



Task Propose

```
TASK_NAME = {  
    "task_name": "beat_block_hammer",  
    "task_description": "...",  
    .....,  
    "actor_list": .....  
}
```

Task Proposal



Code Generation



Diagnosis and Advice

```
# Task: BeatBlockHammer  
class BeatBlockHammer(Task):  
    ...  
    def load_Actor(self):  
        self.hammer = Actor("020_hammer", mass=1e-3)  
        p = rand_pose(..., z=0.76, avoid_center=True)  
        self.block = Box(pose=p, half=0.025, color="red")  
        ...  
    def check_success(self):  
        ...  
        return near(self.hammer.fp(0).xy, self.block.fp(1).xy)  
        and contact(self.hammer, self.block)
```

Task Code

TaskGen Agents

Retrieval

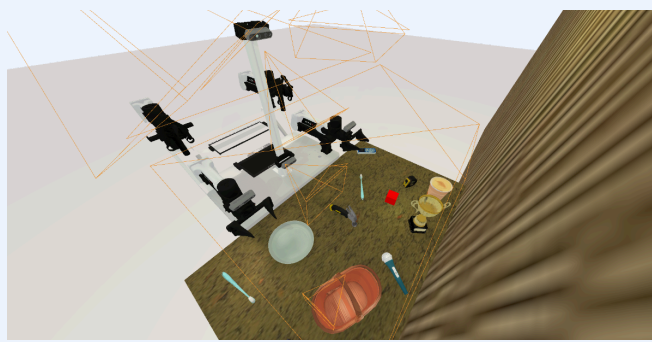
Retrieval



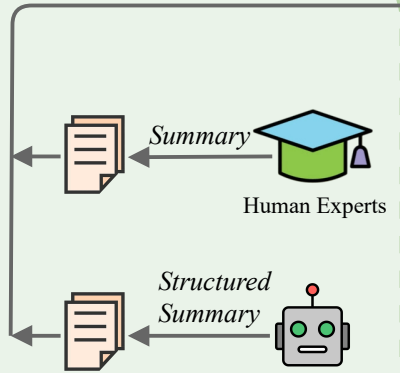
Is the Task Implementation
Aligned with the Description?



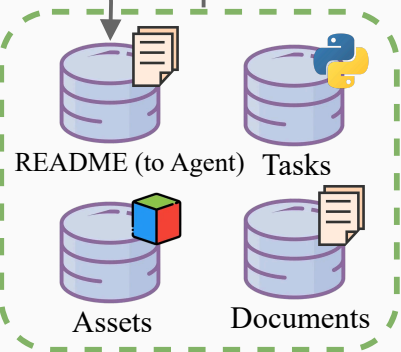
Simulation Engine



Observation



Offline Extractor



Retrieval Augmented

Visual Self-Reflection