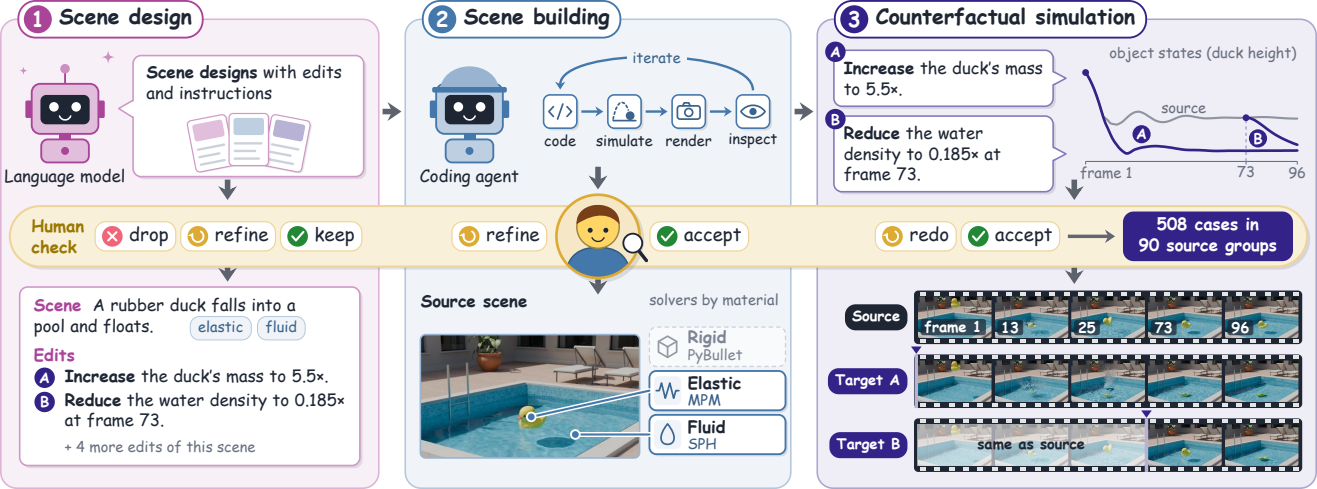
1 Scene design
Scene designs with edits and instructions
Language model
2 Scene building
iterate
code
simulate
render
inspect
Coding agent
3 Counterfactual simulation
A Increase the duck's mass to 5.5×.
B Reduce the water density to 0.185× at frame 73.
object states (duck height)
source
A
B
frame 1
73
96
Human check
drop
refine
keep
refine
accept
redo
accept
508 cases in 90 source groups
Scene A rubber duck falls into a pool and floats.
elastic
fluid
Edits
A Increase the duck's mass to 5.5×.
B Reduce the water density to 0.185× at frame 73.
+ 4 more edits of this scene
Source scene
solvers by material
Rigid
PyBullet
Elastic
MPM
Fluid
SPH
Source
frame 1
13
25
73
96
Target A
Target B
same as source