

# A language and runtime for data that change

An intended experience:

Step 1: You write a program.

Step 2: You change its inputs.

Step 3: You see output changes.

Ideally: responsive, scalable, reliable, ...

# Changes and Consistency

We will transcribe changes to a data collection explicitly, as a (growing) set of **updates**:

`{ (datum, time, diff) }`

What thing changed?  
(e.g. Row, String, type)

When did it change?  
(e.g. a timestamp)

How did it change?  
(e.g. +/-1 occurrence)