

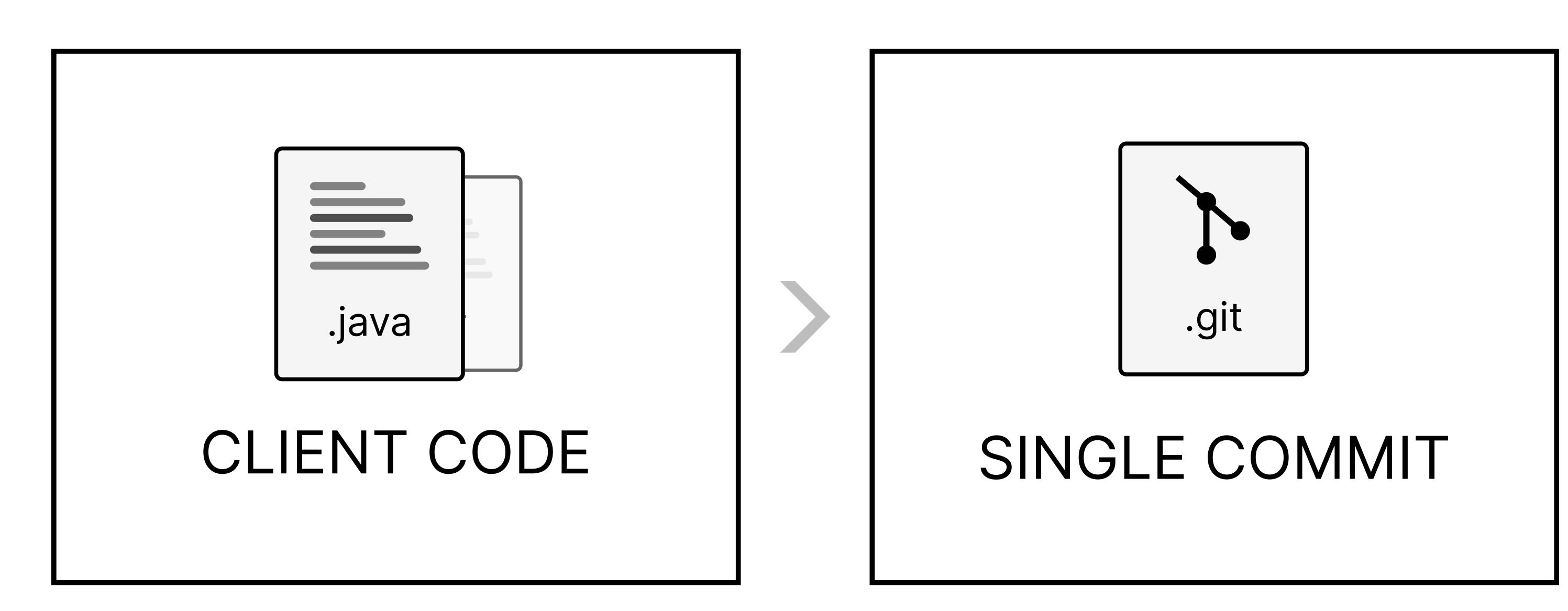
Slowdown breaking dependency updates with Bumper

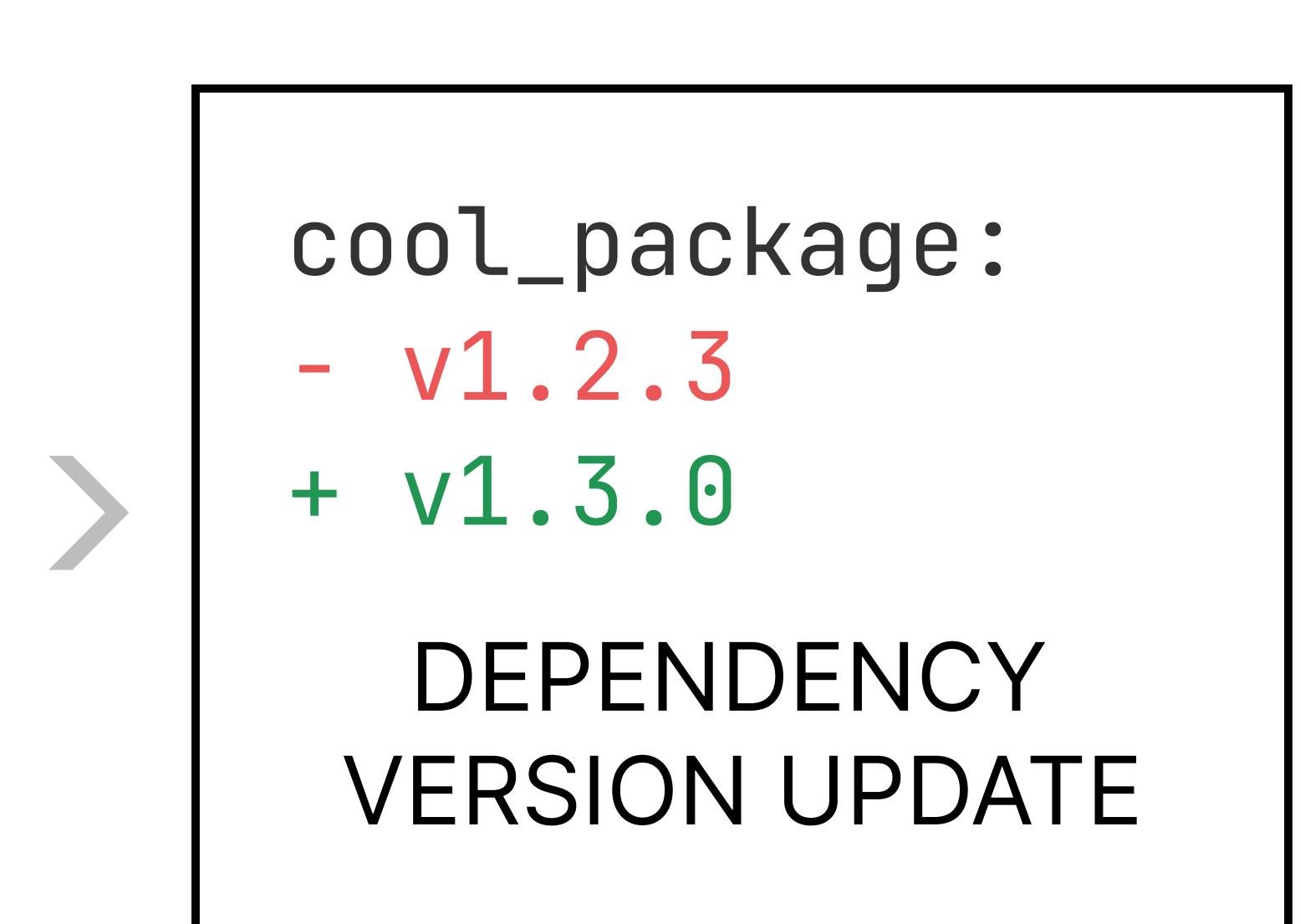


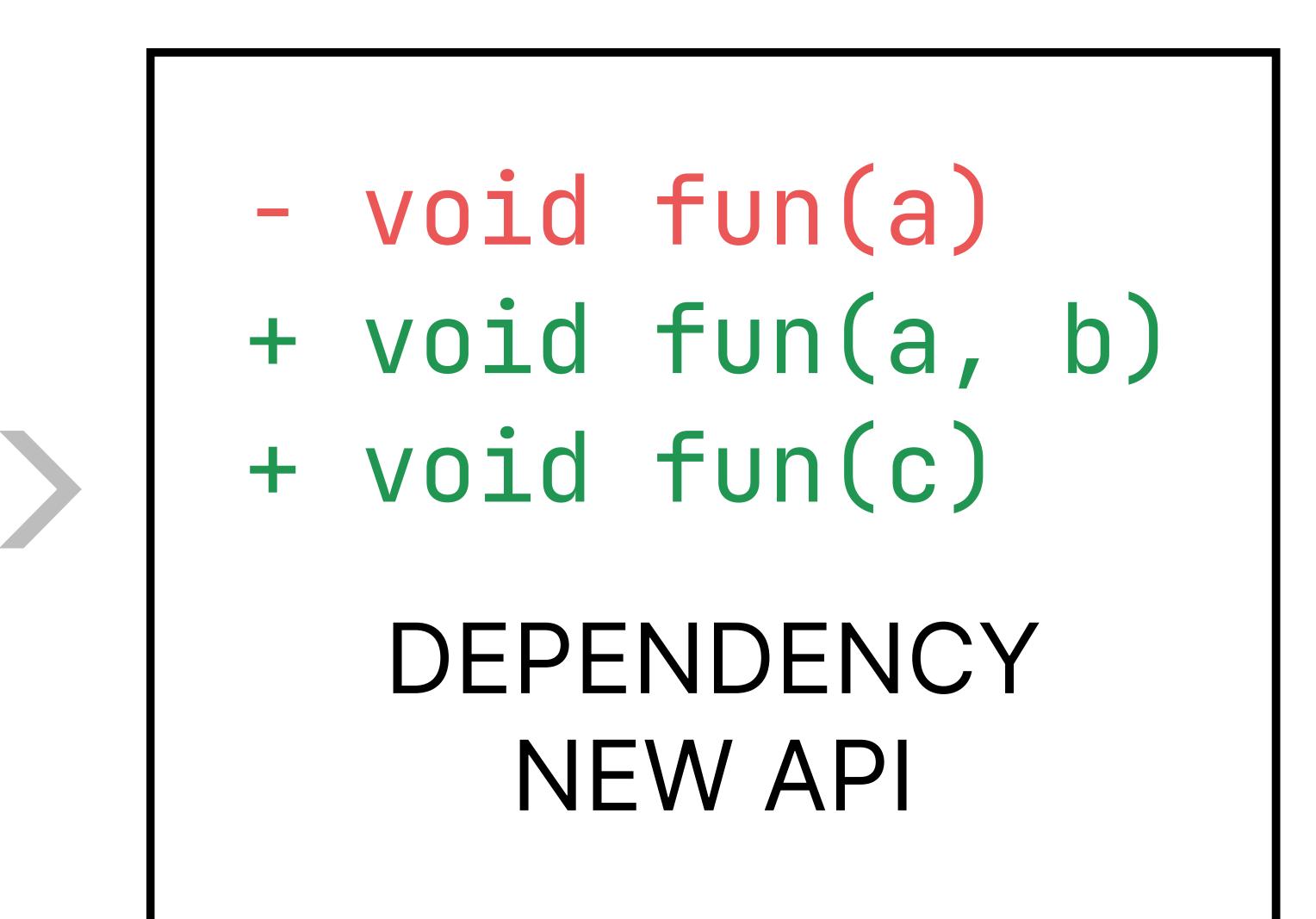
Federico Bono

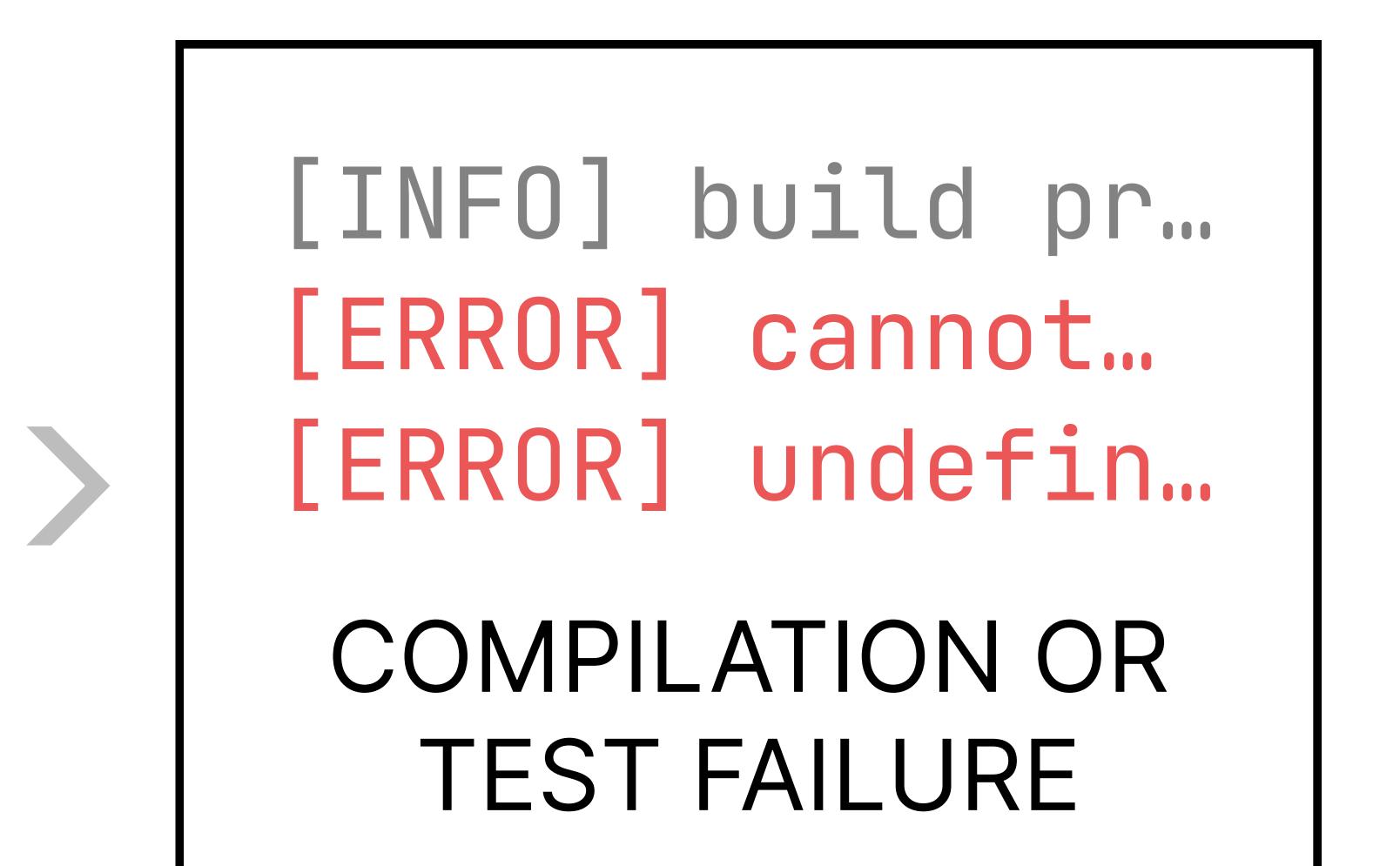
fbono@kth.se



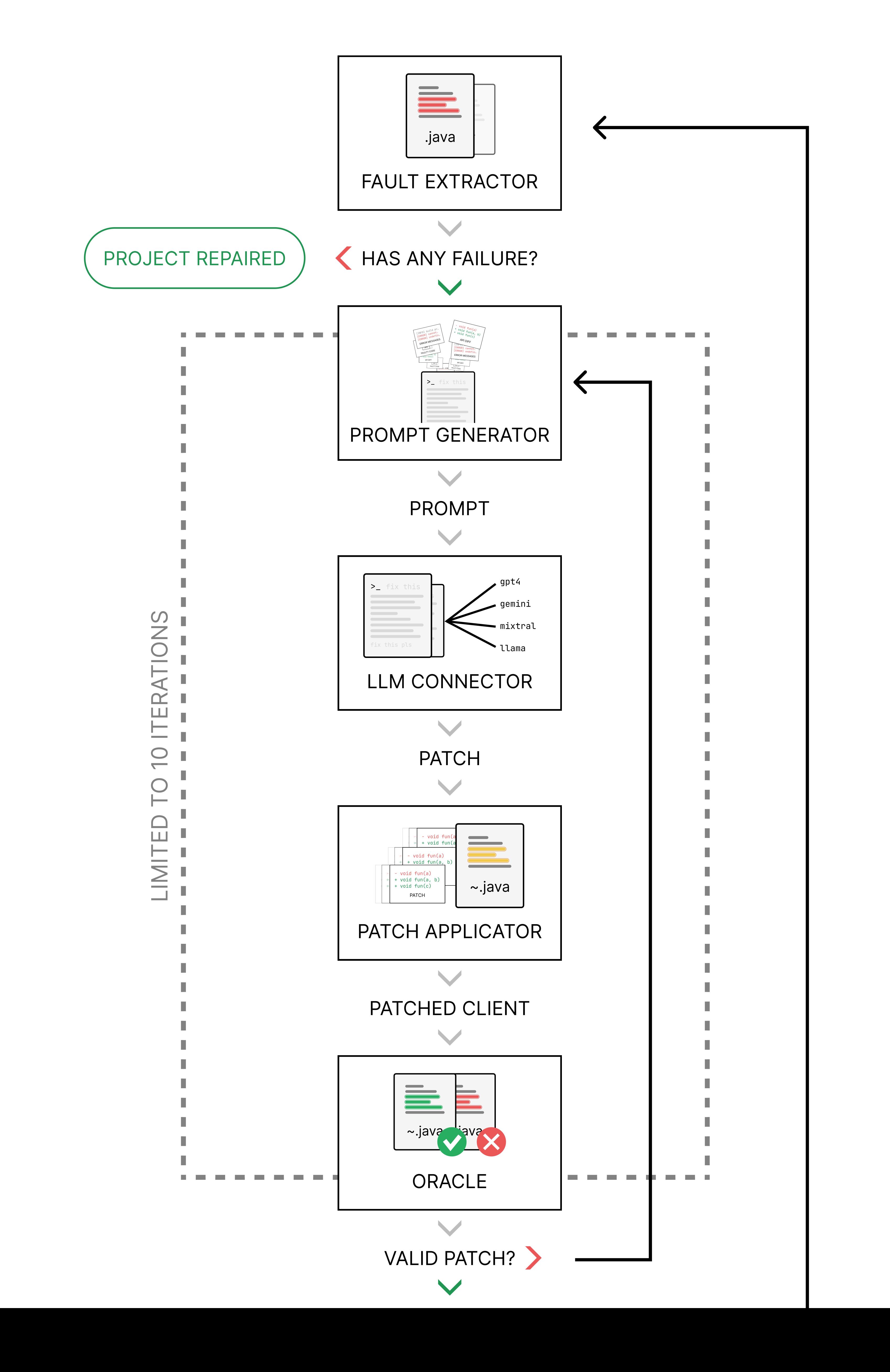




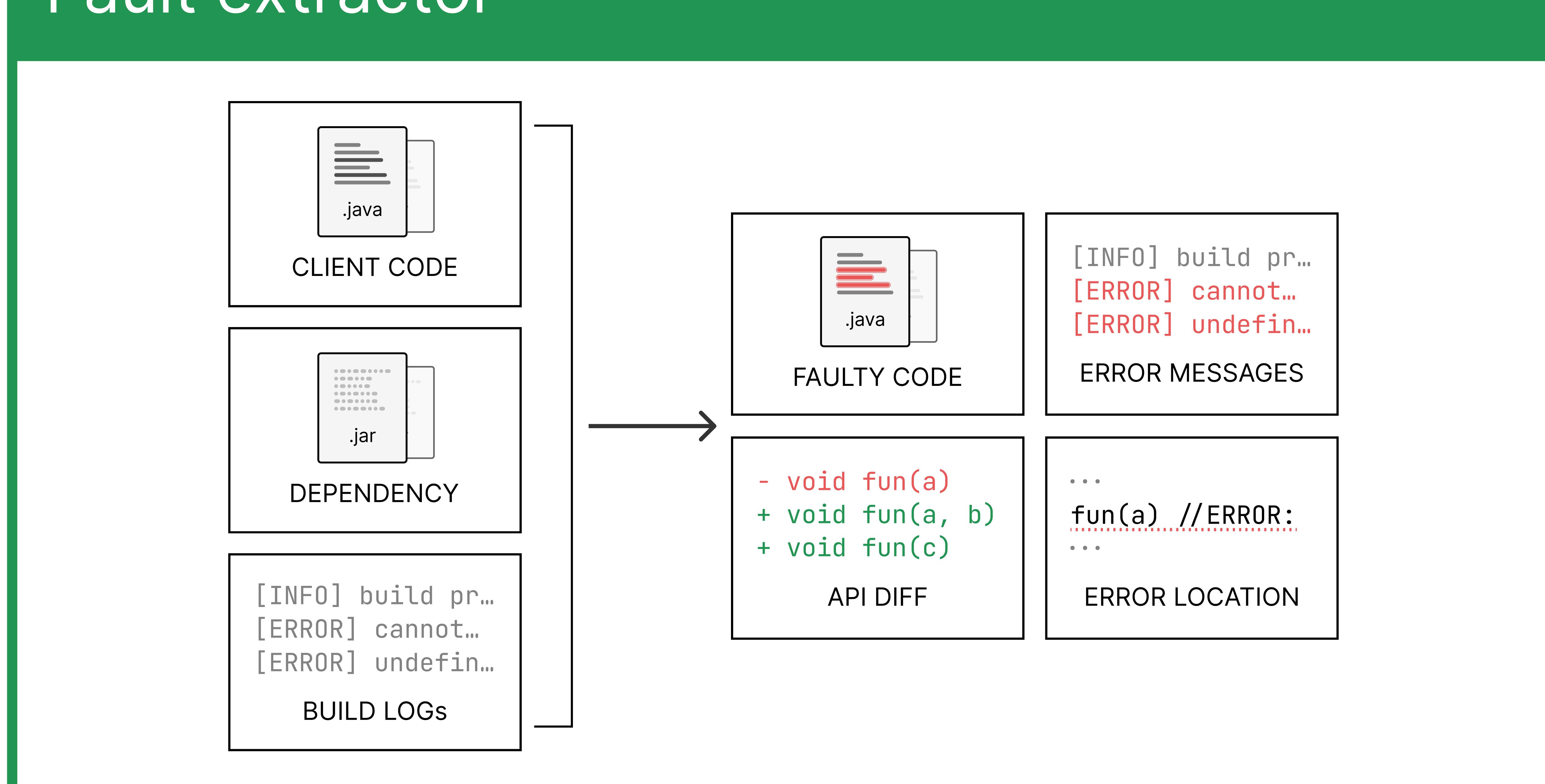




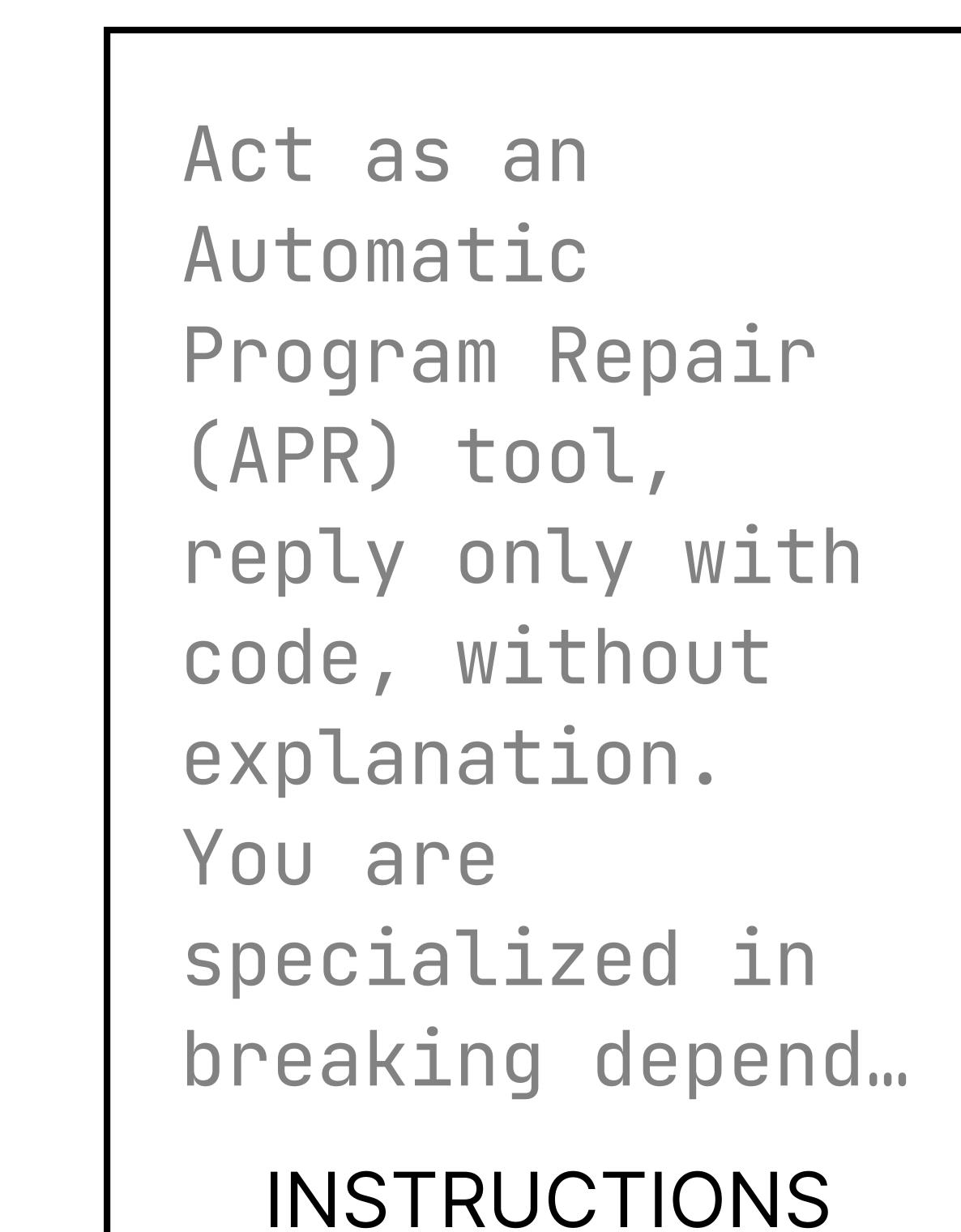
Bumper automatic repair pipeline



Fault extractor



General prompt components



```
- void fun(a)
+ void fun(a, b)
+ void fun(c)
```

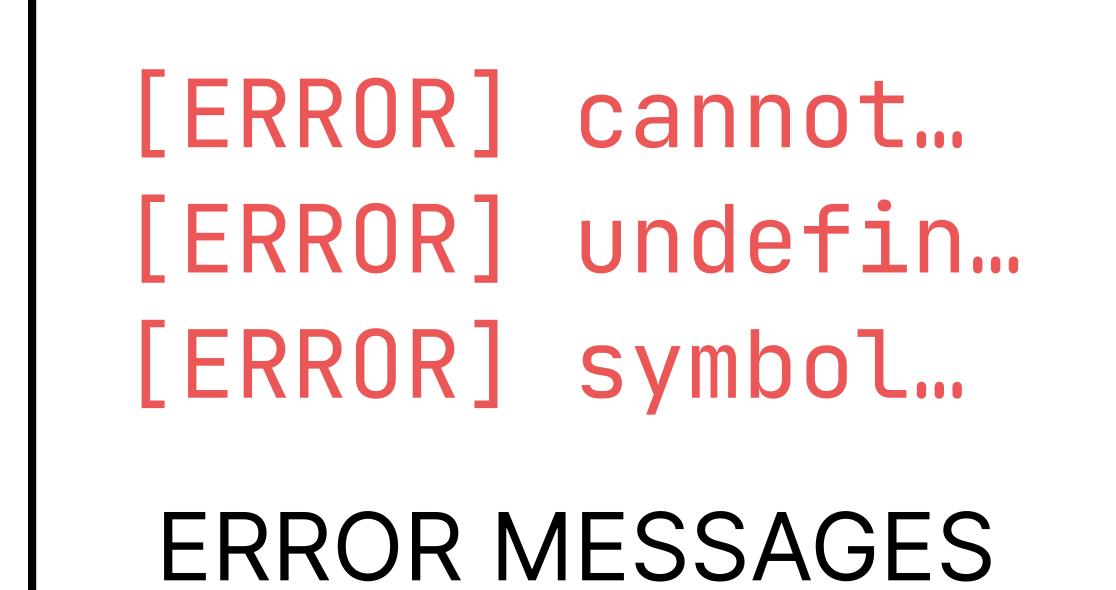
API DIFF

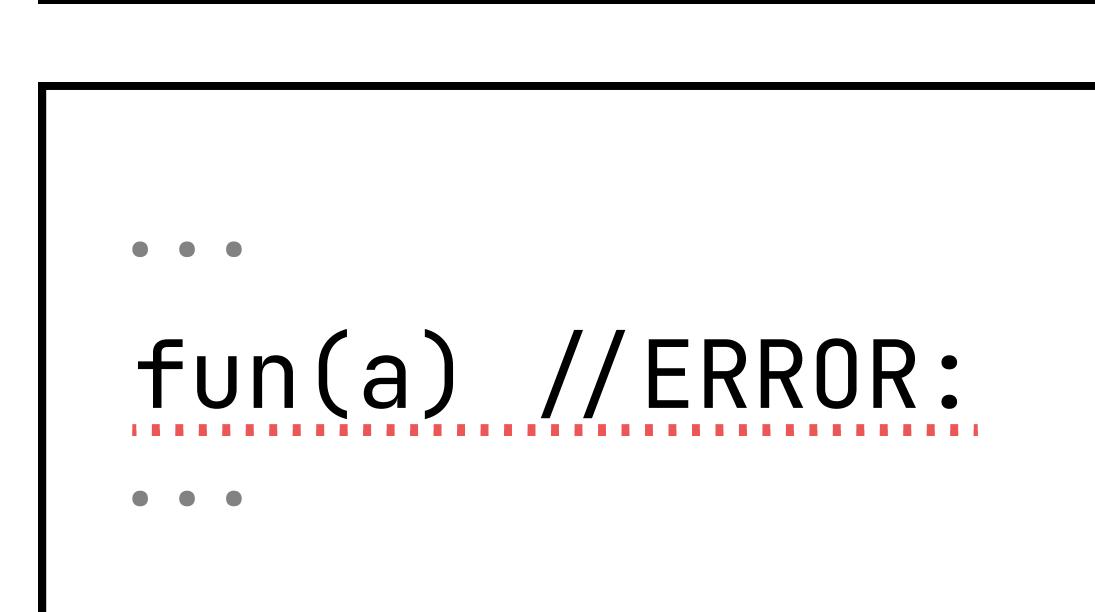
public void ...

FAULTY CODE

... = fun(a)

return ...





ERROR LOCATION

class TestClass
{
private prop...
public TestClass

• • •

public void ...
... = fun(a)
return ...
private int a ...
IN-CLASS CODE