



Wikimedia Commons [Chris Potter](#)

# Communication

DDD-Meetup Cincinnati 2019-10-15



# Communication

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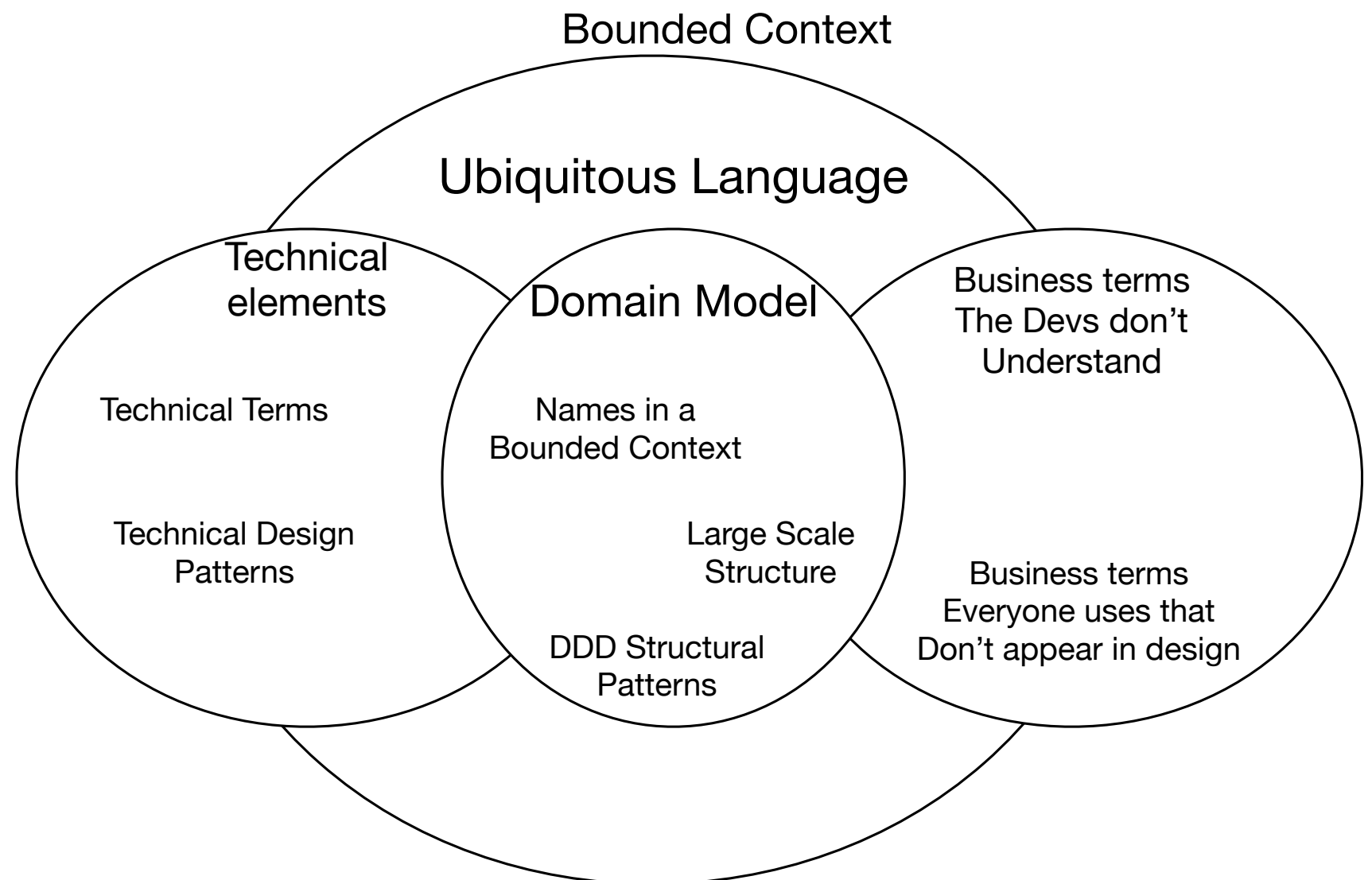
- Ubiquitous Language
- Whirlpool Process
- Event Storming

Ubiquitous Language

# Ubiquitous Language

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- “Ubiquitous” means everywhere
- But within a Bounded Context



# Create Your own Language

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- May need a new word when
  - Domain Expert uses a word not in the MODEL
  - Concept with adjectives
    - Suspended Member, Retired Employee
    - Beware of boolean flags, and state
  - Awkward or Complex to explain
  - Rename when a better word occurs

# Identify Tribal Language

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- Business Tribe
  - synergies, reaching out
- Software Tribe
  - Table, Join, data type, child-class

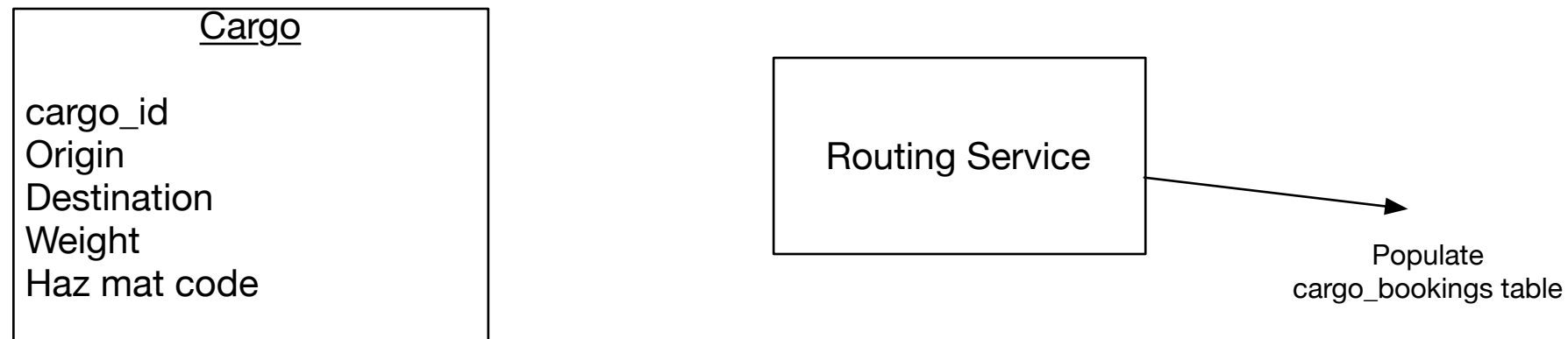
# Listen

- New Words
- Long Explanations
- Awkward Descriptions
- Buisness Jargon
- Tech speak



# Scenario 1: Minimal obstruction of the Domain

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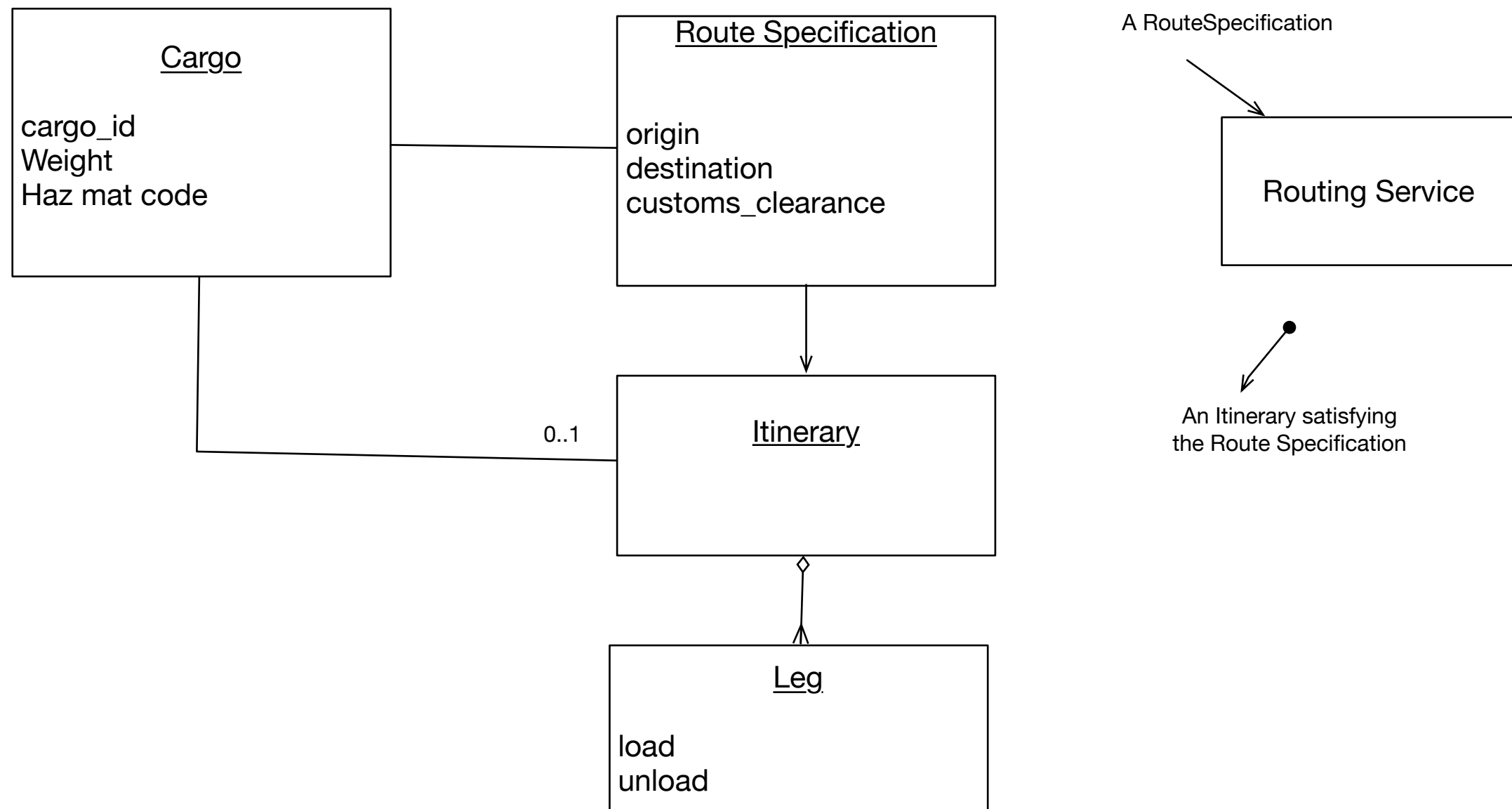
Database table: cargo\_bookings

Cargo ID	Transport	Load	Unload



# Scenario 2: Domain Model Enriched for Discussion

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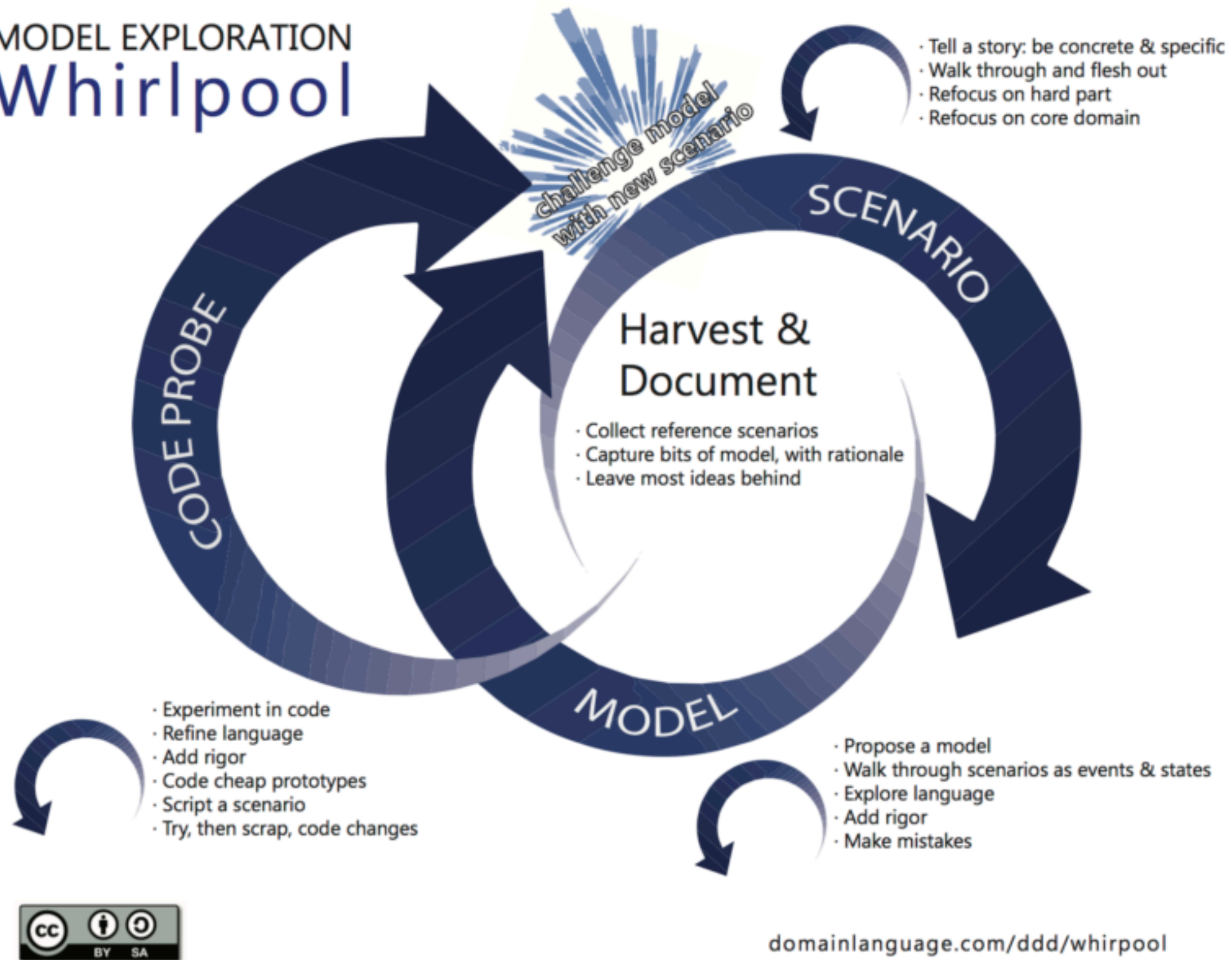


# Whirlpool





# MODEL EXPLORATION Whirlpool



Whirlpool

MODEL EXPLORATION

# Whirlpool Objectives

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- Start a new project
- Explore business scenarios and domain models
- Manage exploding complexity
- Break out of a rut on an existing project
- Collaborate between the software and business teams

# Situation

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- We cannot tell the future, so Agile rightly rejects Up-Front modeling
- Focusing on completing one task at a time creates an incentive for expedient design decisions and often leads to design fragmentation
- Over time this leads to complex and unmaintainable code



# Modeling in DDD

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- Up-Front Modeling is the opposite of DDD-Modeling
- DDD-Modeling is a distillation of knowledge
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# When to Model: Watching for Signals

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- no fixed time (maybe never). From push to ***pull***
- **When:**
  - Communications with stakeholders deteriorates
  - Solutions seem more complex than the problems
  - Velocity slows (completed work becomes a burden)
  - Team is moves to a new domain area for the first time and needs a overview to get started

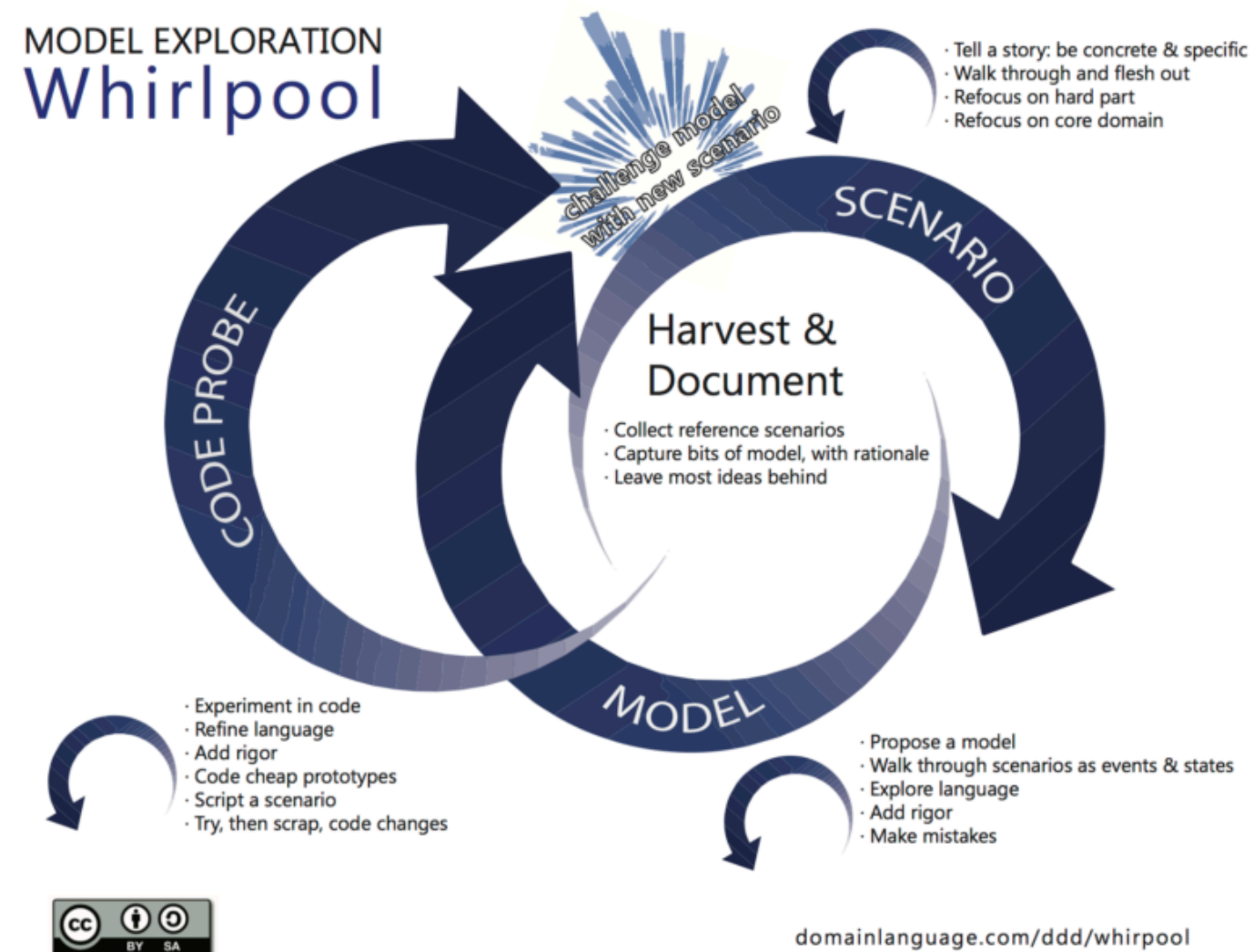
# Whirlpool Activities

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- Brainstorm
- Scenario Phase (Overlaps Modeling Phase)
- Modeling Phase (Overlaps Scenario)
- Challenge the Model
- Harvest & Document
- Code Probe

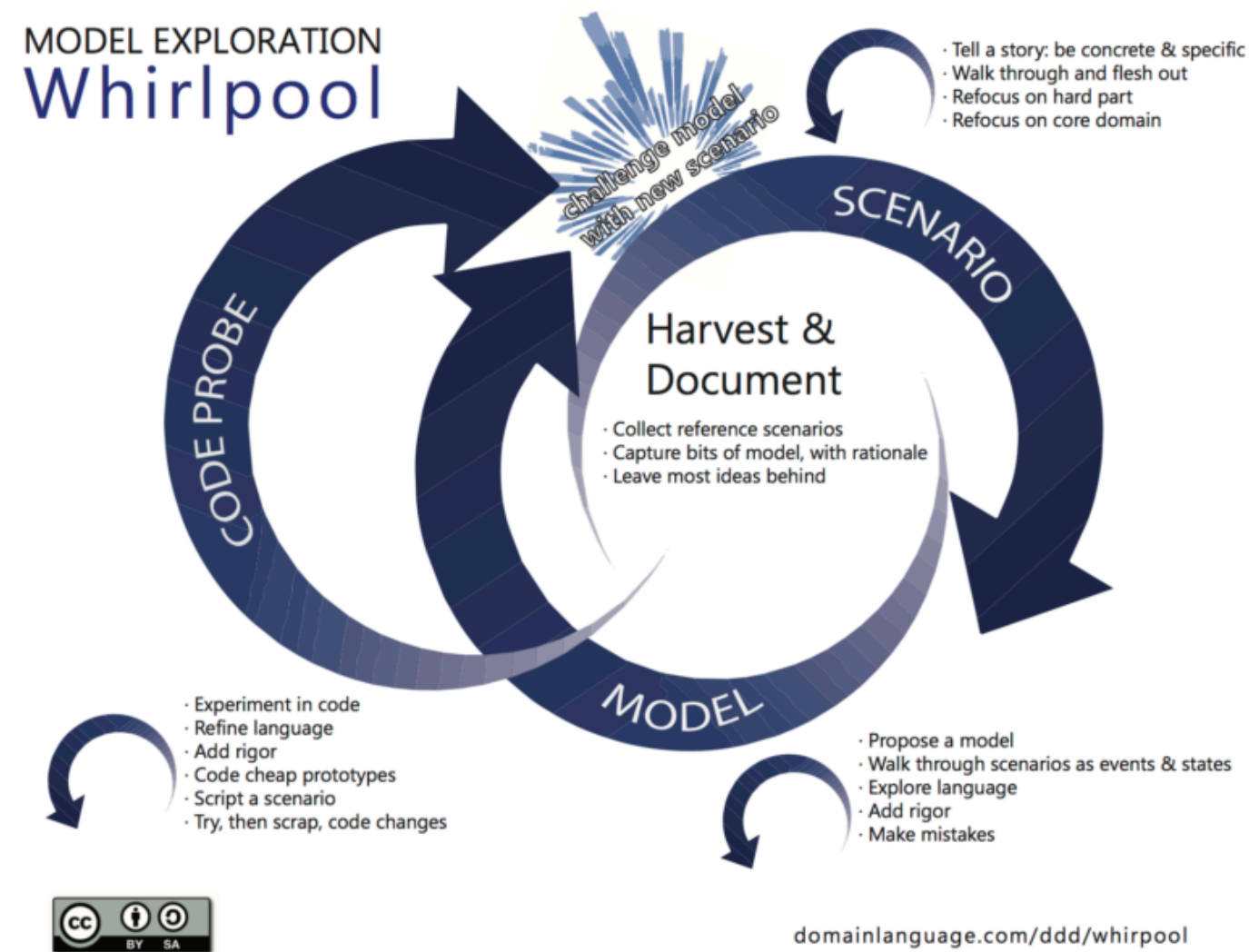
# Brainstorm

- Reference Scenarios
- Alternative models of Domain
- No Commitments
- Only Options



# Scenario Phase

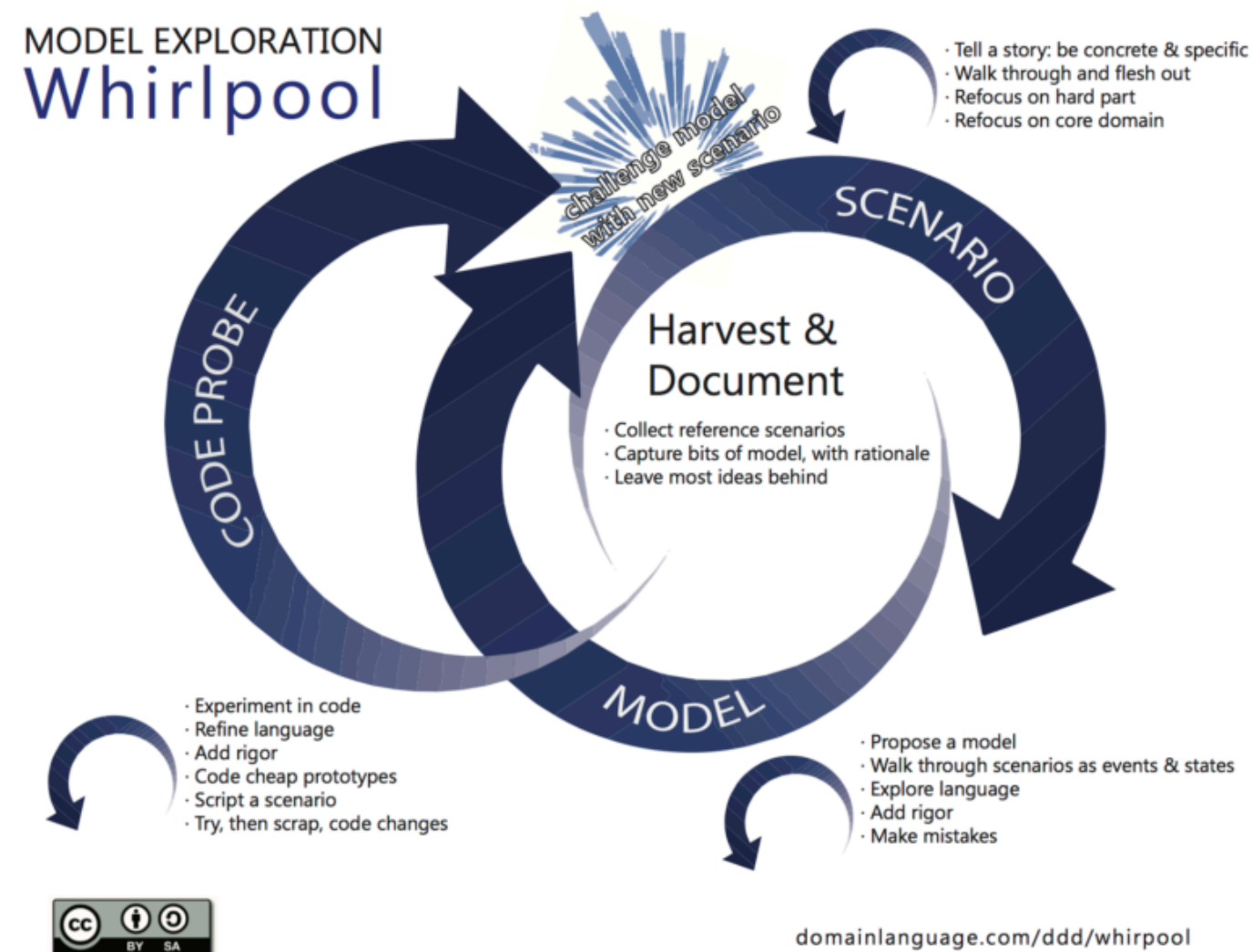
- Choose Initial Scenario
- One particular path
- Domain Expert Tells a Story
- Something that might happen
- Something that causes worry





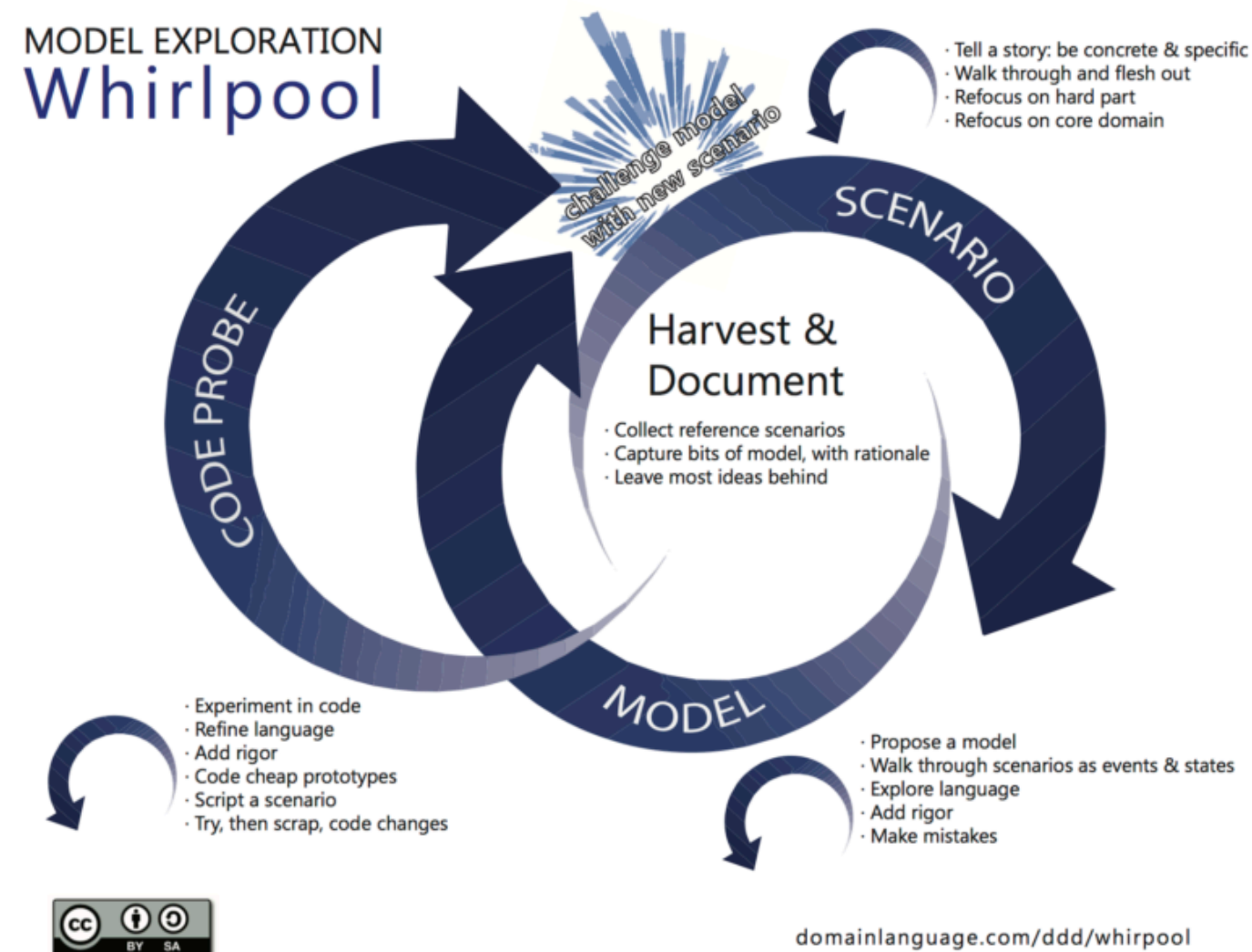
# Modeling Phase

- Step Through Scenario speaking the parts of the Model (or Models)
- Add and change Model language to express the Scenario



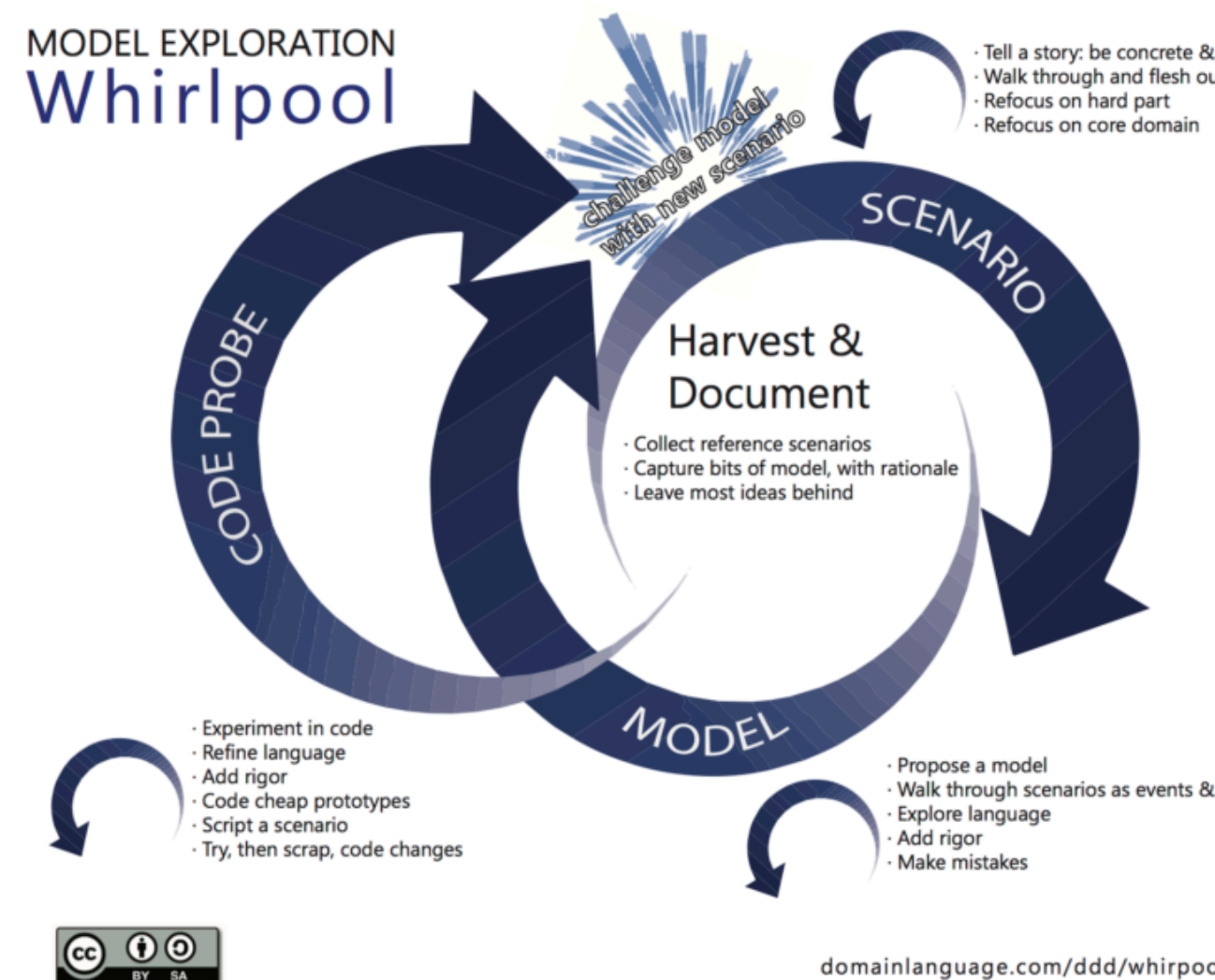
# Challenge the Model

- walk through a different reference scenario
- Find a scenario to express particular complexity
- Not just a corner case



# Harvest & Document

- One paragraph capturing why scenario(s) is important
- Over full project expect 4-10 “Reference Scenarios”
- Document any significant model
  - Capture the design rationale
  - Capture walk through with state changes
- Leave most ideas behind

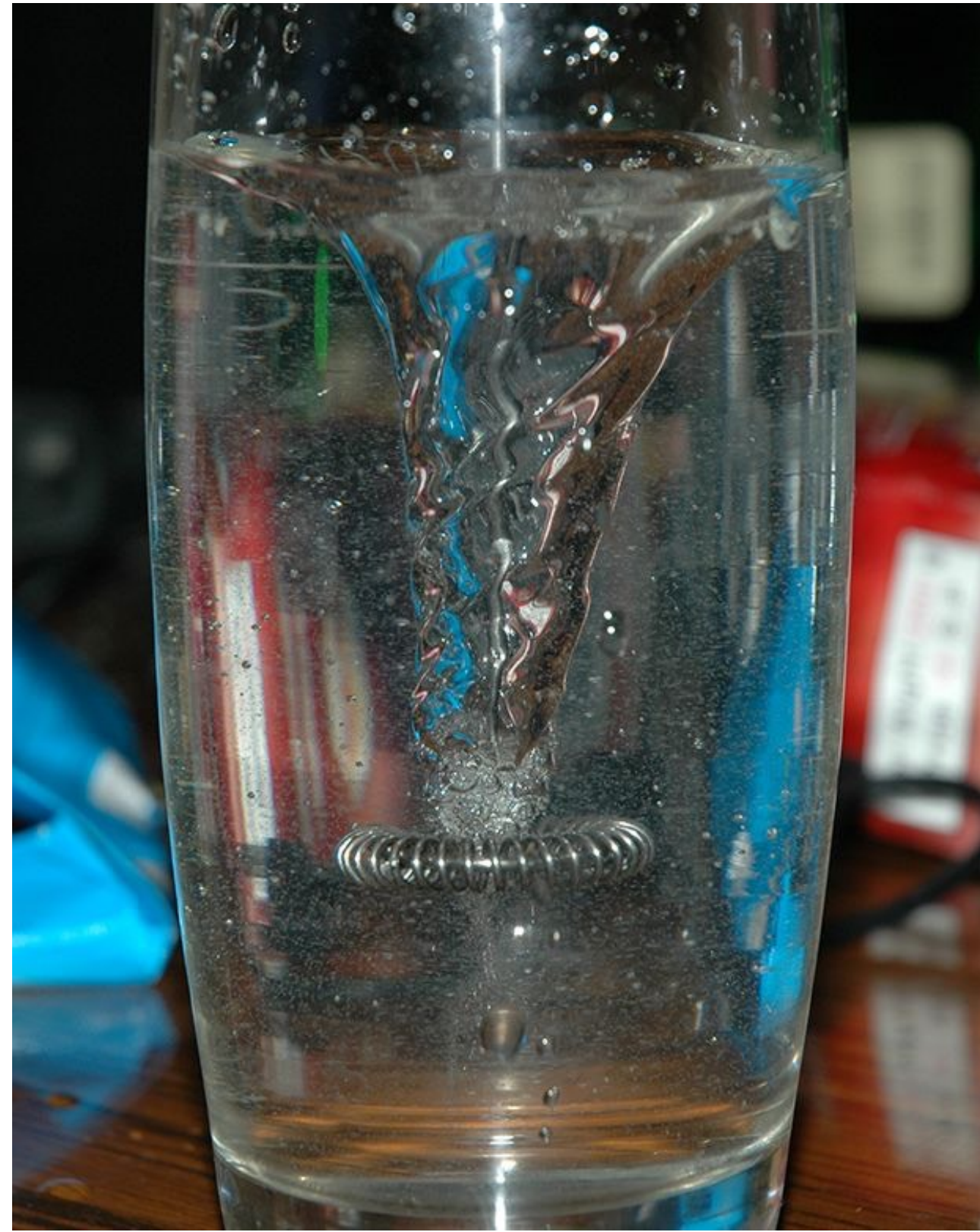




# Code Probe

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- If a viable idea emerged
- Test it in code
  - Eliminate all CRUD
  - What makes this hard





# Agile Process Hooks

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- Stand Up Meeting
- Spike
- Iteration Zero
- Iteration Planning / Estimating
- Release Planning





# Constraints

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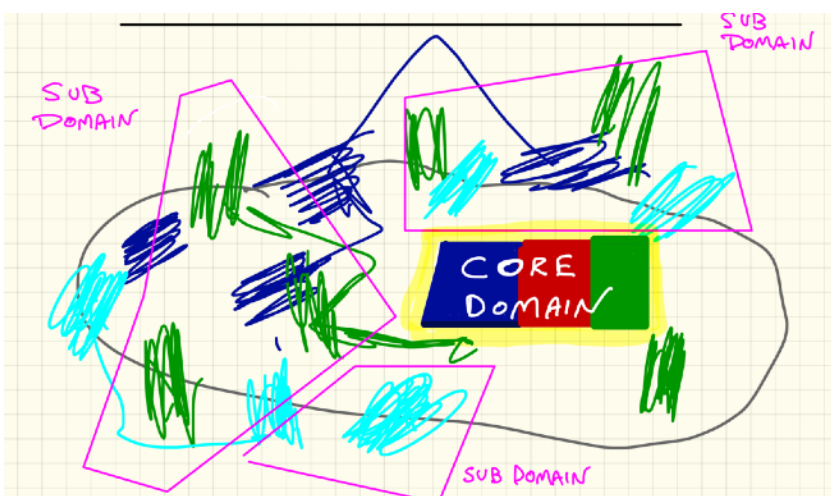
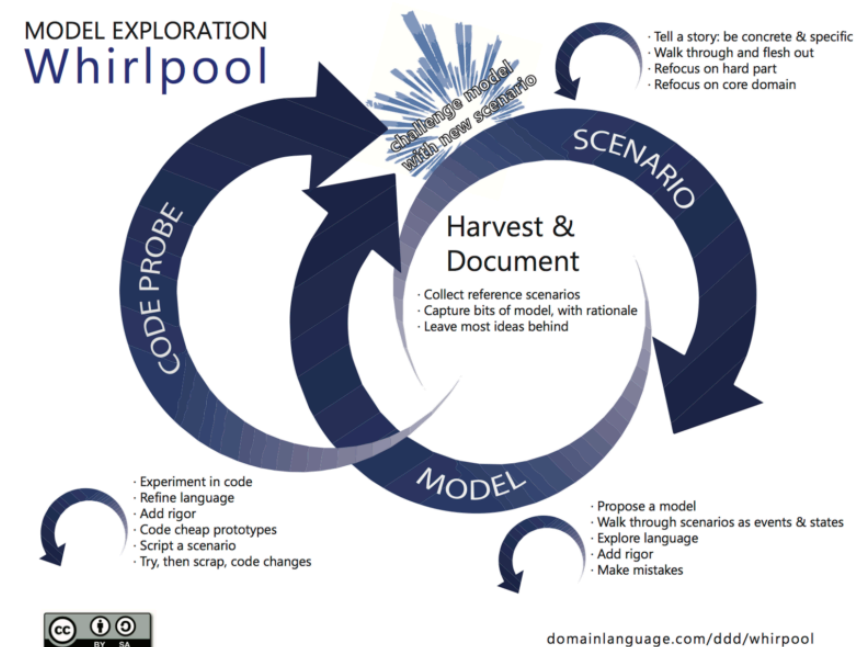
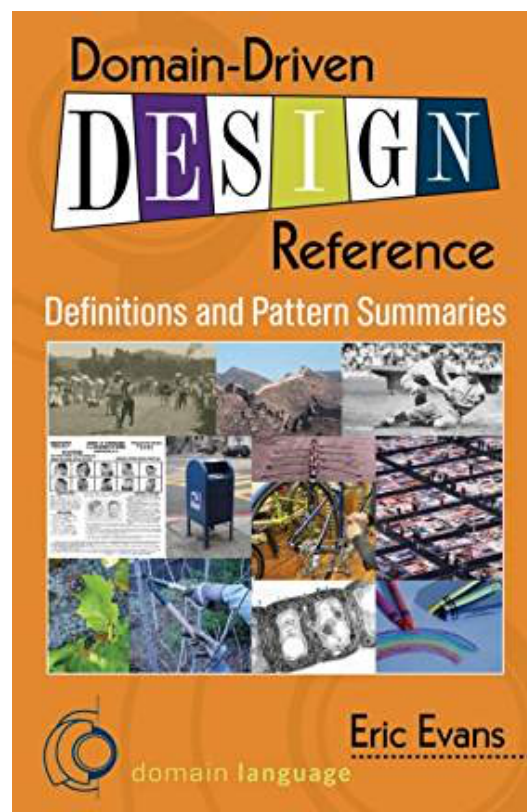


Everyday Astronaut interviews Elon Musk

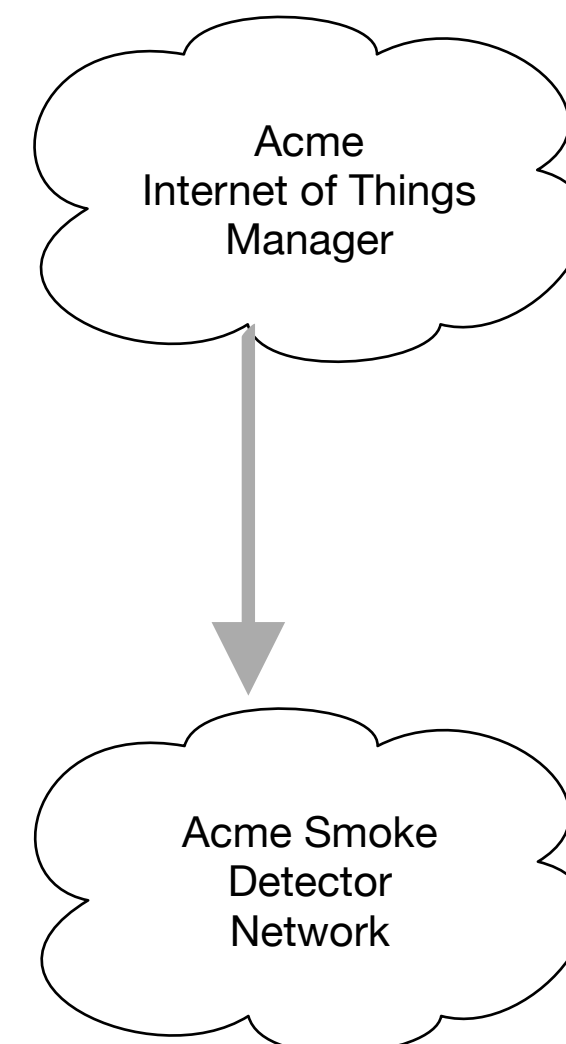
# Tips

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- Question Constraints
  - Constraints are guaranteed to be wrong
  - Frame the Question
- Confirm the Obvious
- Ask Stupid Questions



# The End



- Whirlpool article
  - <https://www.yumpu.com/en/document/read/3629406/model-exploration-whirlpool-domain-language-home>
- Full Elon Musk Interview
  - <https://www.youtube.com/watch?v=clQ36Kt7UVg>
- Marco Heimeshoff - DDD 2018: Software Development Is Not About Software
  - [https://www.youtube.com/watch?time\\_continue=2&v=5AcYKhB4hu4](https://www.youtube.com/watch?time_continue=2&v=5AcYKhB4hu4)
- DDD Wiki
  - <http://ddd.fed.wiki.org/view/welcome-visitors/view/domain-driven-design>