



1: Beginning with the Basics





Successful Remote Participation



1. Please have  on

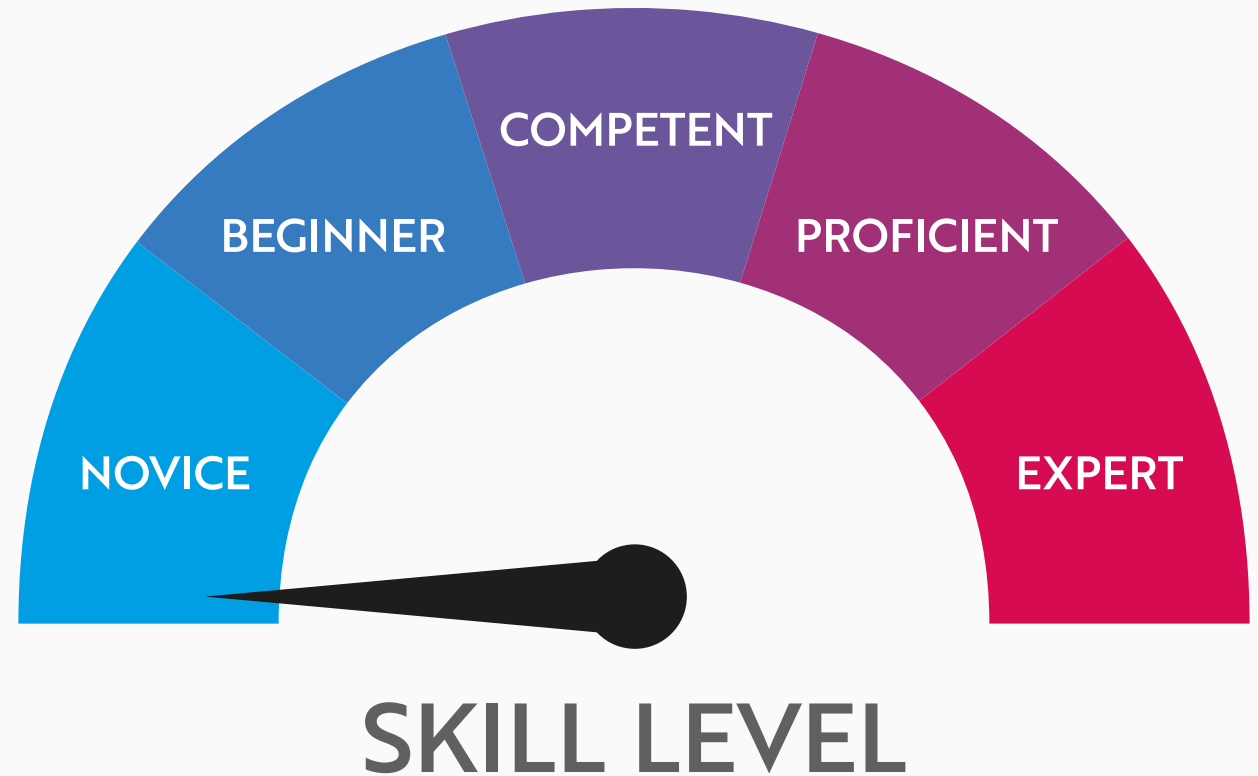
2. Questions 

3. When you're done 



We're All Starting at Different Points

But we're all in this together.





Conqueror Our Fear

The opposite of courage is
not fear but apathy.





Expect to be Uncomfortable

Growth and comfort can't
co-exist.





Focus On What We Can Become

Lava can unlock new abilities for our inner ministry superhero.





History of Lava

From e-commerce to digital ministry.





What Lava Is

- Template Language
- Bridge between the data in Rock and the content on a page.

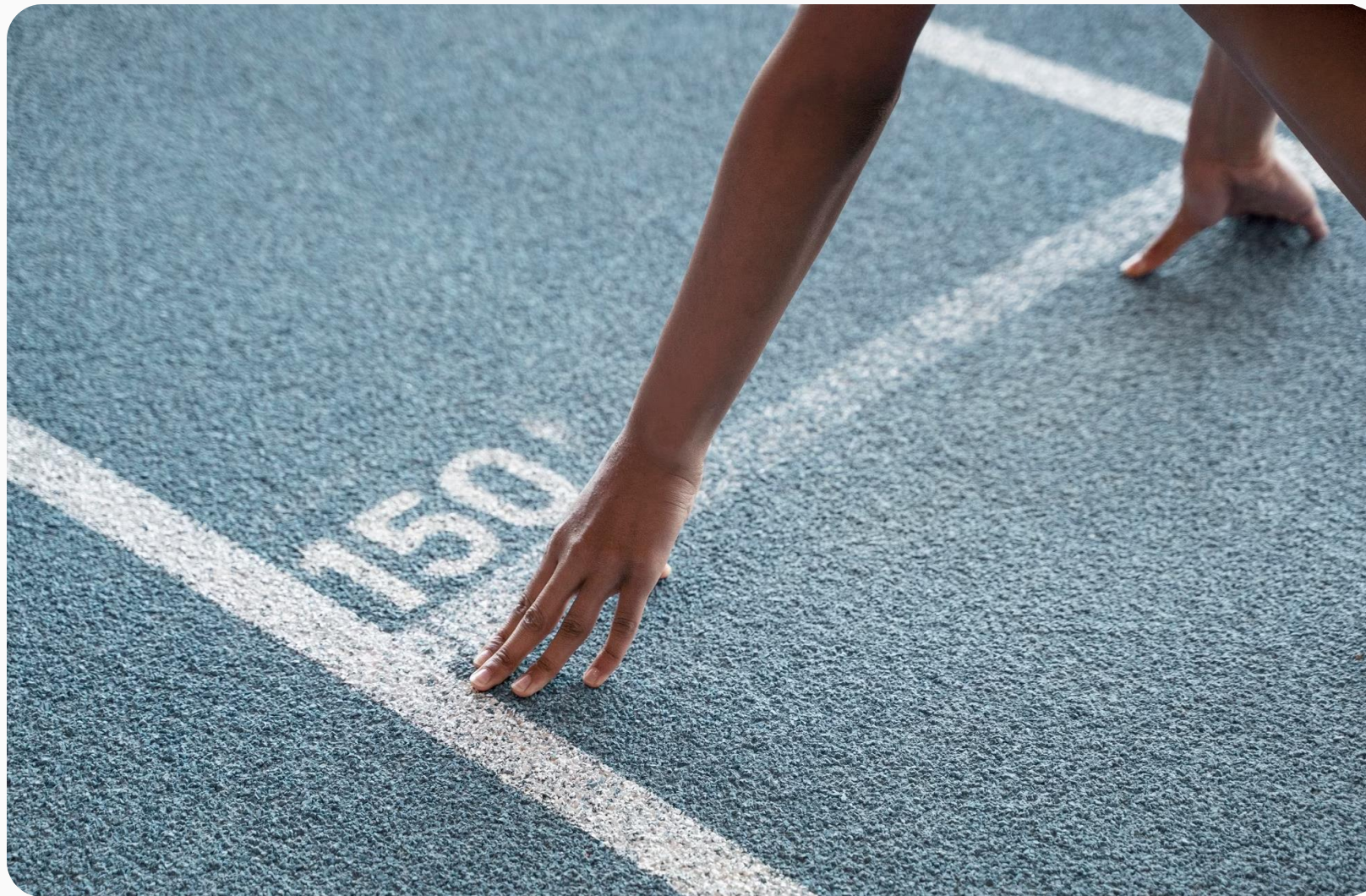
What Lava Is Not

- A programming language.
- It's not hard... really... 😊



Let's Go!

Enough talk, let's get started!





Lava Basics

```
1 <h1>Hello World</h1>
2 <p>
3     Excited and nervous, we embark on our
4     coding journey.
5 </p>
```



Hello World

Excited and nervous, we embark on our coding journey.



literal

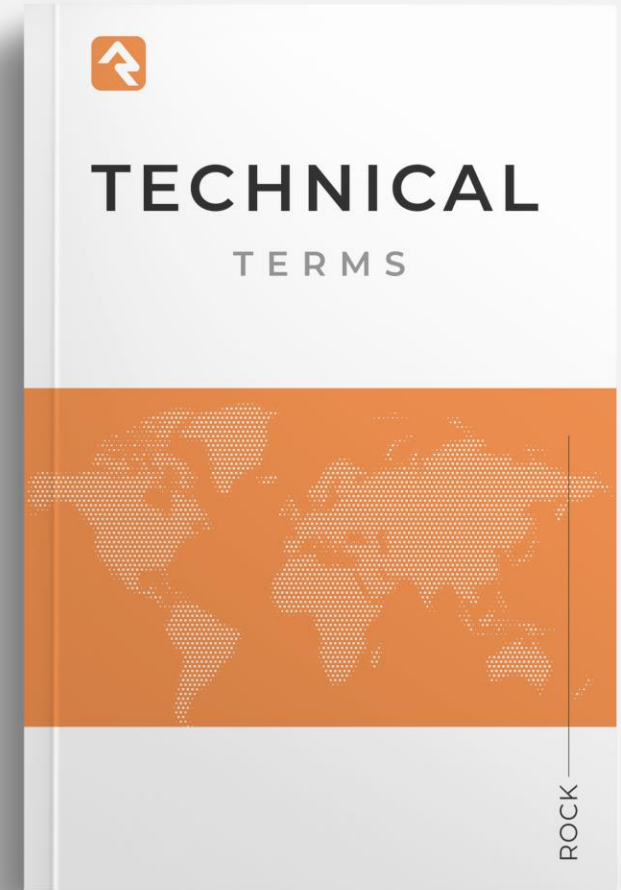
[lit-er-uhl]

A value that is directly written into the source code of a program.



Demystified:

The text is 'literally' typed into the Lava.





Power of Braces



```
{{ 'Hello World' }}
```



Pipes

Hello World



Uppcase



Pipes Are Filters

'Hello World'



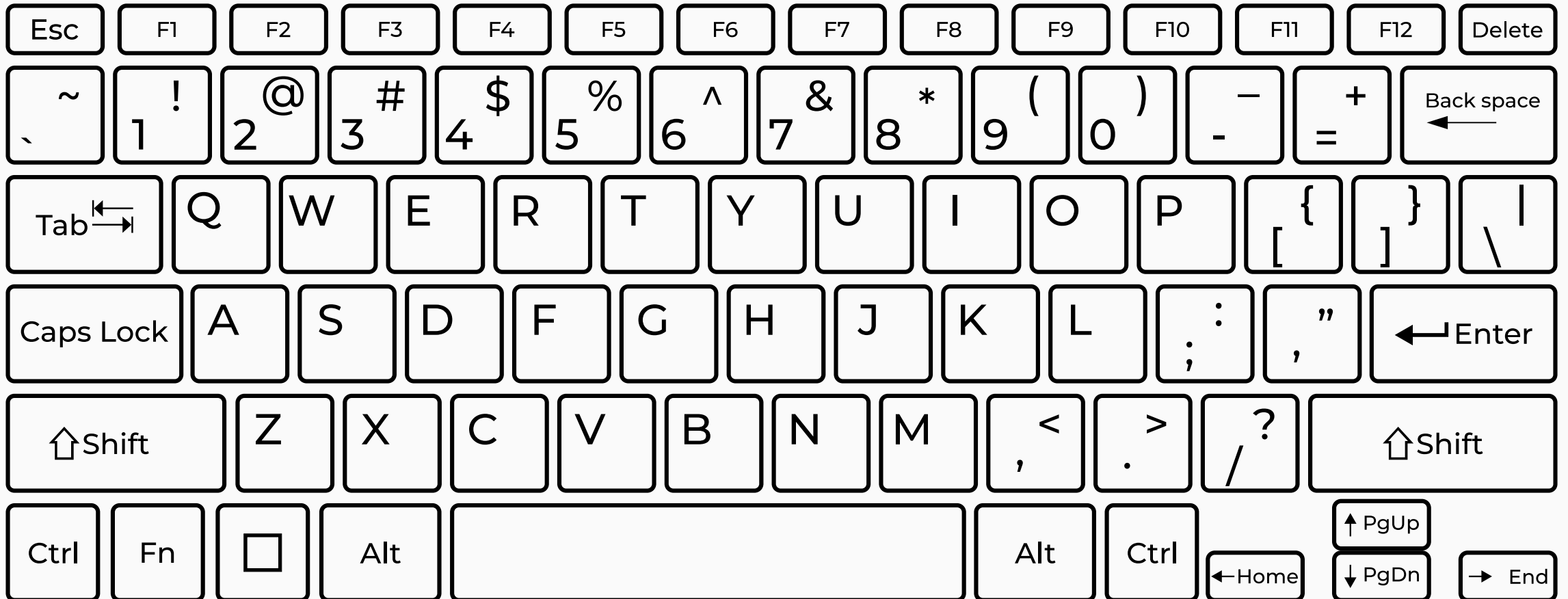
Uppcase



Pipes Are Filters

`{{ 'Hello World' | Uppcase }}`

```
{{ 'Hello World' | Uppcase }}
```





Where's the Pipe?





Our First Filter

```
1 <h1>{{ 'Hello World' | Uppcase }}</h1>
2 <p>
3     Excited and nervous, we embark on our
4     coding journey.
5 </p>
6
```

HELLO WORLD

Excited and nervous, we embark on our coding journey.



Class Editor Walk- Thru





Class Editor Walk-Thru

Hello World

Writing "Hello World" is a common exercise when you start learning a new language. Here we are using a literal to show that text. Update the template to make it completely capitalized.

Code

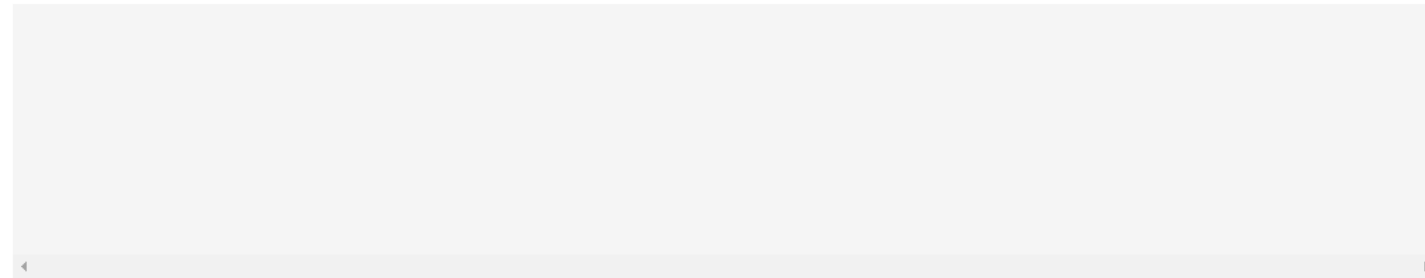


```
1 <h1>{{ 'Hello World' }}</h1>
2 <p>
3   Excited and nervous, we embark on our coding journey.
4 </p>
```

Run

Results

☐ Show Answer





Class Editor Walk-Thru

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Code

```
1 <h1>{{ 'Hello World' | Upcase }}</h1>
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```



Run

Results

☐ Show Answer

HELLO WORLD

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Code



```
1 <h1>{{ 'Hello World' | Uppcase }}</h1>
2 <p>
3   Excited and nervous, we embark on our coding journey.
4 </p>
```

Run

Results

☒ Show Answer

HELLO WORLD

Excited and nervous, we embark on our coding journey.

```
<h1>HELLO WORLD</h1>
<p>
  Excited and nervous, we embark on our coding journey.
</p>
```

[Show Solution Lava](#)

```
<h1>{{ 'Hello World' | Uppcase }}</h1>
<p>
  Excited and nervous, we embark on our coding journey.
</p>
```



Class Editor Walk-Thru

Hello World

Writing "Hello World" is a common exercise when you start learning a new language. Here we are using a literal to show that text. Update the template to make it completely capitalized.

Code

```
1 <h1>{{ 'Hello World' | Upcase }}</h1>
2 <p>
3   Excited and nervous, we embark on our coding journey.
4 </p>
```



Run

Results

☒ Show Answer

HELLO WORLD

Excited and nervous, we embark on our coding journey.

```
<h1>HELLO WORLD</h1>
<p>
  Excited and nervous, we embark on our coding journey.
</p>
```

[Show Solution Lava](#)

```
<h1>{{ 'Hello World' | Upcase }}</h1>
<p>
  Excited and nervous, we embark on our coding journey.
</p>
```



Hint:

“Show Answer” will show the desired markup, without revealing the Lava.



Our Second Filter

```
1 <h1>{{ 'Hello World' | Pluralize }}</h1>
2 <p>
3     Excited and nervous, we embark on our
4     coding journey.
5 </p>
6
```

Hello Worlds

Excited and nervous, we embark on our coding journey.



What's a Variable?





Using a Variable

```
1 <h1>{{ CurrentPerson | Uppcase }}</h1>
2 <p>
3     We're so glad you're here with us today!
4 </p>
5
```

TED DECKER

We're so glad you're here with us today!



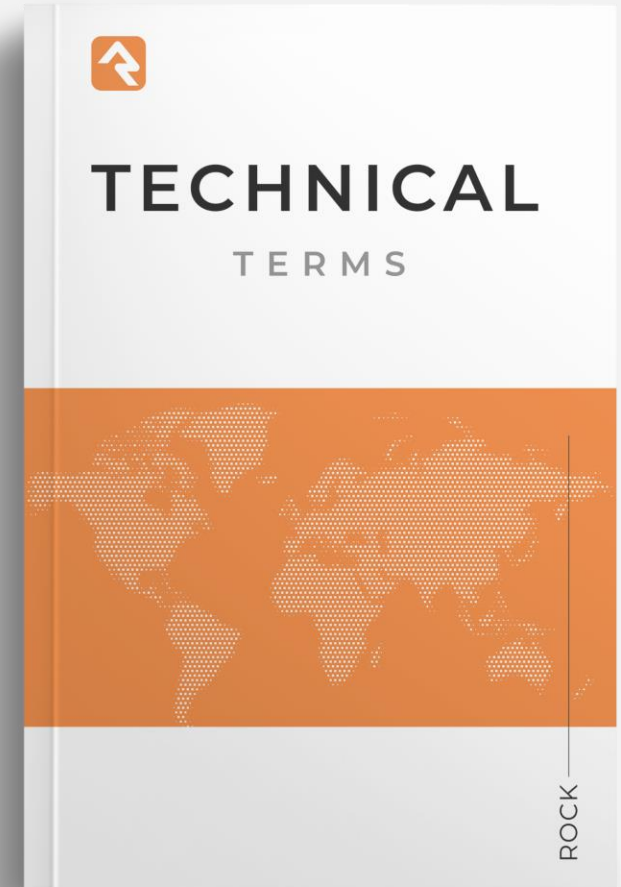
variable [vair-ee-uh-buhl]

A named storage location whose content can vary in value.



Demystified:

A variable in programming is like a labeled box for keeping and using things.





Taking a Step Back

```
1 <h1>{{ CurrentPerson | Uppcase }}</h1>
2 <p>
3     We're so glad you're here with us today!
4 </p>
5
```

```
1 "CurrentPerson" {
2     "FirstName": "Theodore",
3     "NickName": "Ted",
4     "LastName": "Decker",
5     ...
6 }
7
```

TED DECKER

We're so glad you're here with us today!



Lava Tags

Taking Action in Your Templates

Filters

```
1 {{ CurrentPerson | Uppcase }}
```

Filters display and format variables.

Tags

```
1 {% assign favoriteAnimal = 'Bear' %}
```

Tags or 'commands' perform specific actions or control the flow of the template.



Anatomy of a Variable

Three Types of Variables

Primitives

```
favoriteAnimal
```

Bear



Types of Primitives

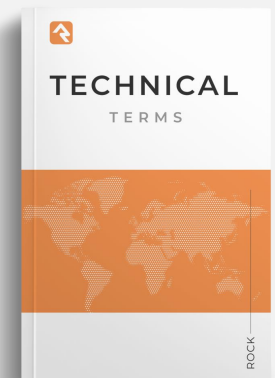
String

```
1 {% assign favoriteAnimal = 'Bear' %}
```



Demystified:

A 'string' of characters. B-e-a-r





Types of Primitives

String

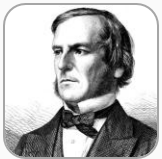
```
1 {% assign favoriteAnimal = 'Bear' %}
```

Number

```
1 {% assign favoriteNumber = 3 %}
```

Boolean

```
1 {% assign isSunday = true %}
```




George Boole





Variable Names

```
1 {% assign campusLocationPhone = '(623) 867-5309' %}
```

Variable names should be in
 case



Anatomy of a Variable

Three Types of Variables

Primitives

favoriteAnimal

Bear

Arrays

favoriteAnimals

0 Bear

1 Dog

2 Rhino

Arrays are collections that allow you to store multiple bits of information of the same type. Each 'slot' is numbered starting at zero. Think of an array as a list.



Anatomy of a Variable

Three Types of Variables

Primitives

favoriteAnimal

Bear

Arrays

favoriteAnimals

0 Bear

1 Dog

2 Rhino

Objects

CurrentPerson

FirstName: Theodore

NickName: Ted

LastName: Decker

...



Anatomy of Objects

CurrentPerson

FirstName: Theodore

NickName: Ted

LastName: Decker

...

Objects are made up of properties.

```
1  {{ CurrentPerson.NickName }} {{ CurrentPerson.LastName }}
```

**Object and Property names
should be in Pascal Case.**

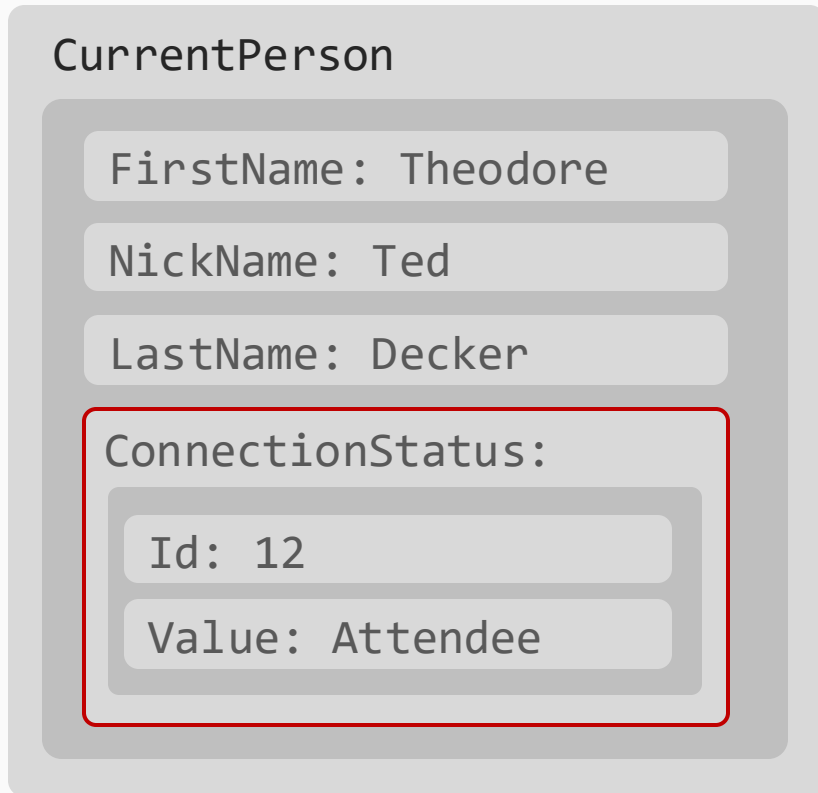


Blaise Pascal





Anatomy of Objects

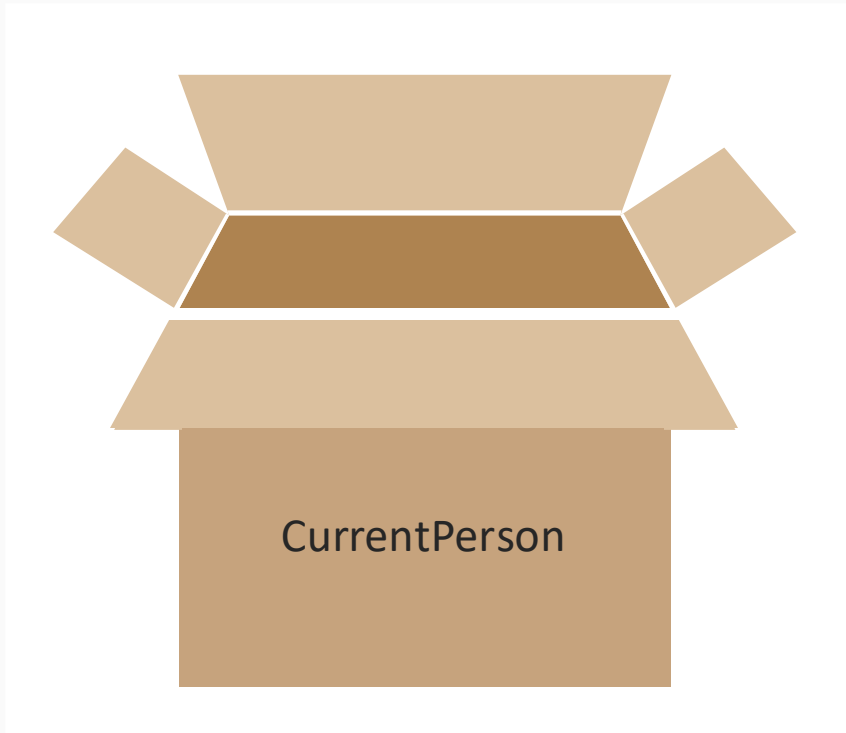


Properties can be objects.

```
1  {{ CurrentPerson.ConnectionStatus.Value }}
```



Anatomy of Objects

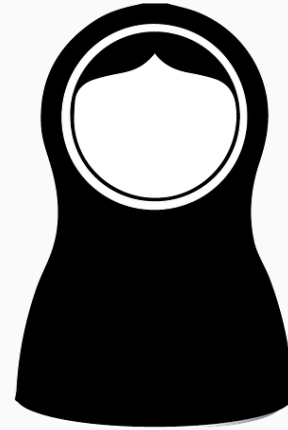
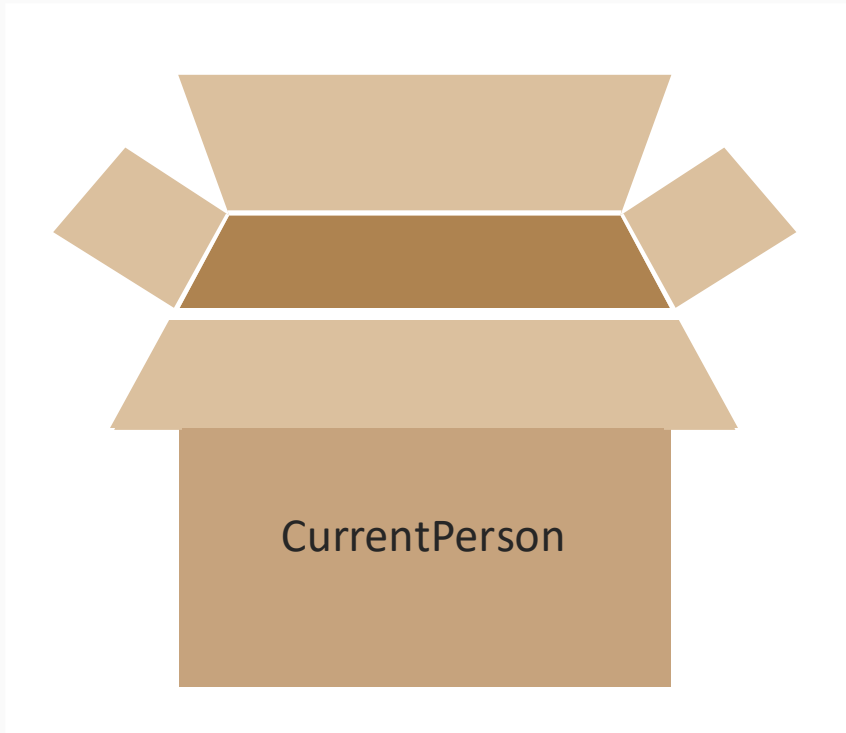


ConnectionStatus





Anatomy of Objects





Getting Data

Two ways to get data

Merge Fields (Provided by Block)

CurrentPerson

FirstName: Theodore

NickName: Ted

LastName: Decker

...

Group

Name: Ted's Group

Description:

Merge Fields are variables provided by blocks.

- Common Fields
 - CurrentPerson
 - CurrentVisitor
 - Campuses
 - CurrentBrowser



Getting Data

Two ways to get data

Get it Ourselves

```
1 {% person where:'LastName = "Decker"' %}  
2     {% for person in personItems %}  
3         {{ person.FullName }}  
4     {% endfor %}  
5 {% endperson %}
```

Entity Commands

```
1 {% sql %}  
2     SELECT [NickName], [LastName] FROM [Person]  
3     WHERE [LastName] = 'Decker'  
4 {% endsql %}  
5  
6 {% for item in results %}  
7     {{ item.NickName }} {{ item.LastName }}  
8 {% endfor %}
```

SQL



Don't Fear!

Entity Commands & SQL are covered in a later session.



Commenting

```
1  {% comment %}  
2  This is a comment  
3  {% endcomment %}
```

A love letter to your future self.

```
1  //- This is a single line comment
```

```
1  /-  
2      This Lava may seem complex, but let me explain it to you...  
3      ...  
4      See, that was not so bad, right?  
5  -/
```

Use simple comments.