

## What is DINA?

A **D**igital information system for **N**atural history data  
(and the consortium that develops it)

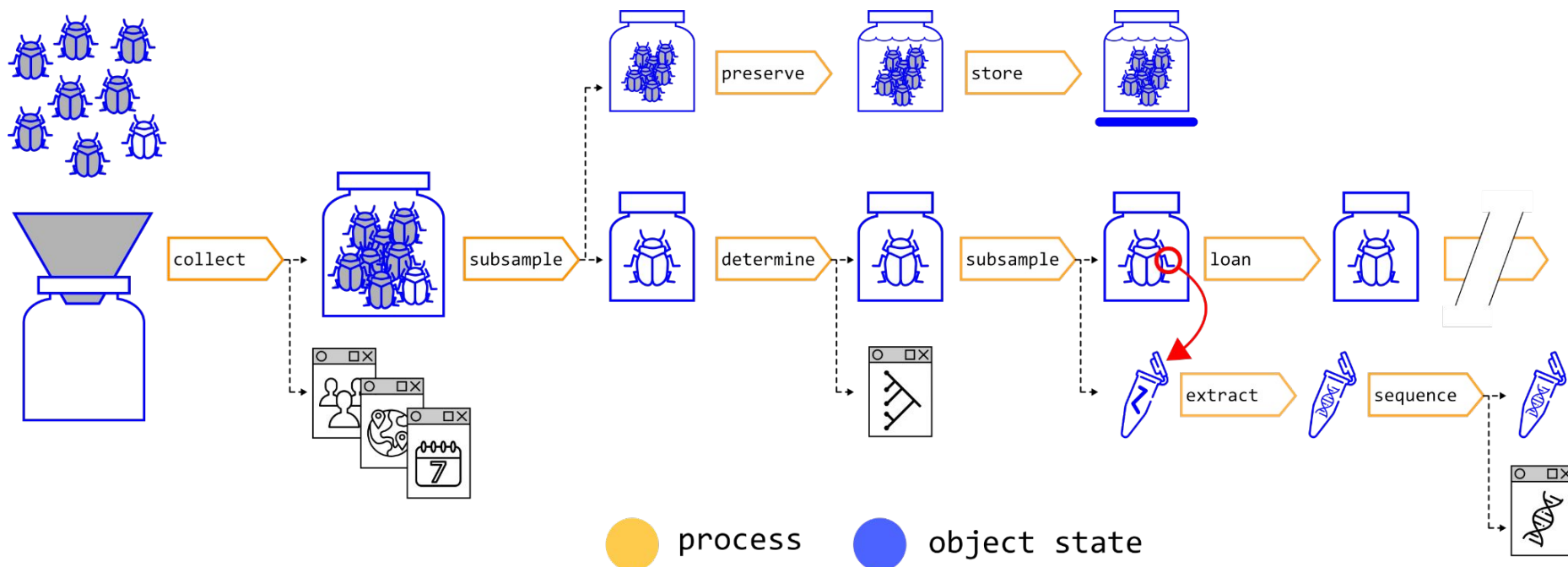
- web-based application for managing, sharing and re-using natural history collection data
- community-driven, modular software development and architecture
- Web Content Accessibility Guidelines (WCAG)-compliant
- open source, MIT-License, dockerized code



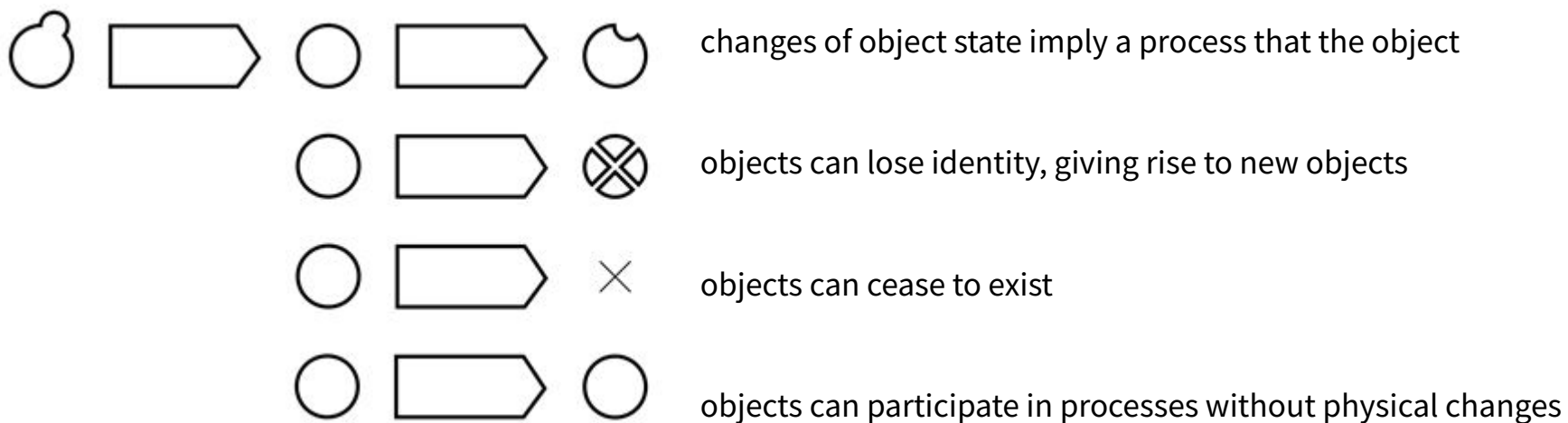
<https://dina-project.net>

## The core principle for Knowledge Representation in DINA:

### Process- and State-Based Representation of Object Histories

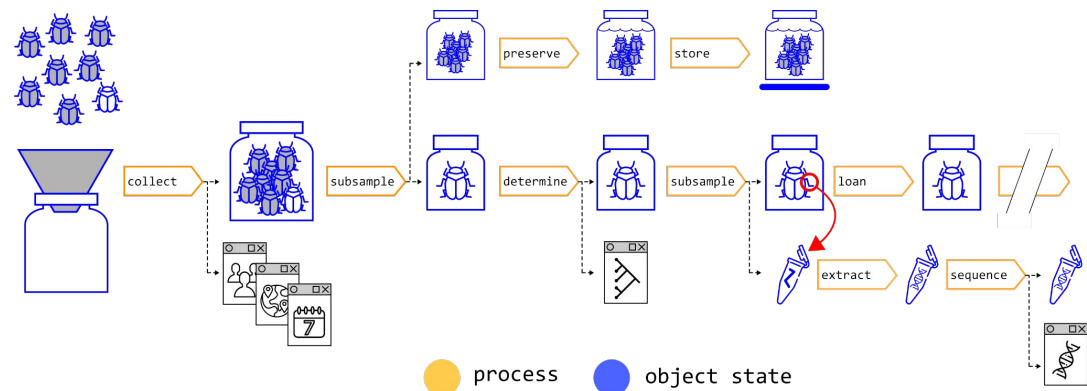


## Processes and object states intertwined:



# Thinking Material Samples, Parts and Derivatives:

any object that participates in the course of interventions after initial collection is considered a *Material Sample* - whether or not it is persisted in the collection



any collection object potentially consists of multiple parts some of which can be derived from different biological individuals.

**GBIF:**

“In every use case the conceptual and data publishing **models are built around the fundamental concept of an event** - some activity within some place during some period of time.” [1]

**DINA:**

“Specimens, samples and **objects in general are subjected to a variety of processes**, including planned actions involving the object, e.g., collecting, preparing, subsampling, loaning. **Object states are any particular mode of being of an object at a certain point in time.** For example, any one intermediate step in preparing a collected specimen for long-term conservation in a collection would constitute an individual object state. **An object’s history is the entire chain of these interrelated processes and states.**” [2]

[1] [https://docs.google.com/document/d/1OpXwole\\_j32QZAg6ddqOrAB5OOdqVJKdoKKzz06CK-o/edit](https://docs.google.com/document/d/1OpXwole_j32QZAg6ddqOrAB5OOdqVJKdoKKzz06CK-o/edit)

[2] <https://doi.org/10.3897/biss.5.75178>

## Acknowledgments

- data model co-designed by **Museum für Naturkunde Berlin** and **Agriculture and Agri-Food Canada**
- beta user interface and API implementation lead by **Agriculture and Agri-Food Canada**:
  - funded by the **Government of Canada** as a component of the **BioMob Project**
  - followed modified agile development: stakeholders are a mix of collection managers, researchers and technical support staff; recurrent scrums



<https://dina-project.net> # start here

<https://github.com/DINA-Web> # project documentation

[info@dina-project.net](mailto:info@dina-project.net) # inquiries and membership