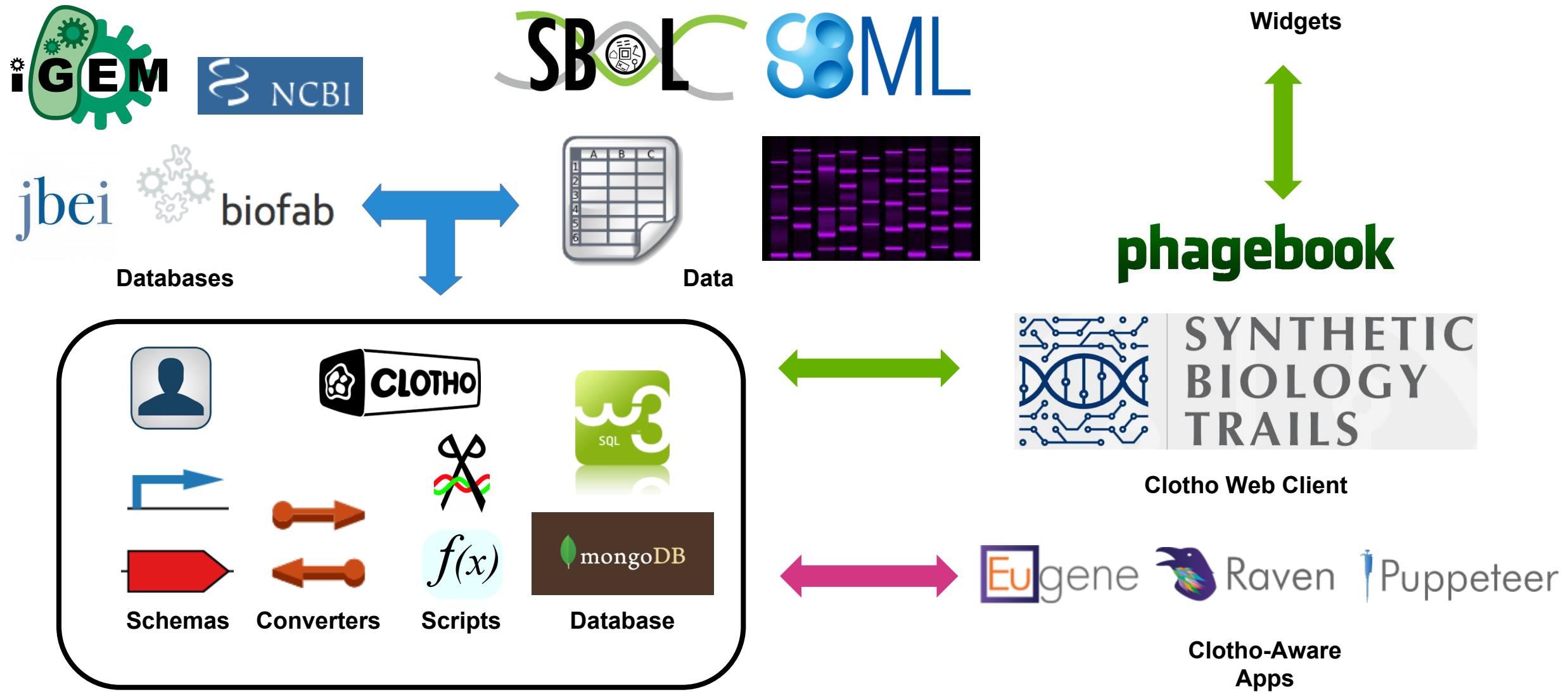
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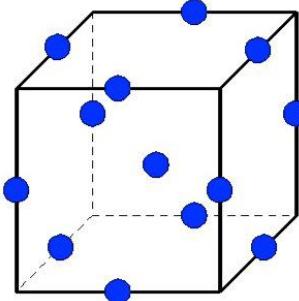
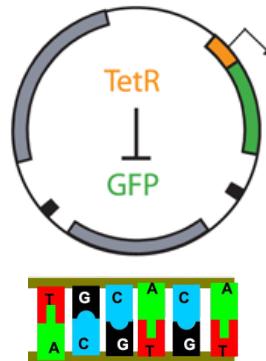
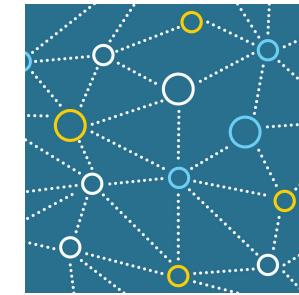
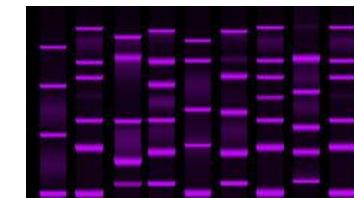
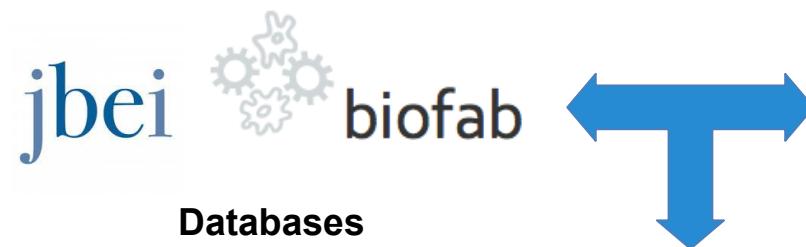
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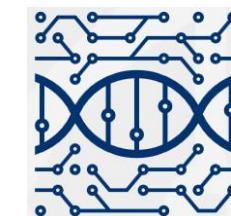
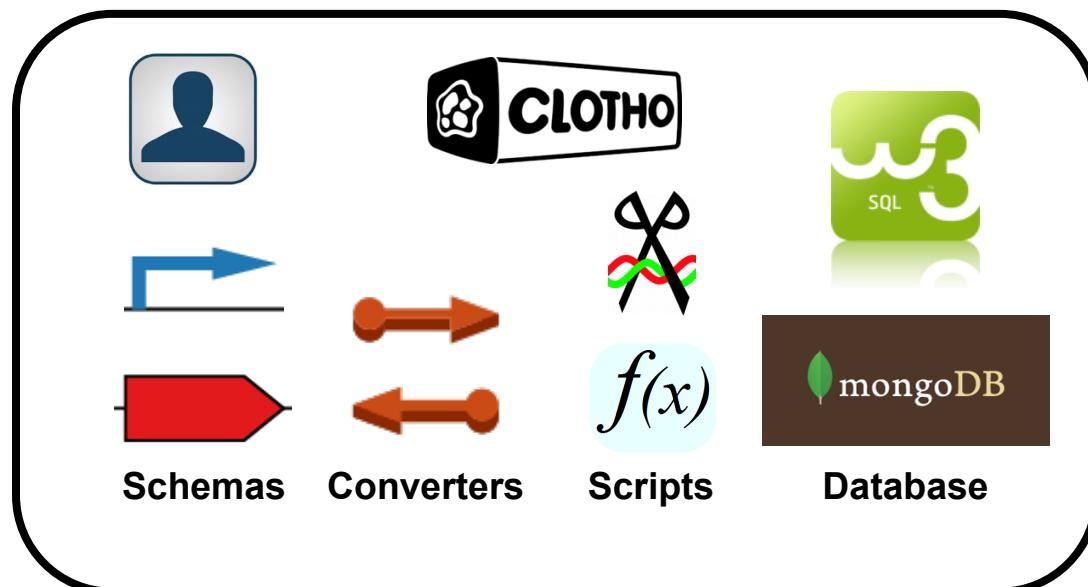
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Widgets



phagebook



SYNTHETIC BIOLOGY TRAILS

Clotho Web Client

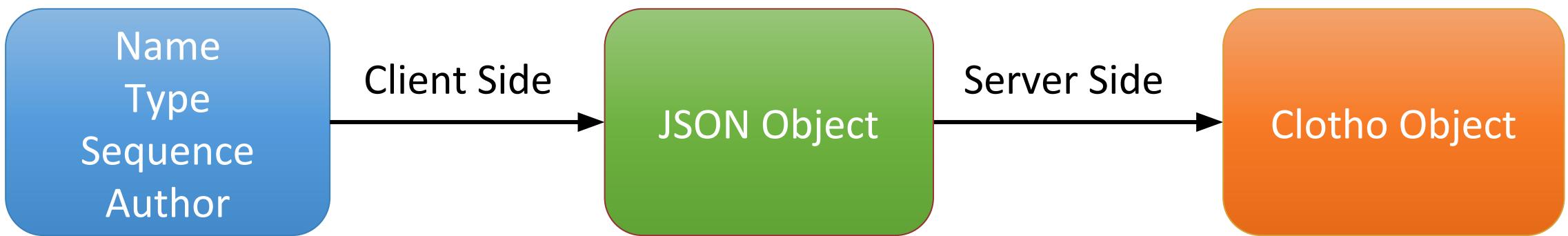
Eugene Raven Puppeteer

Clotho-Aware
Apps

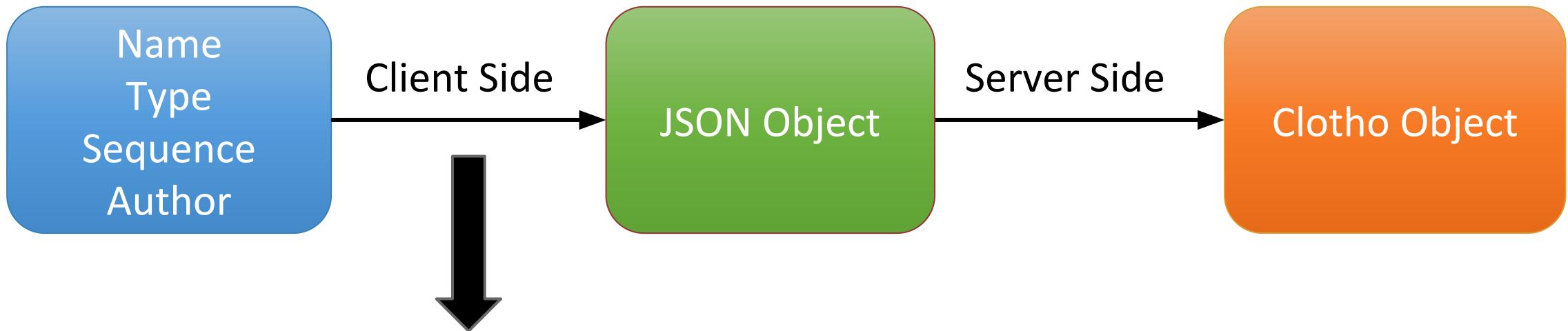
Demo Outline

- Uploading Parts
- Querying Parts
- Uploading and Running Functions

Demo: Uploading Parts

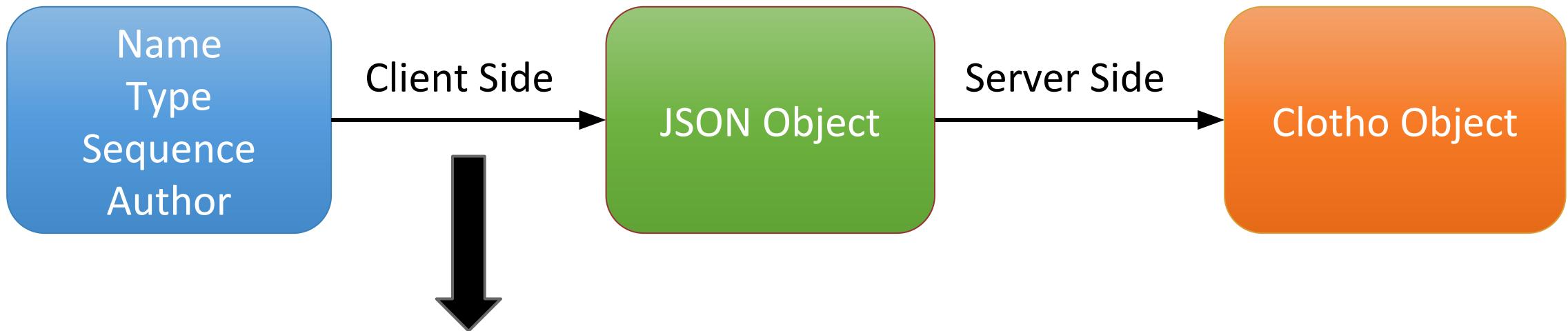


Demo: Uploading Parts



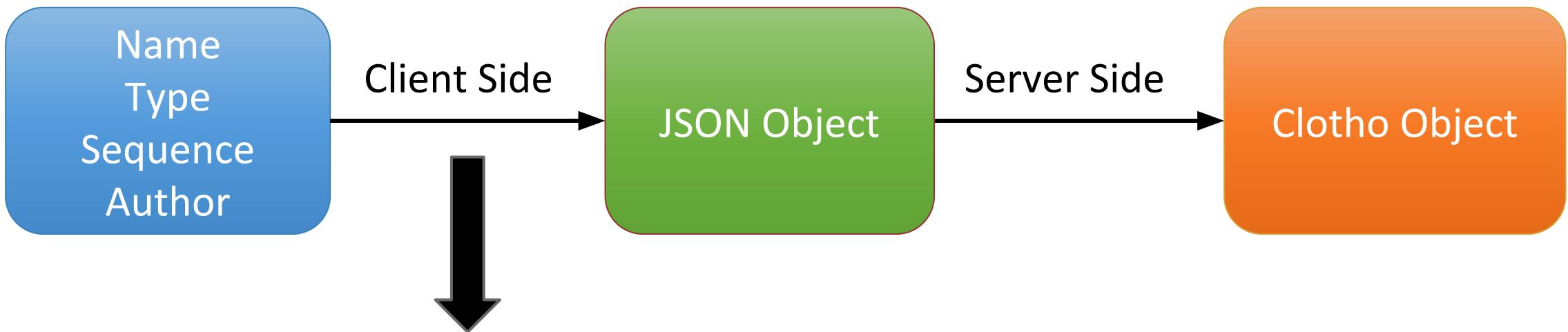
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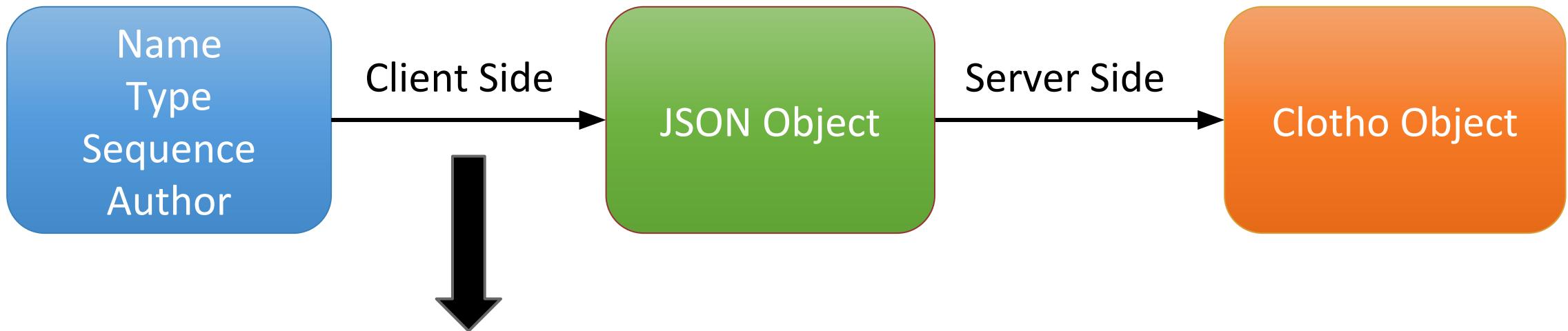
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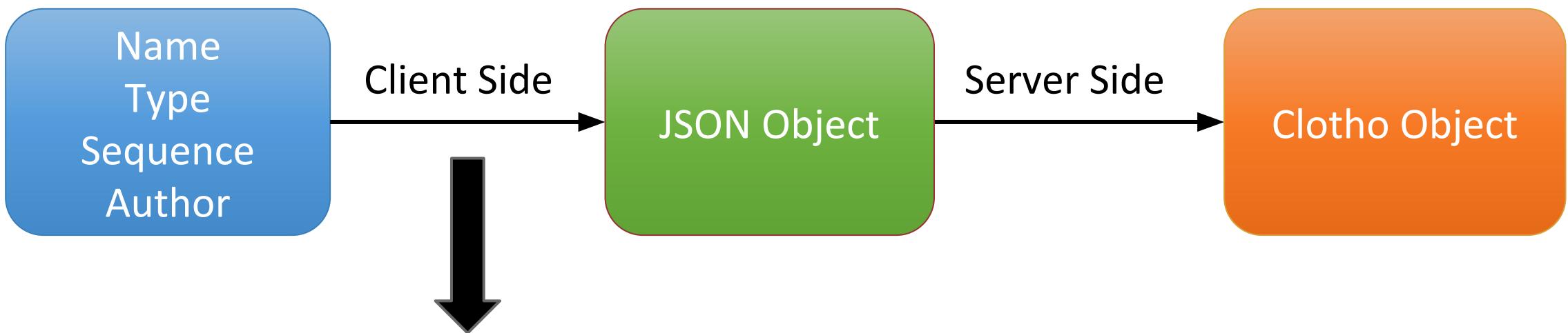
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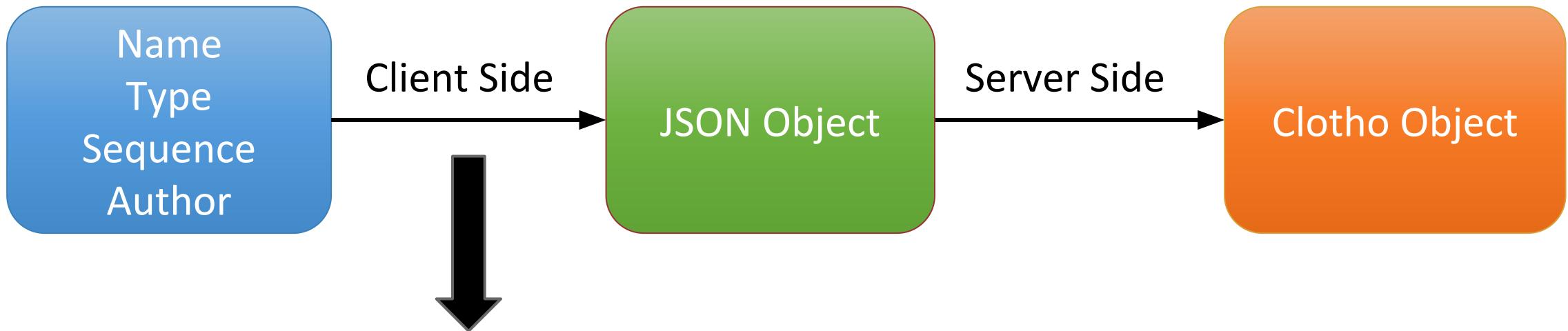
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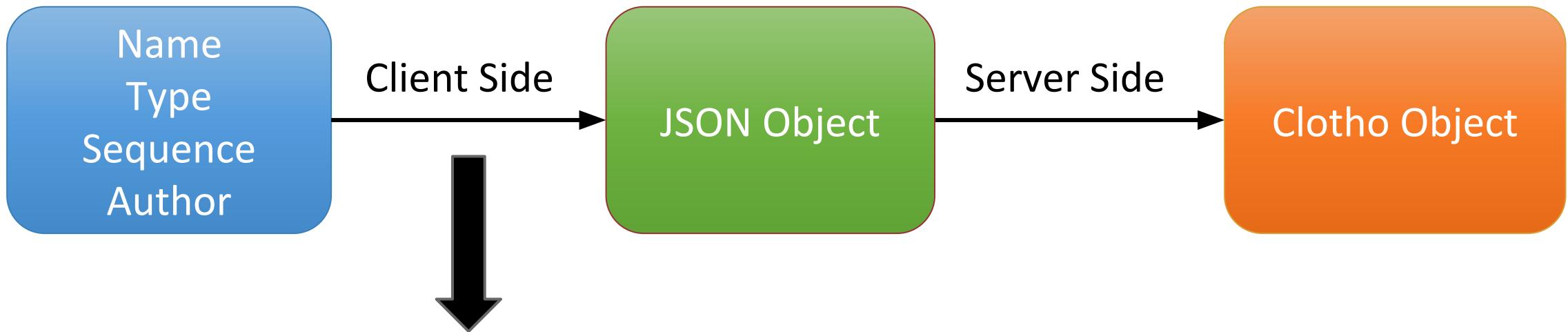
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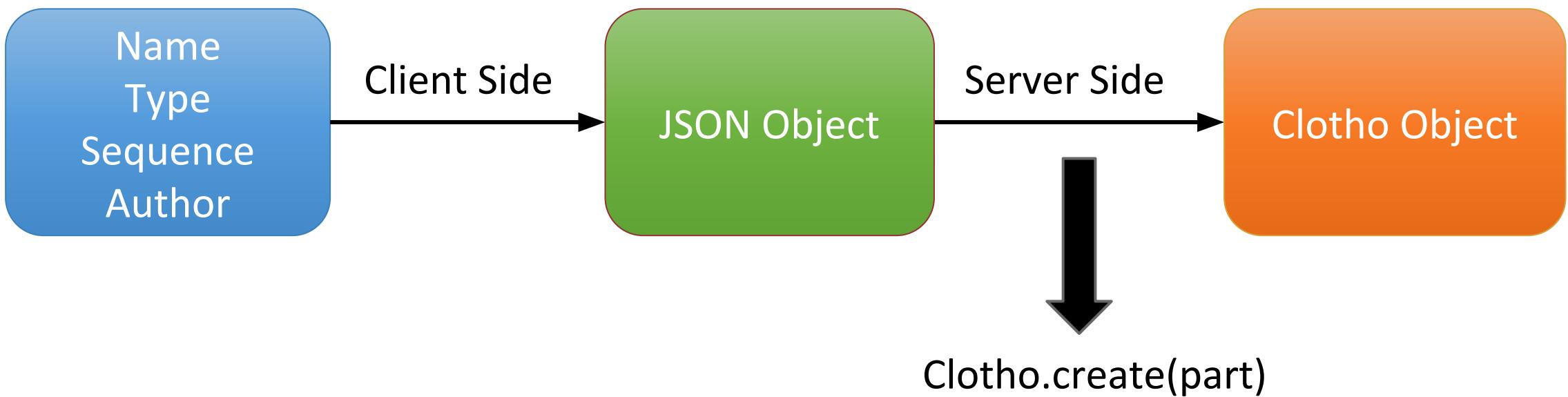
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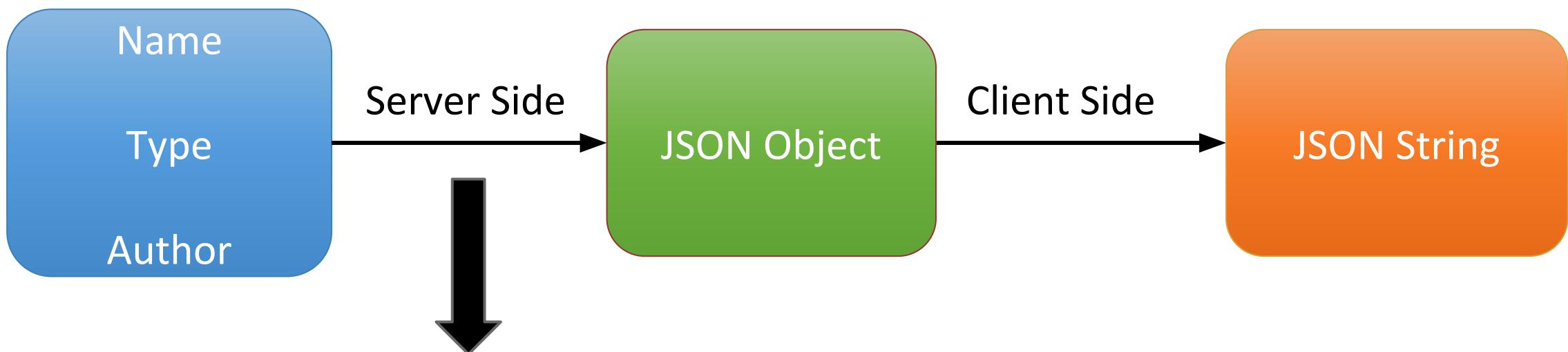
Demo: Uploading Parts



Demo: Querying Parts



Demo: Querying Parts

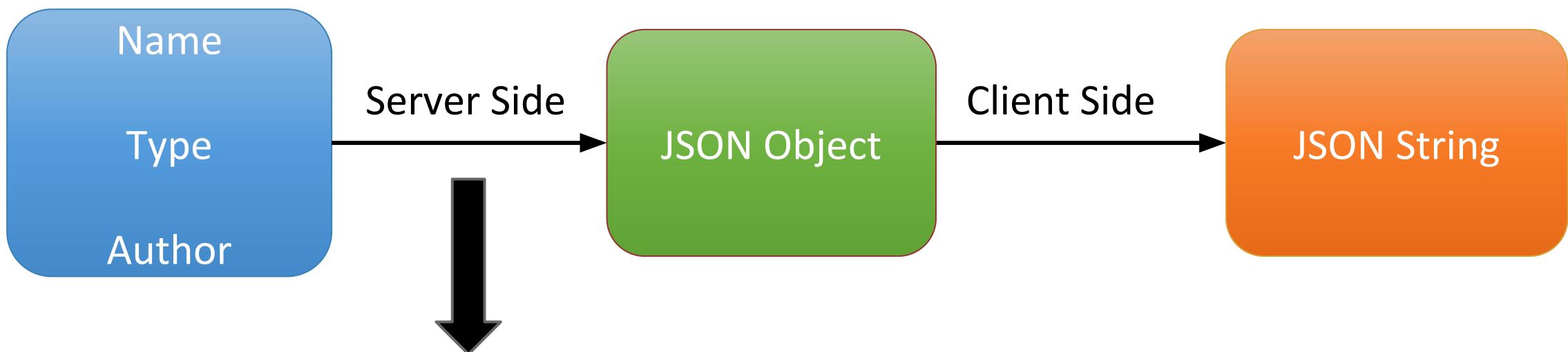


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var data = Clotho.query(`name`, `pLac`)
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var data = Clotho.query(`type`, `promoter`)
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var data = Clotho.query(`author`, {name: `Nic`})
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Demo: Querying Parts

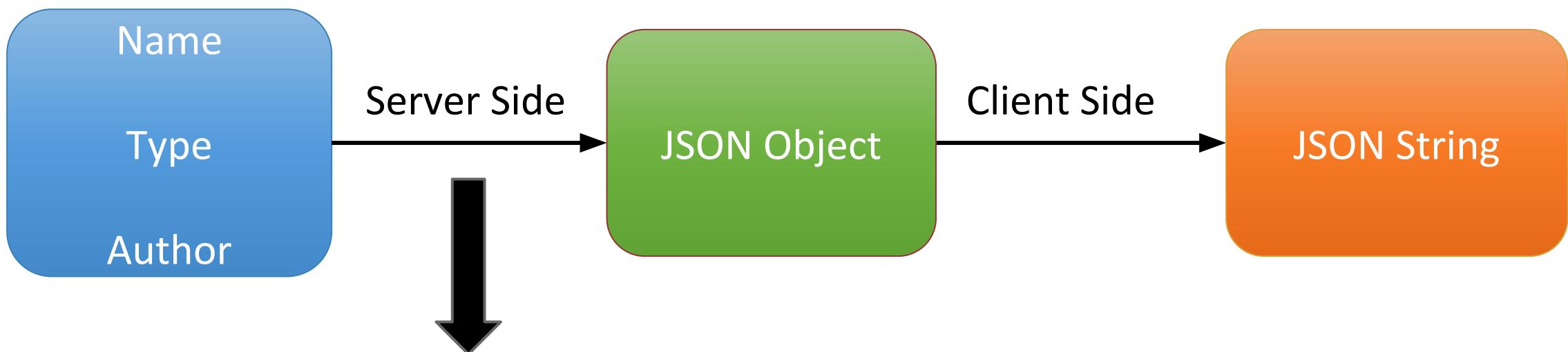


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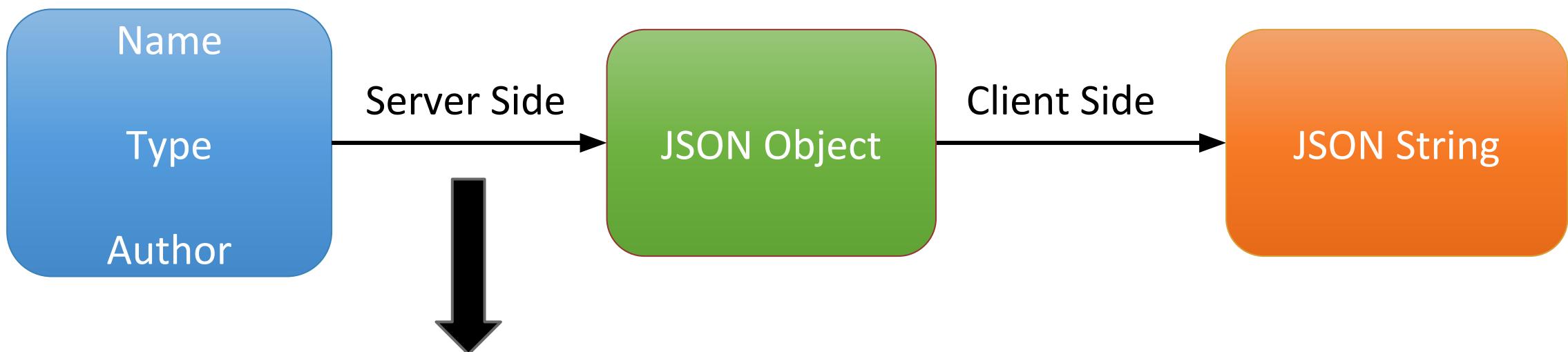


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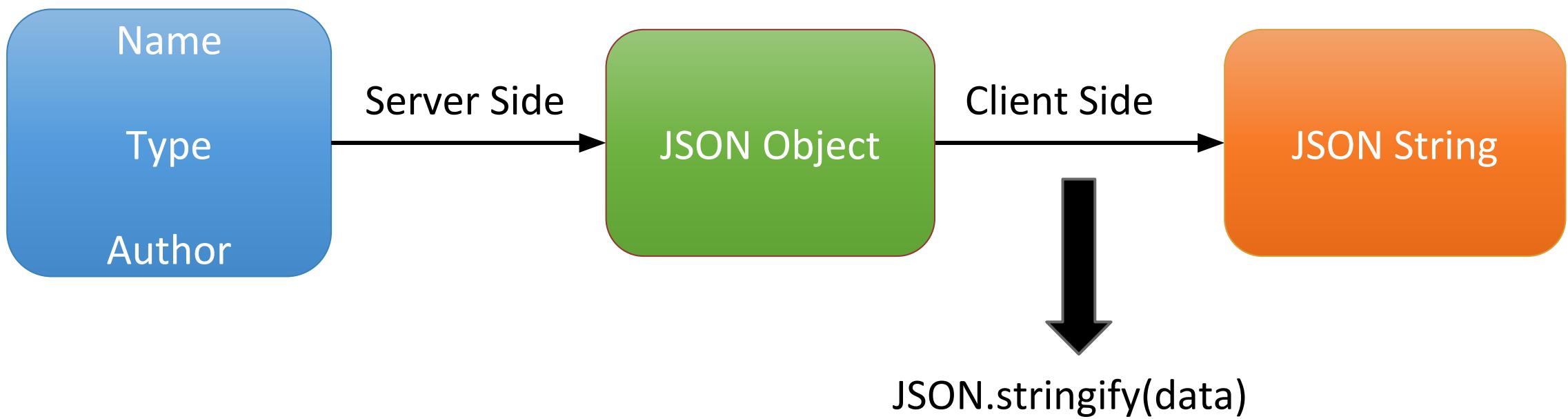


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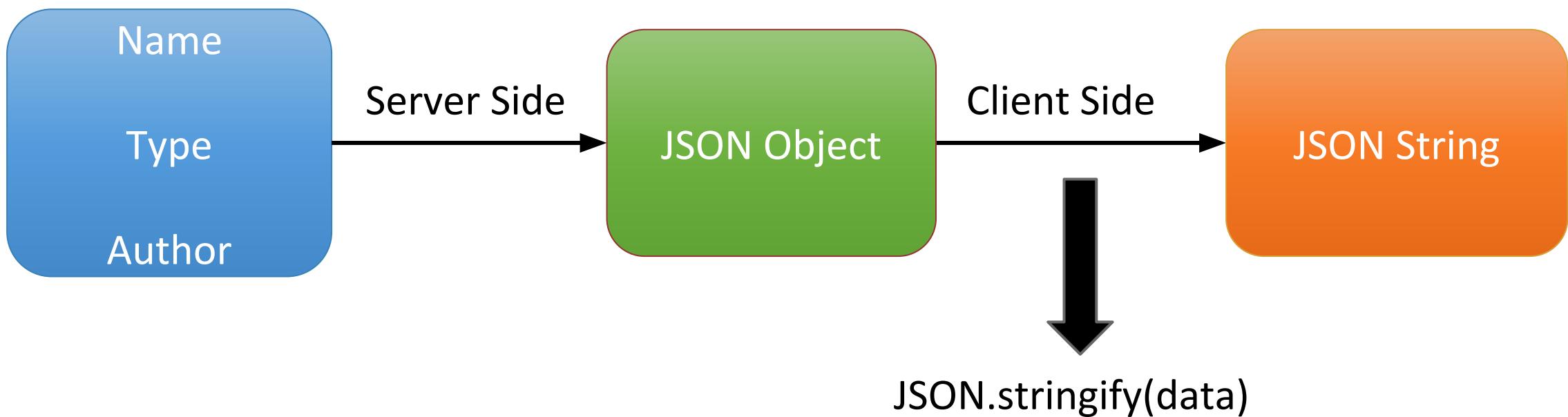
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Demo: Querying Parts



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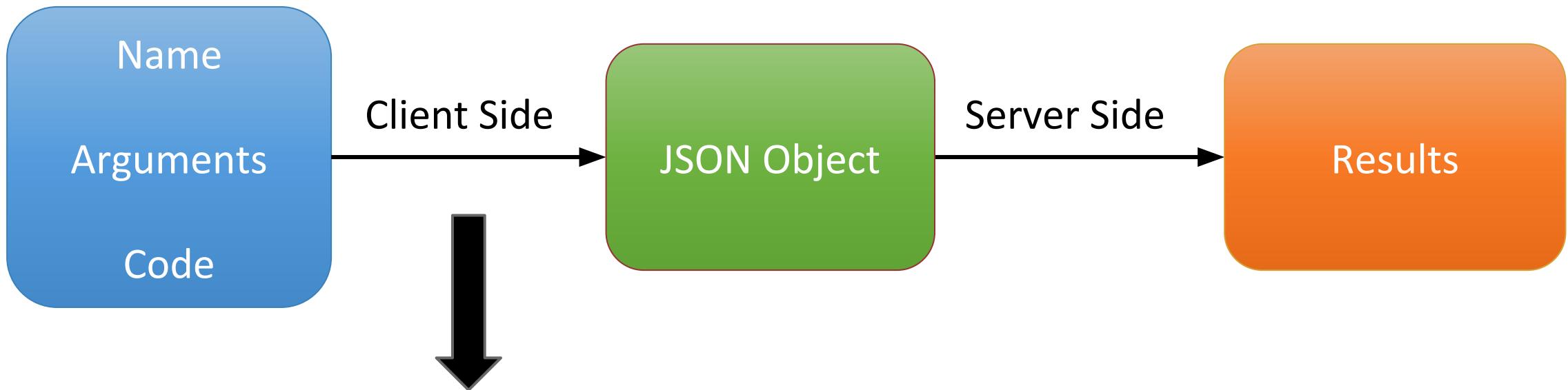


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Demo: Uploading and Running Functions

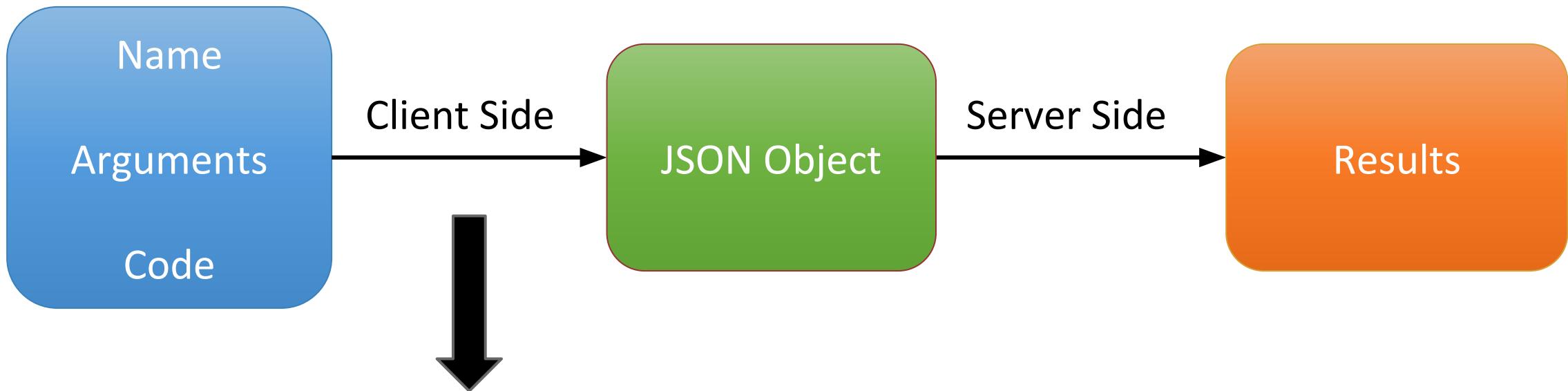


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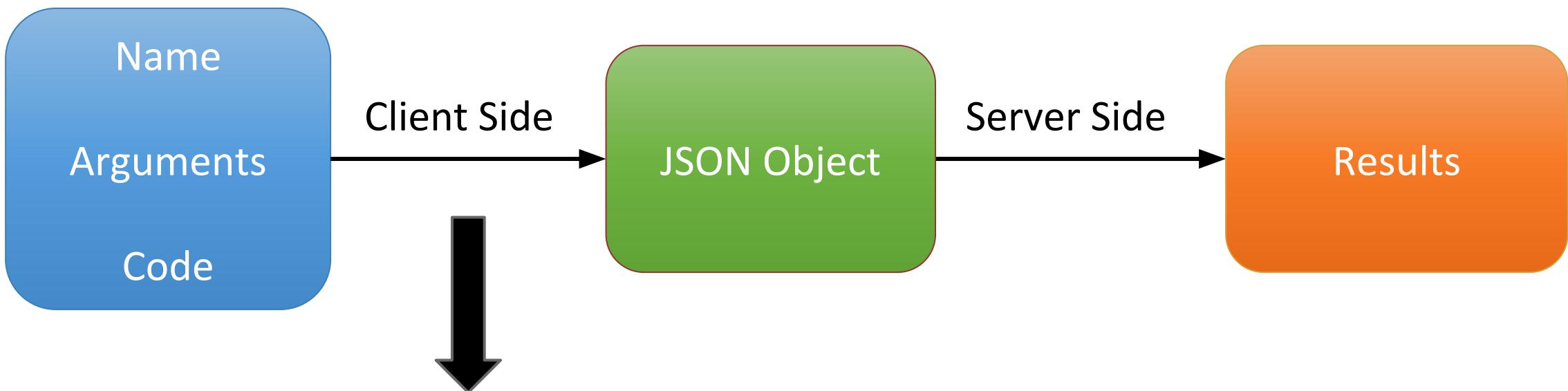
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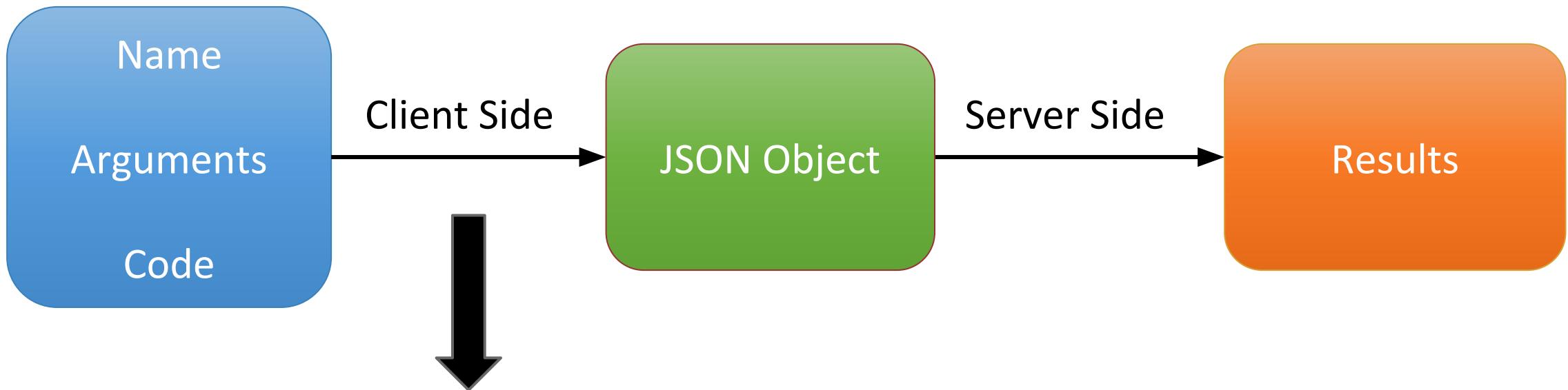
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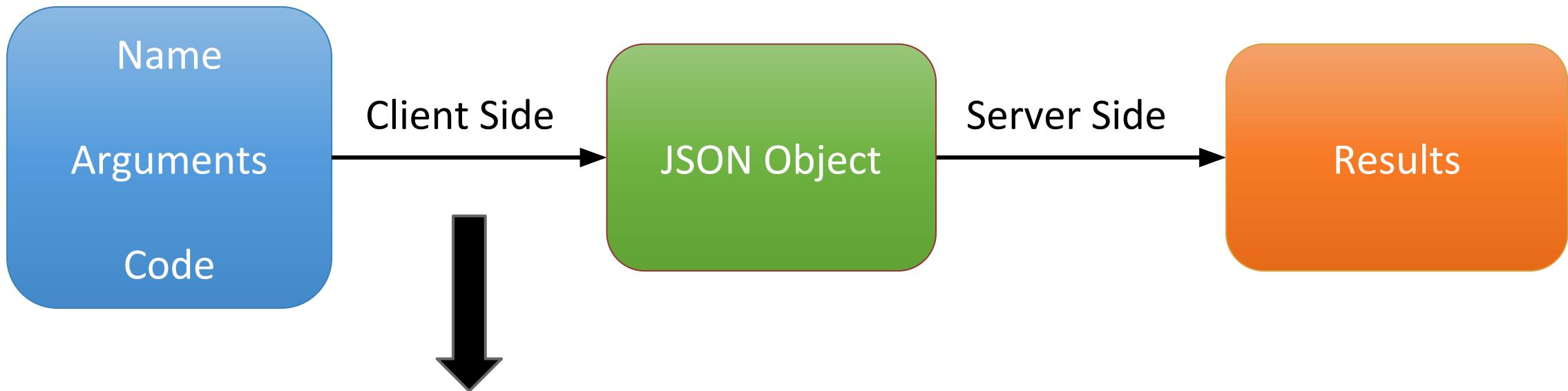
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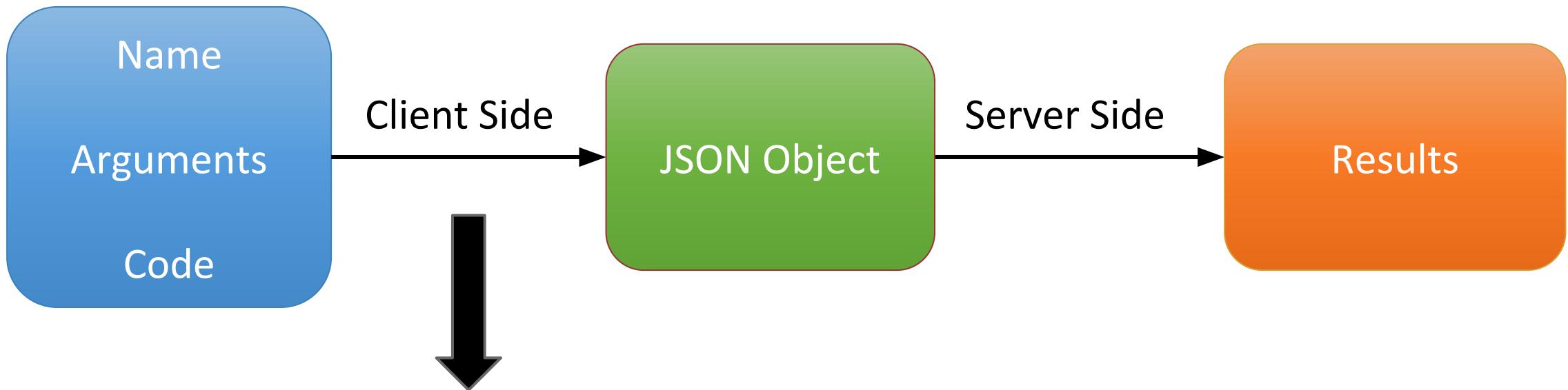
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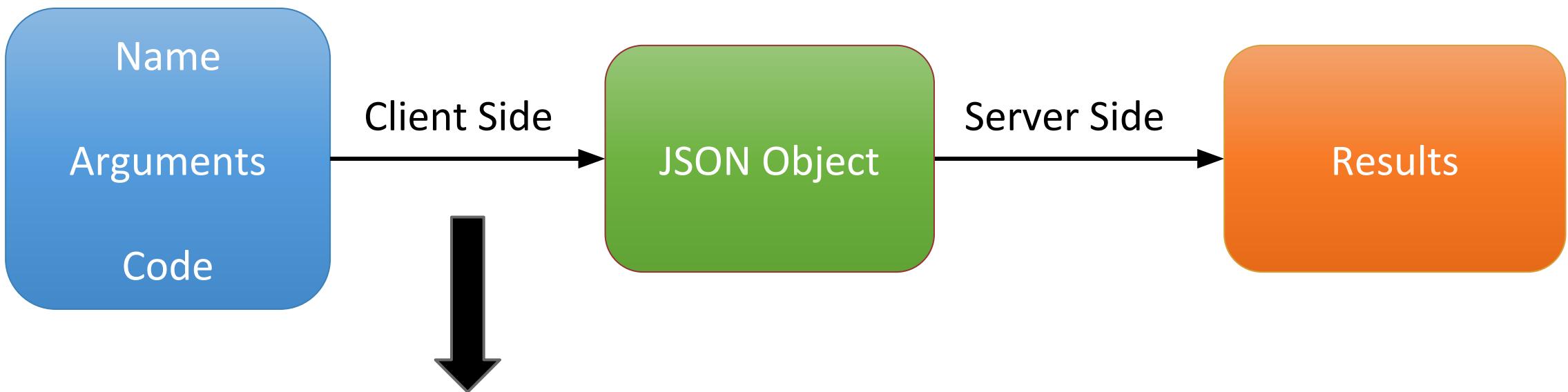
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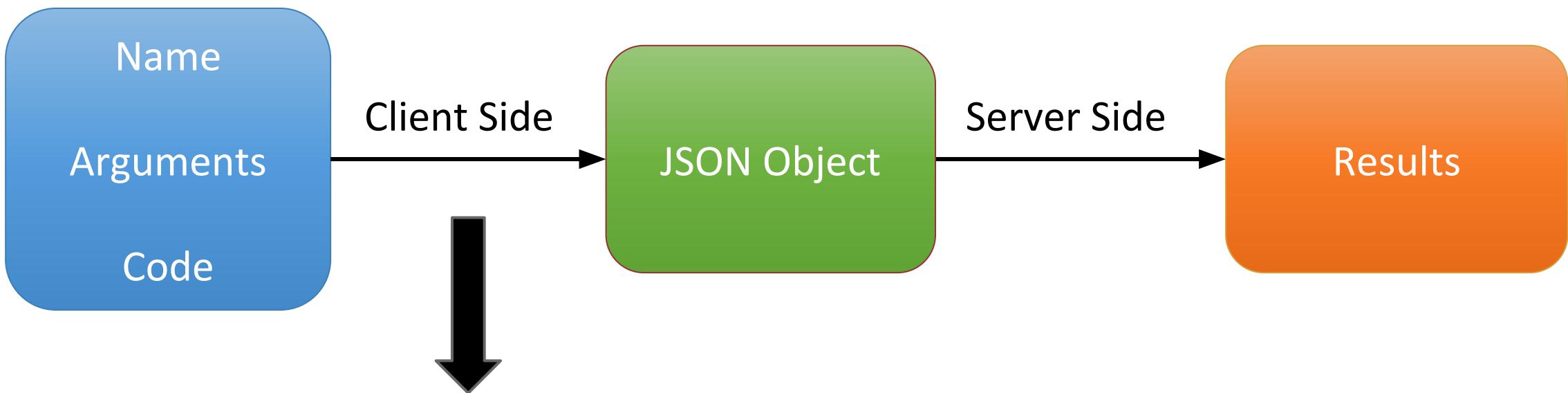
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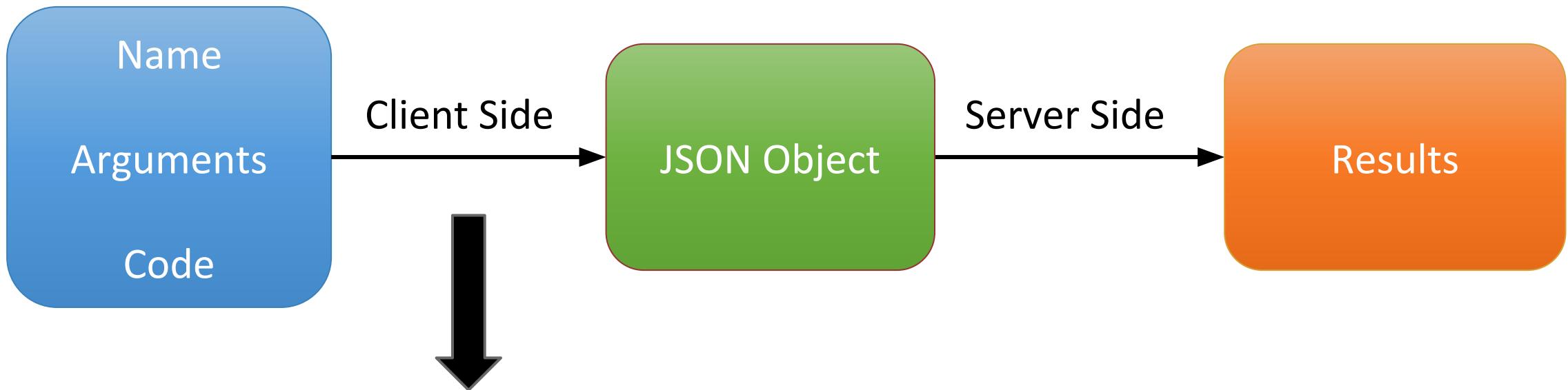
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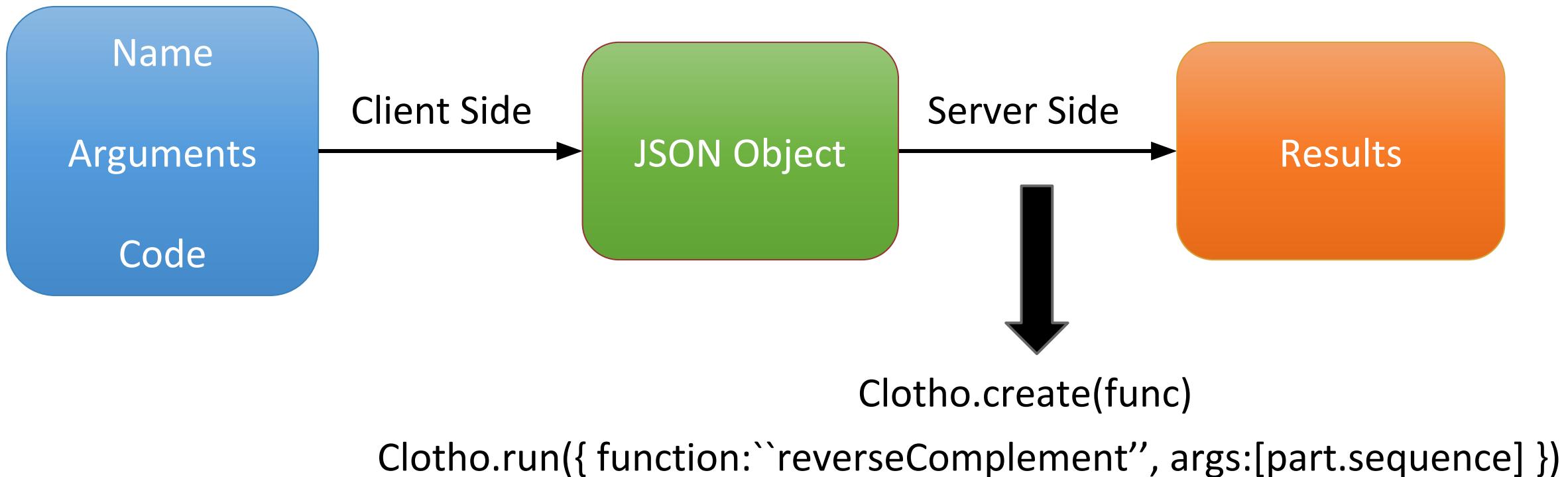
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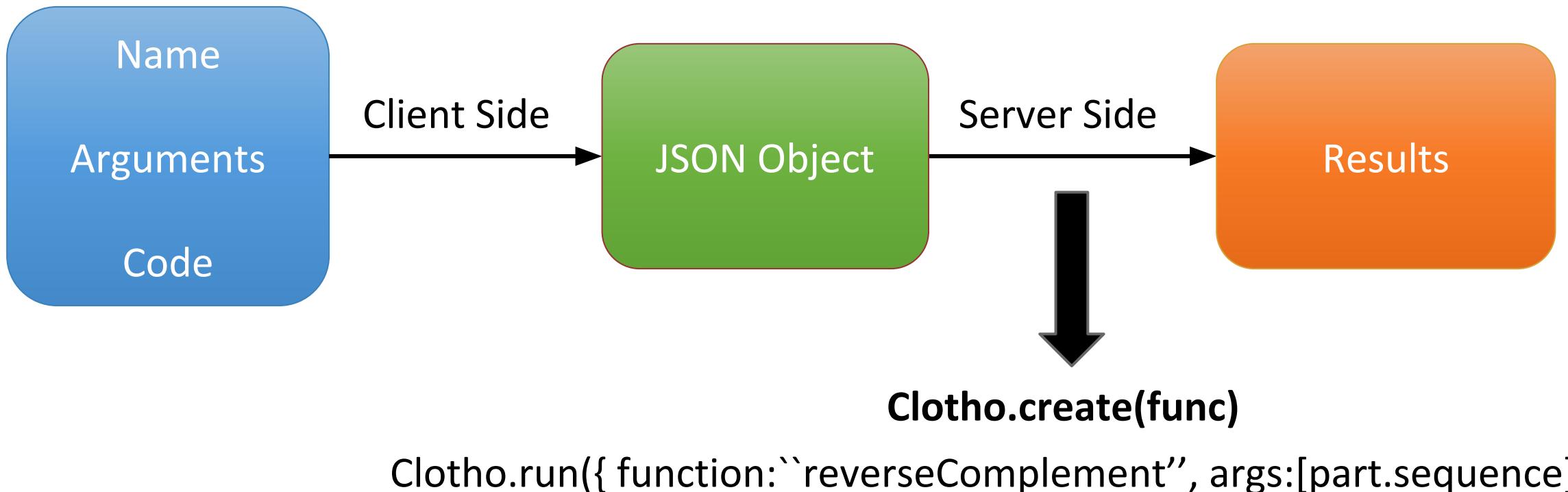


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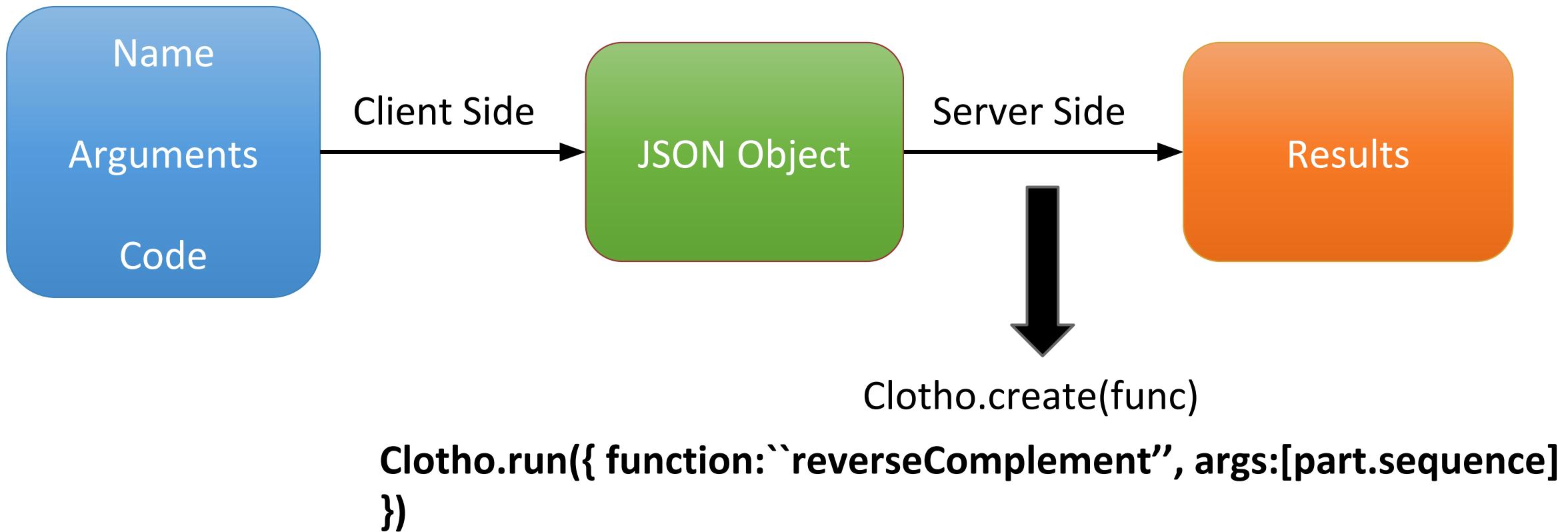
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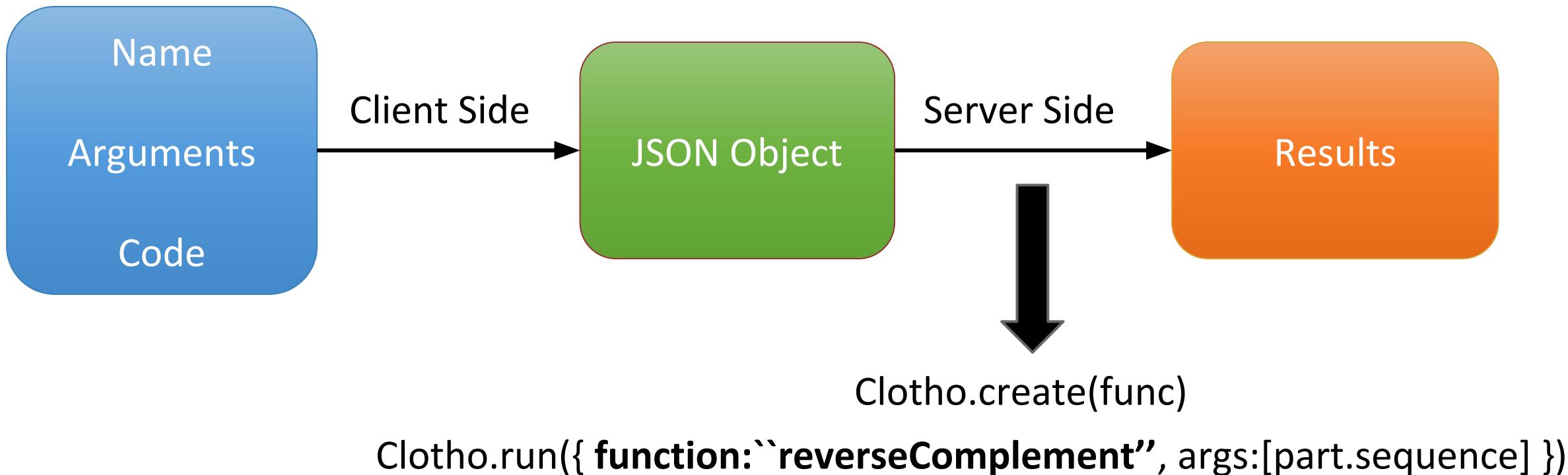
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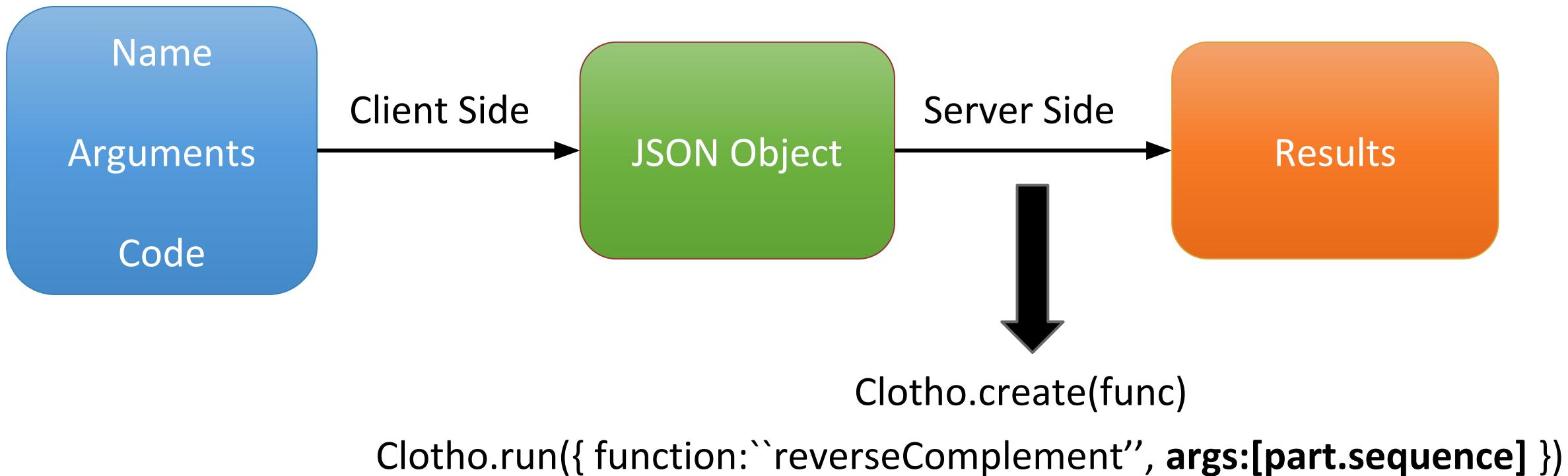
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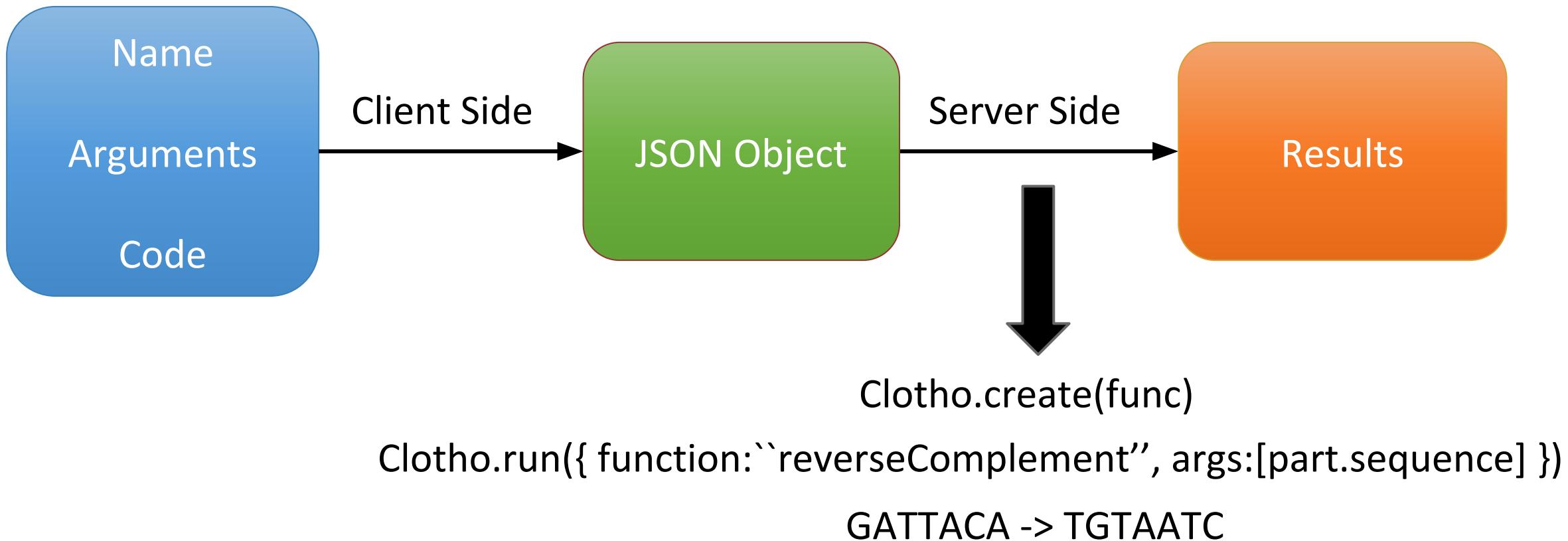
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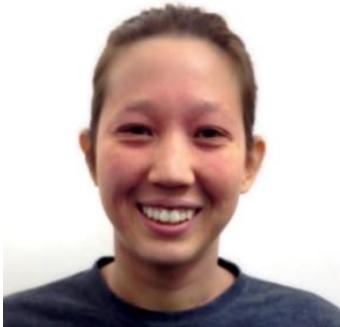
Invitation to Demo

- You are all welcome to come to the Clotho 3.0 demo and sign up for the Clotho 3.0 beta.
- I am also running a demo for iBioSim, a modeling and design tool from the University of Utah.

Clotho Team



Douglas
Densmore



Stephanie
Paige



J. Christopher
Anderson



Prashant
Vaidyanathan



Bill
Cao



Maxwell
Bates

