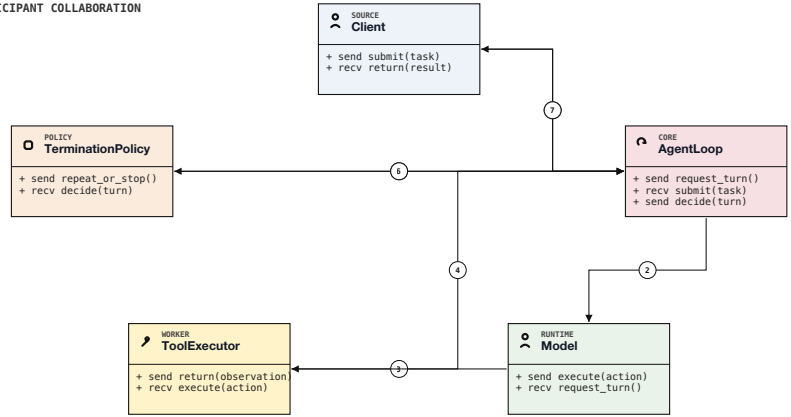
# P01 Minimal linear loop

***Primitive · A² A1 · cycle role collaboration***

Alternate model turns and action execution.

**STRUCTURE · PARTICIPANT COLLABORATION**




**PATTERN INTERFACE**

***context***
A harness executes an agent with at least one model or action turn.

***trigger***
A model response requests tools or another turn.

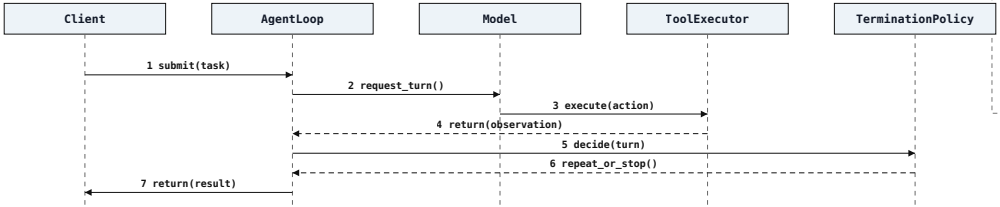
***structure***
Ordered turn/result records and an explicit repeat-or-terminate decision.

***effect***
Every turn yields a terminal result, a tool action, or another legal turn.

**CONTRACT ANNOTATIONS**

| | |
|---|---|
| ***requires*** | Model output, action dispatch, and a termination predicate are available. |
| ***ensures*** | Actions are correlated with their turn and a terminal outcome is returned. |
| ***invariant*** | Each completed turn has one recorded decision and no unexplained action. |
| ***violation*** | Premature stop, malformed action, or repeated retry must terminate or surface an error. |

**INTERACTION**




**MESSAGE TRACE** `1 submit(task) → 2 request_turn() → 3 execute(action) → 4 return(observation) → 5 decide(turn) → 6 repeat_or_stop() → 7 return(result)`

Evidence: 39/41 repositories, 35/36 families; 39 trajectories (18 multi-checkpoint); exact audit: not sampled.

Variation: Prompt, tool set, stopping predicate, and turn result encoding.

Negative control: A one-shot model call with no action cycle does not satisfy the pointcut.