

# Rules as Code

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# Outline:

1. What does “Rules as Code” mean?
2. What are the benefits?
3. What does it look like? (Blawx demo)




# What is “Rules as Code”?

## “Rules as Code” is a Methodology

- Draft rules in an interdisciplinary way
- “Co-Drafting” - Draft Rules in Natural Languages and Computer Languages At the Same Time

## “Encoded Rules” are a Product

- A digital encoding of the meaning of a rule
  - Can be used, in combination with facts and a query, and other tools, to automate reasoning about legal conclusions
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# The Benefits of “Rules as Code”

- Better-Drafted Legislation
  - By Virtue of Discipline
  - By Virtue of Enabling Computer Assisted Legislative Drafting
- More Effective Policy Design
- More consistency of interpretation
- Improvements to (public or private) automated legal services
  - Faster Development
  - Better Legal Quality Assurance
  - Easier to Maintain
- Simplified Regulatory Compliance
- Better Access to Justice in Canada
- ... and more ...



- Menu
- Facts, Rules, Queries
- Categories
- Known Categories
- Data Types
- Objects
- Known Objects
- Known Attributes
- Data
- Logic
- Variables
- ▶ Values

[www.blawx.com](http://www.blawx.com)

Rule Name: `return_to_Alberta_14`

We know `" person " 's required_to_isolate_14 is true`

if `" person " 's returned_to_Alberta is true`

Rule Name: `return_to_Alberta_10_symptomatic`

We know `" person " 's required_to_isolate_10 is true`

if `" person " 's returned_to_Alberta is true`  
`" person " 's is_symptomatic is true`

Rule `return_to_Alberta_14` overrides rule `default_no_isolation`

Rule `return_to_Alberta_10_symptomatic` overrides rule `default_no_isolation`



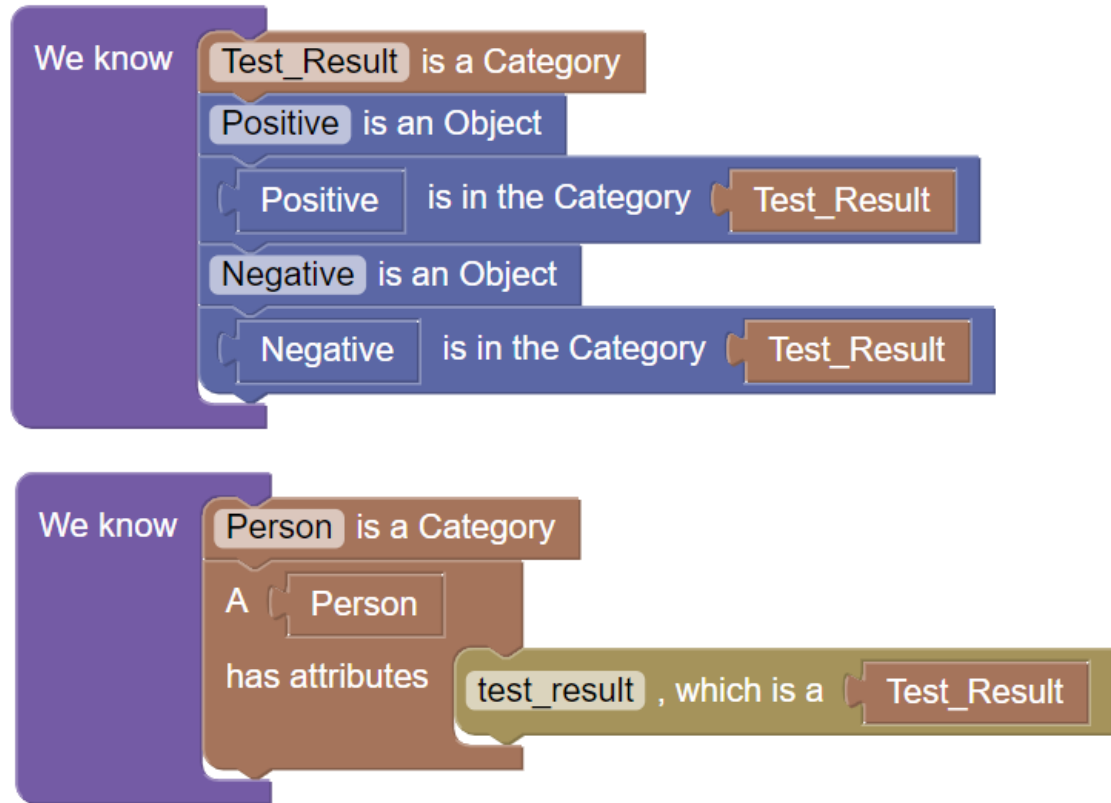
# The Blawx Encoding Process

1. Define Your Ontology
2. Encode the Rules
3. Provide Facts and Ask Questions



# 1. Defining an Ontology

“...a person  
who has a  
negative  
test  
result...”



## 2. Encode the Rules

“ A person with a positive test result is required to isolate for 10 days.”

Rule Name: `positive_isolate_10_days`

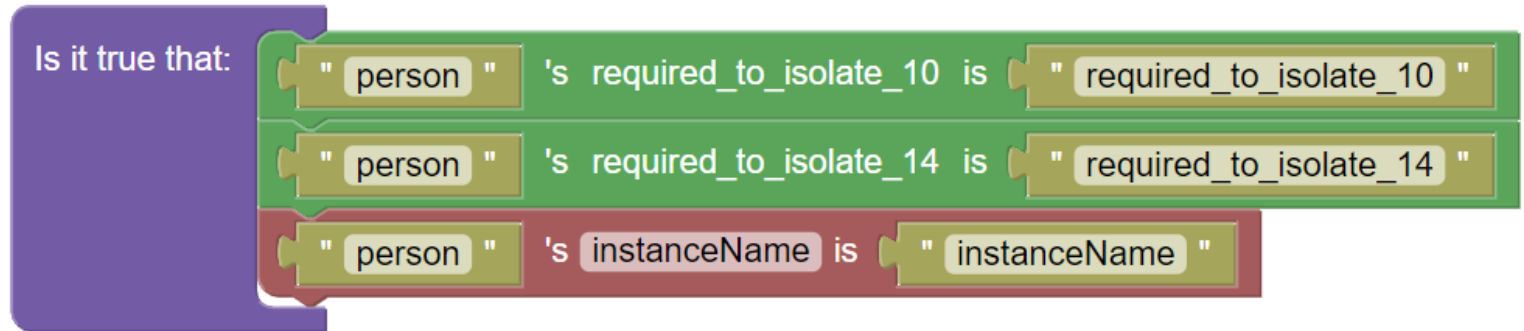
We know `" person "`'s `required_to_isolate_10` is `true`

if `" person "`'s `test_result` is `Positive`



### 3. Provide Facts and Ask Question


“Who is required to isolate for 10 or 14 days?”



# Docassemble Interview Demo

# Live Blawx Demo

# Responses to Common Objections/Concerns

- Encoded Rules are not a Black Box. They are open, transparent, and auditable.
  - Encoded Rules are not a third authoritative source of statutes. They are a detailed specification of the interpretation used by the government.
  - Rules can still be as ambiguous and subjective as you need them to be. Encoded rules don't remove ambiguity, they just make it explicit.
  - This isn't just for math, and taxes. Every law has some rules that can be usefully encoded. Some more than others.
  - Everything, including the *status quo*, has risks. Pick the combination of risks and benefits you prefer.
  - That it is not perfect does not mean it is not better.
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Legislative Drafters  
are the Key

# Any Answers?

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