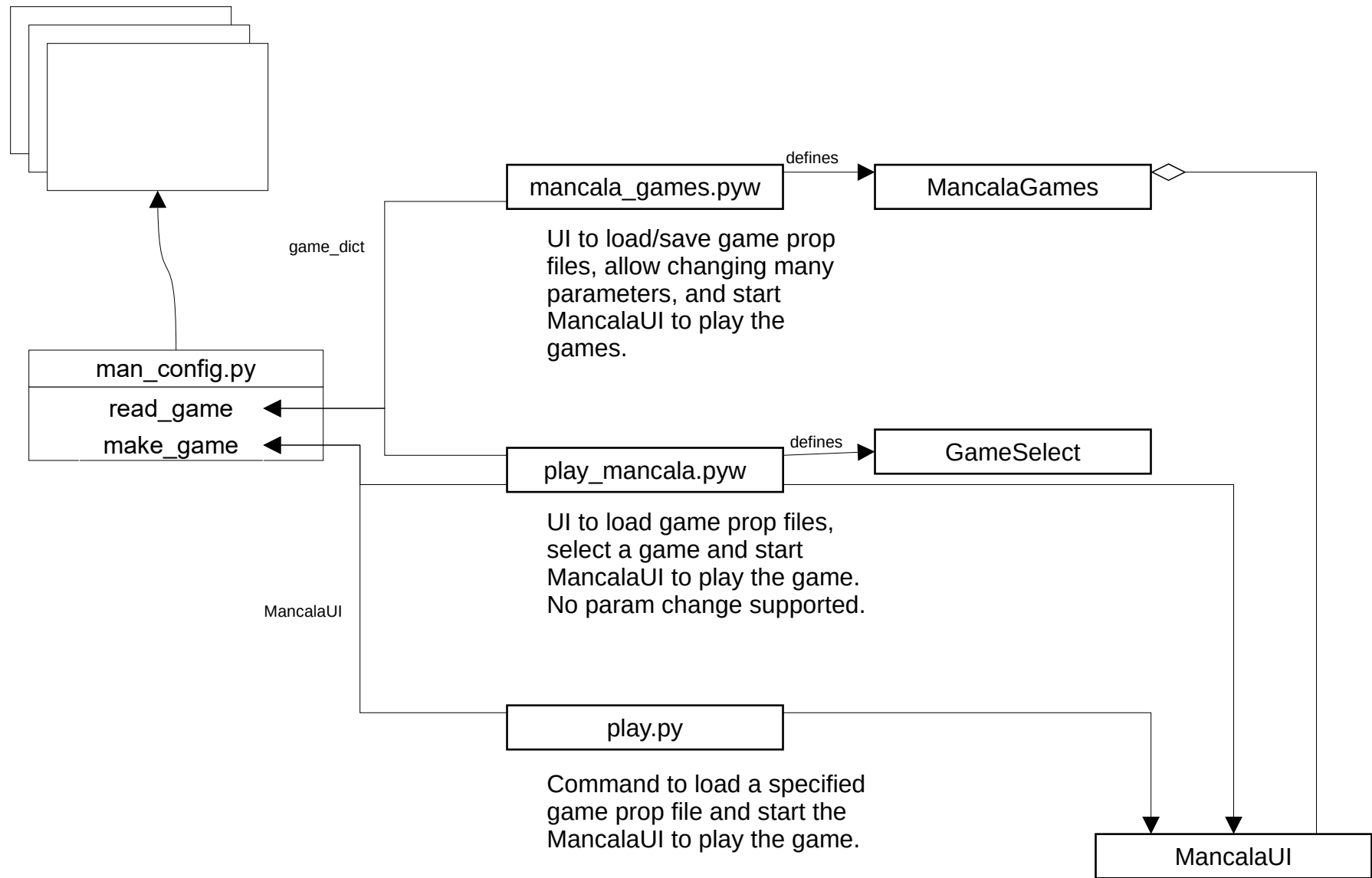
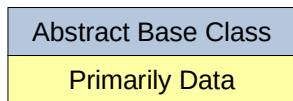
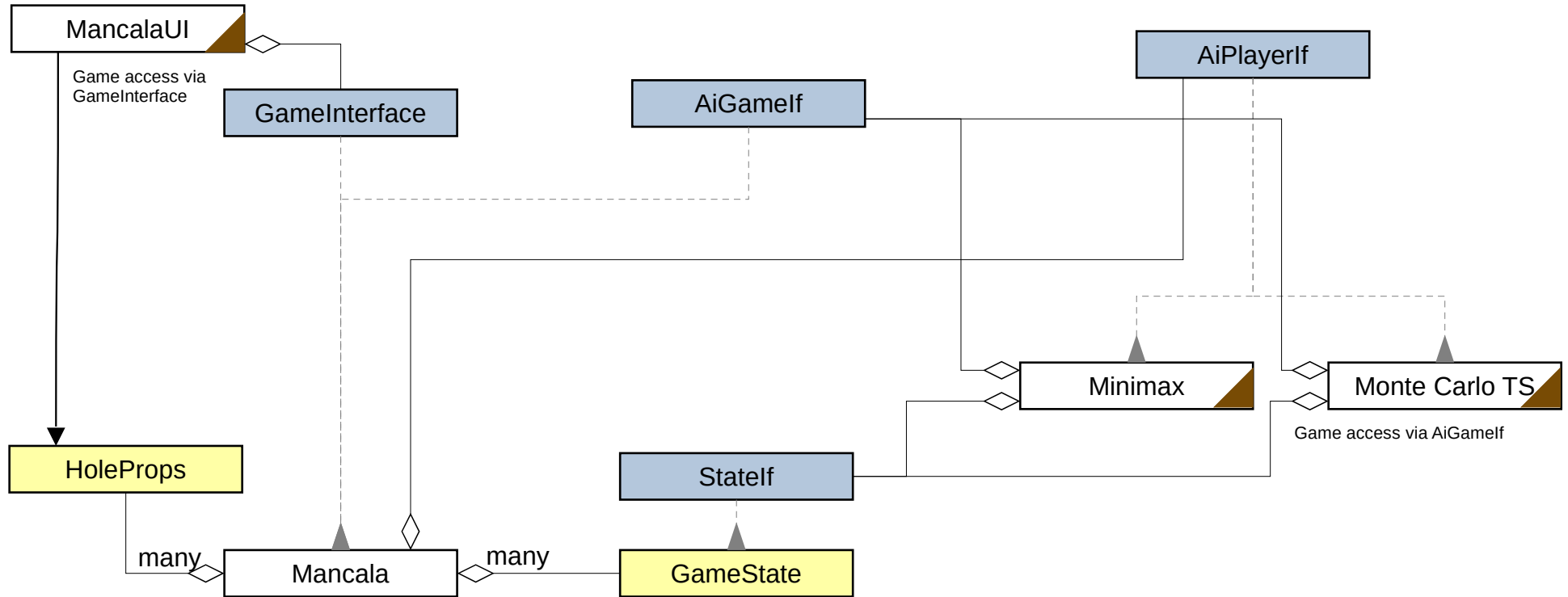


Mancala Games

Game Property Files

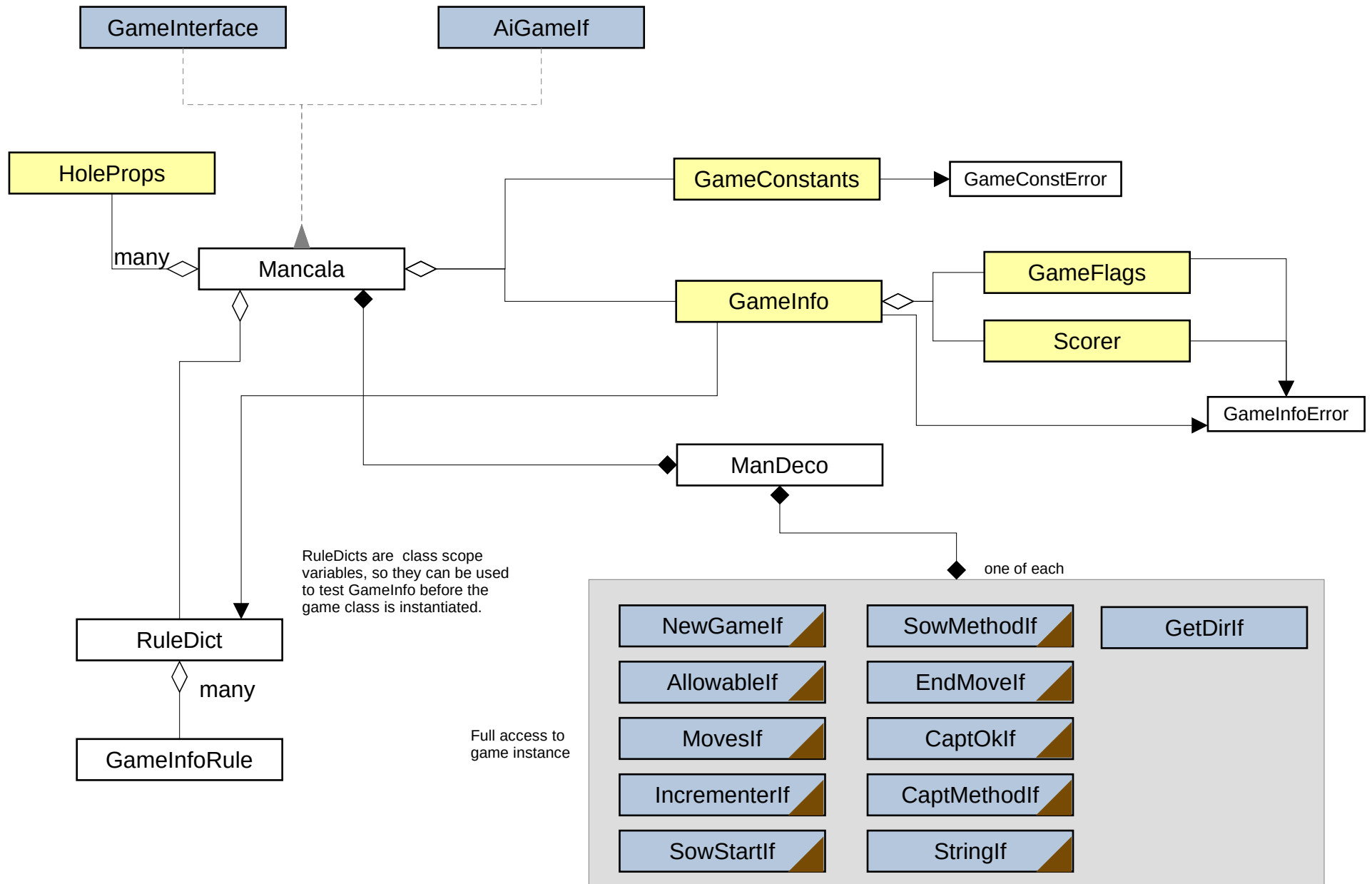


Mancala UI & AI Classes

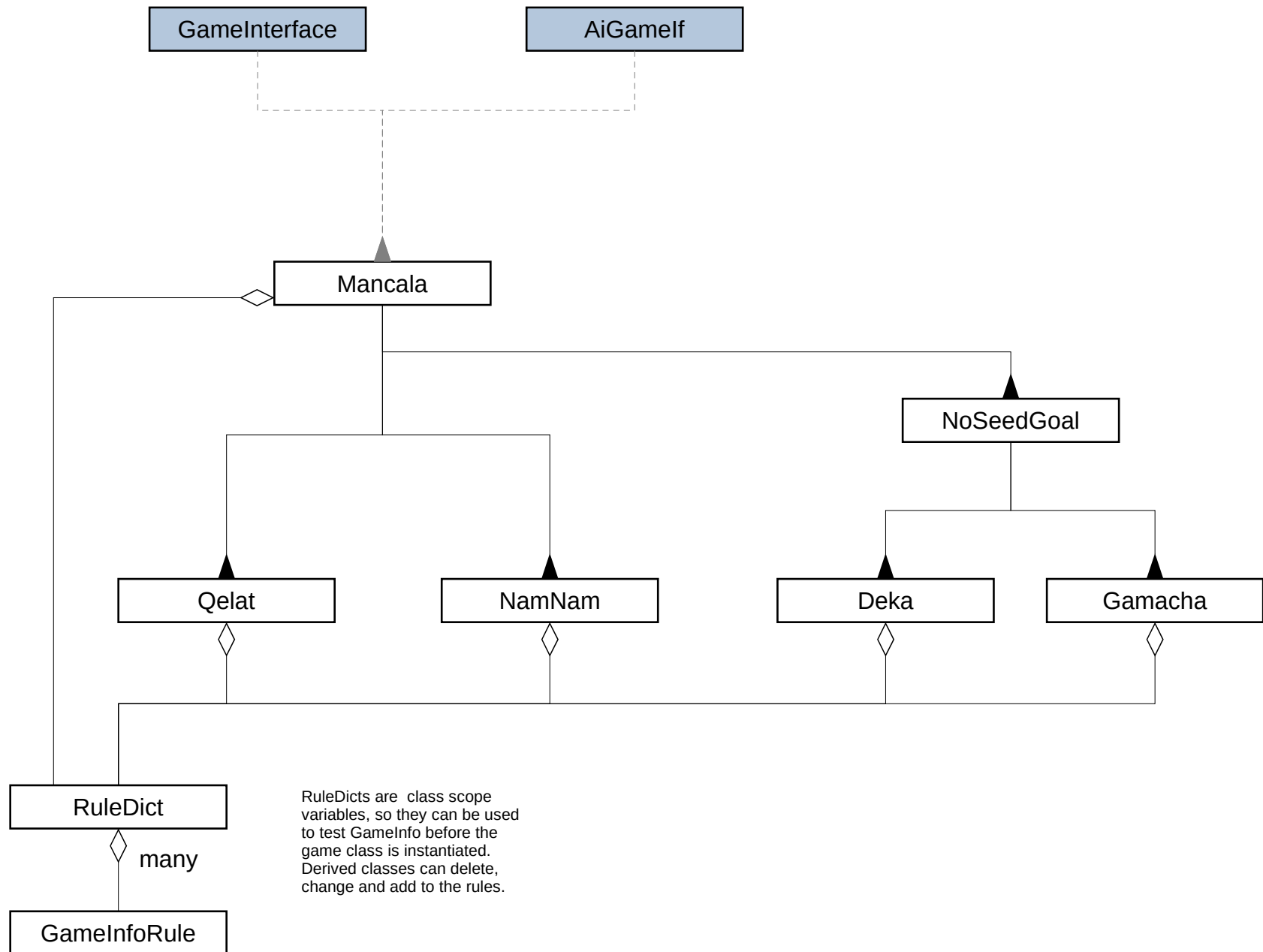


- ◊— Has-a
- .-> Implements
- > Extends
- ◆— Composes
- > Uses
- ▲ Link to game instance (Mancala, Deka, Qelat, etc.)

Mancala Classes



Mancala Game Classes



Decorator Usage

Mancala Move Steps

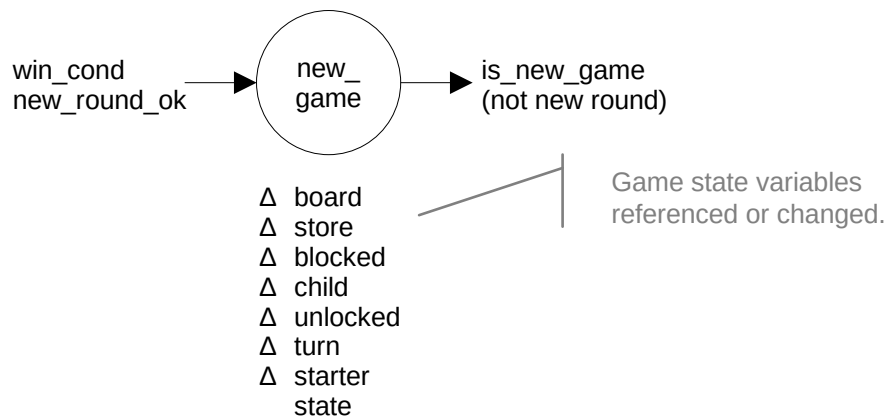
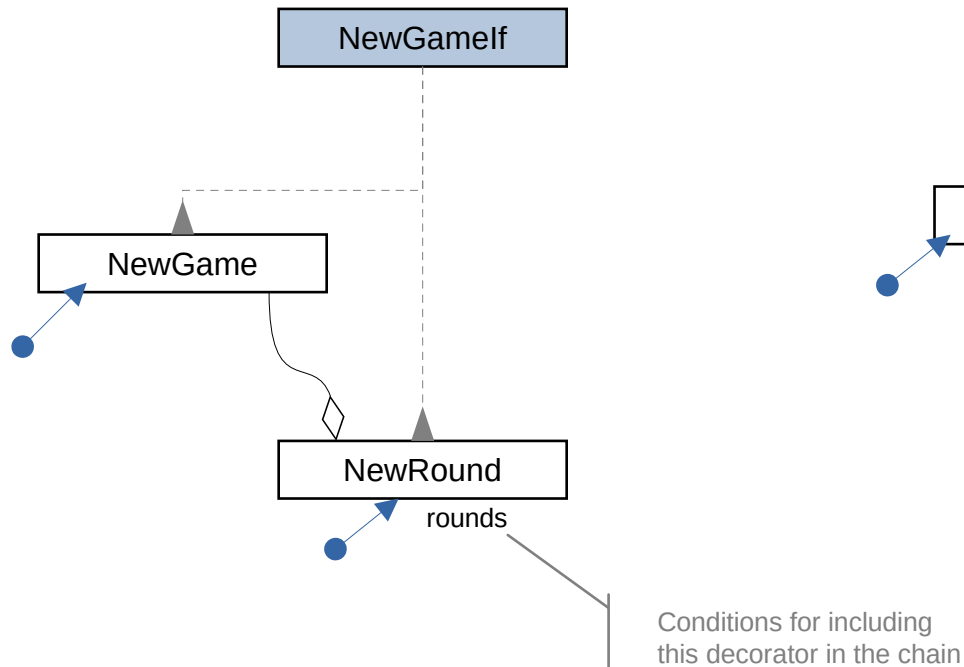
Mancala Methods (mancala.py)		Step Number	Description	Decorator(s)
move		1	Parse move & execute pass	
	do_sow	2	Start Sow (first hole, seeds)	sow_start
		3	Get Direction (CW or CCW)	get_direction
		4	Sow – drop seeds	sower & incr
	capture_seeds	5	Capture Seeds	capt_ok, capturer & incr
	win_conditions	6	Win Condition – is game over	ender

Decorator Calls (non-move)

Interface	Method (mancala.py)	Decorator
GameInterface	new_game	new_game
GameInterface	end_game	quitter
GameInterface	get_allowable_holes	allowables
AIGameIf	get_moves	get_moves
not applicable	__str__	get_string

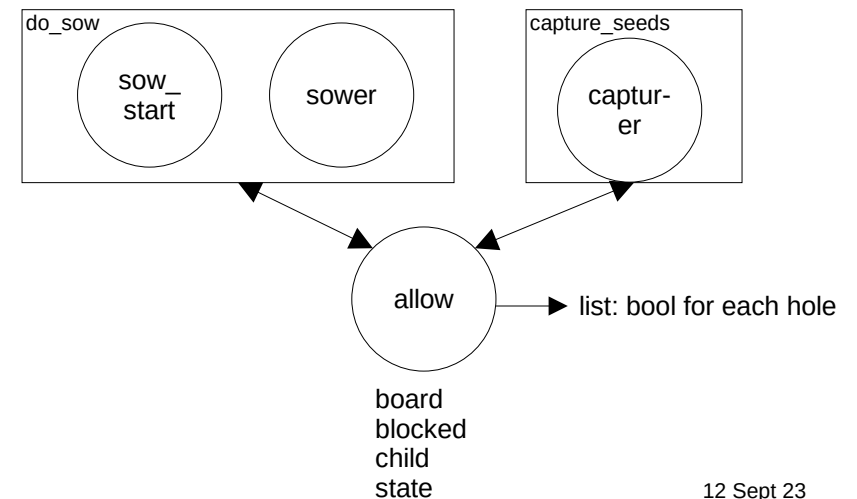
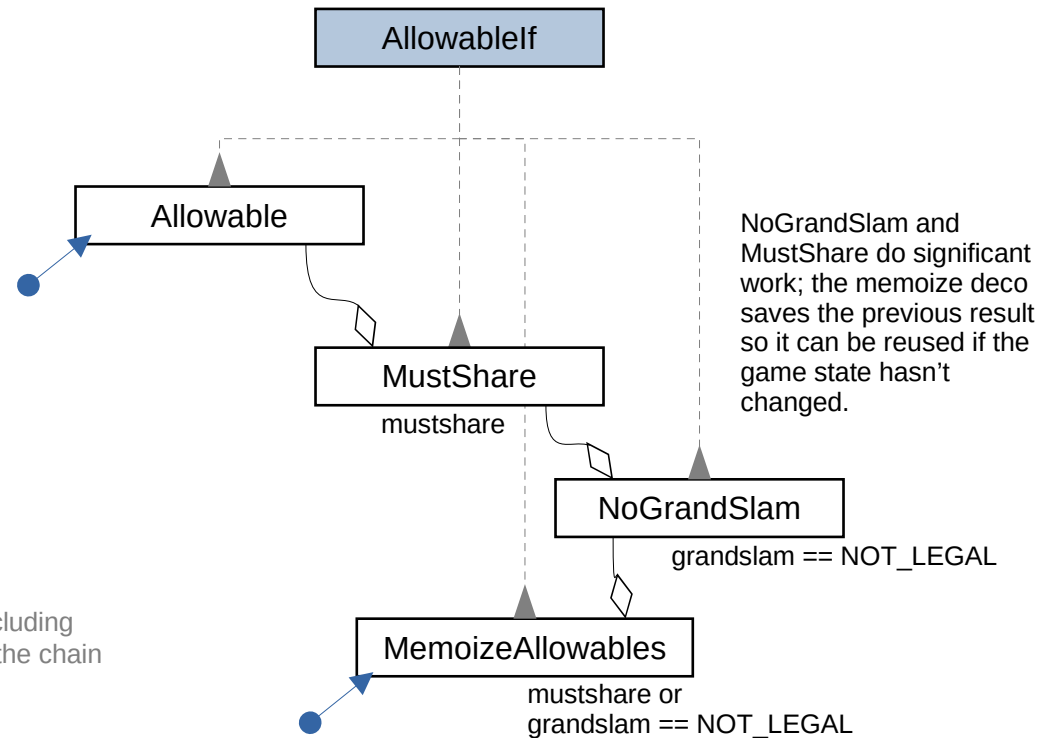
New Game Classes and Deco

new_game.py



Allowable Classes and Deco

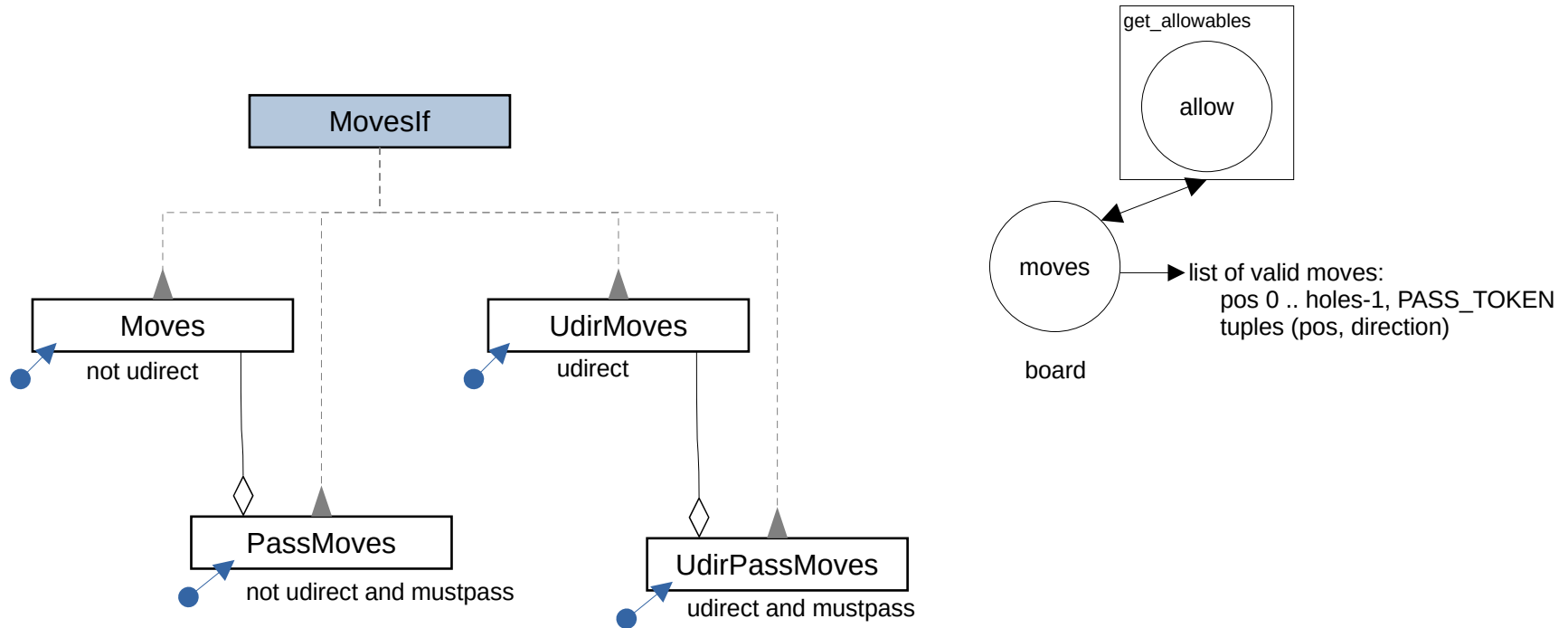
allowables.py



● Possible decorator chain start Δ game state changed

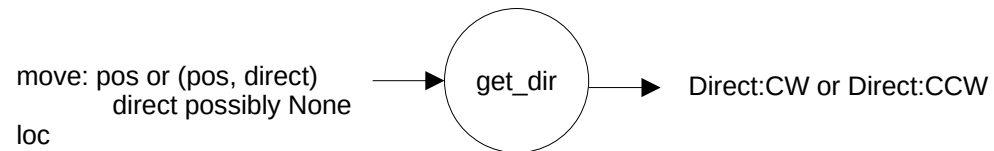
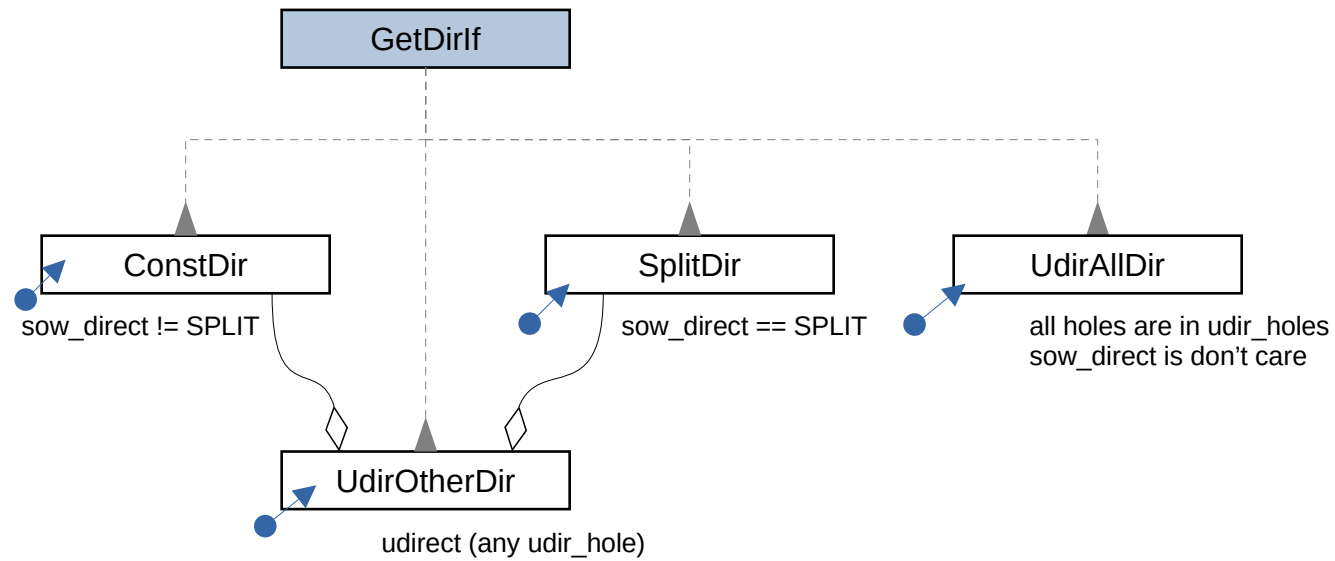
Get Moves Classes and Deco

[get_moves.py](#)



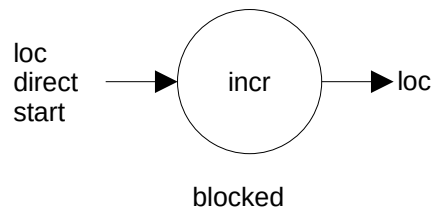
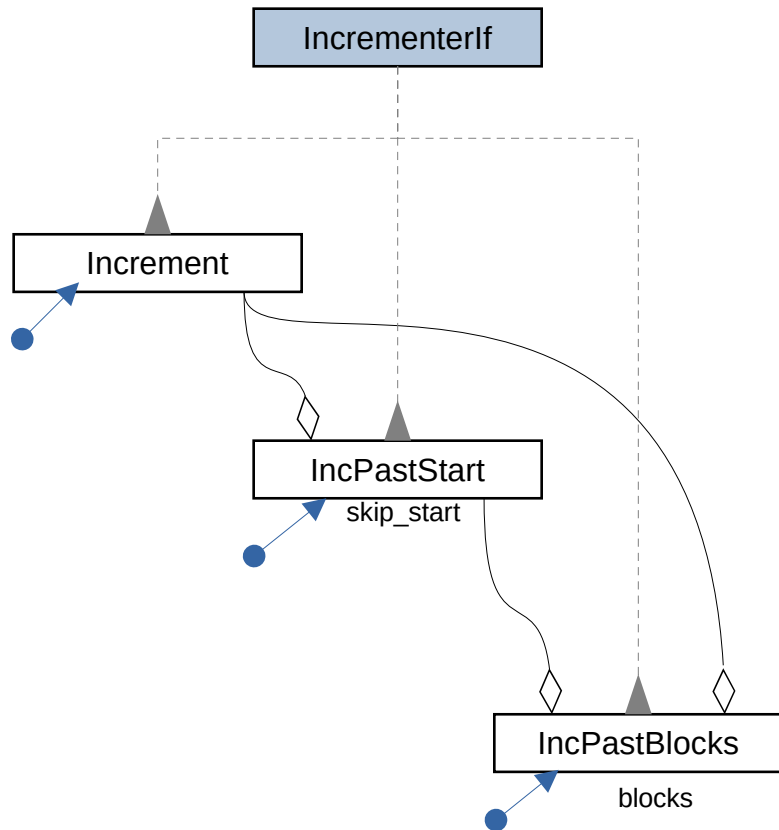
Get Direction Classes and Deco

[get_direction.py](#)



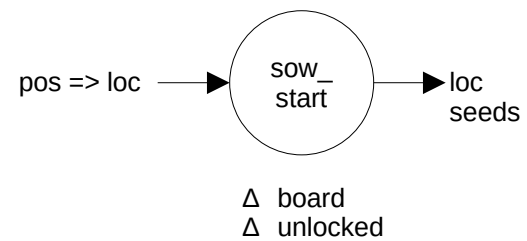
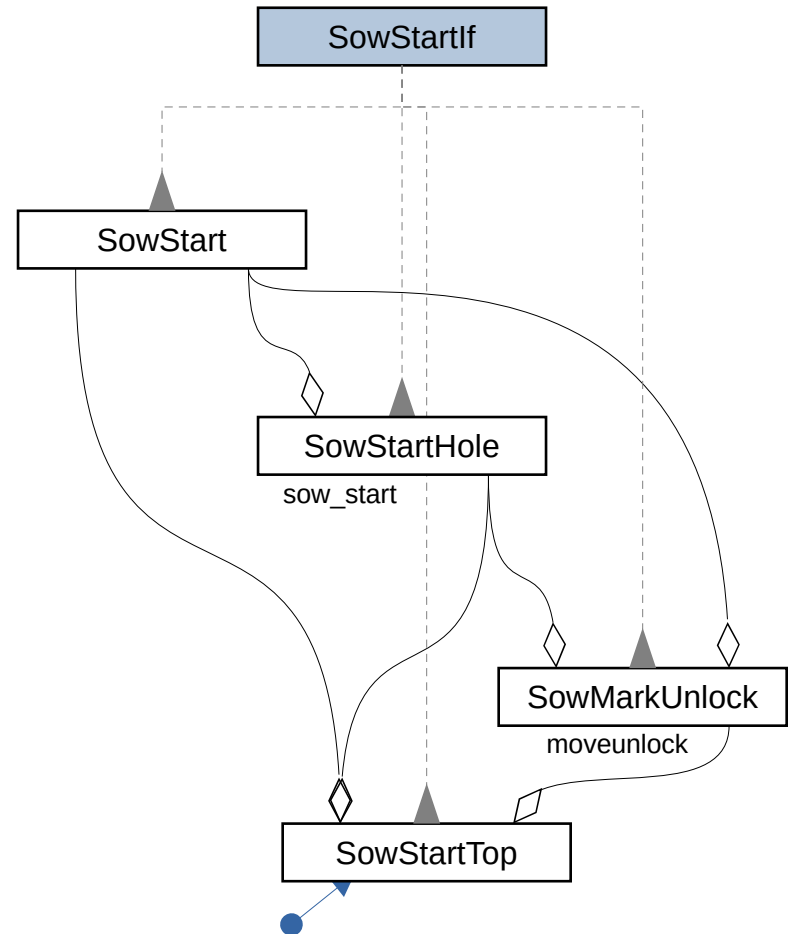
Incrementer Classes and Deco

incrementer.py



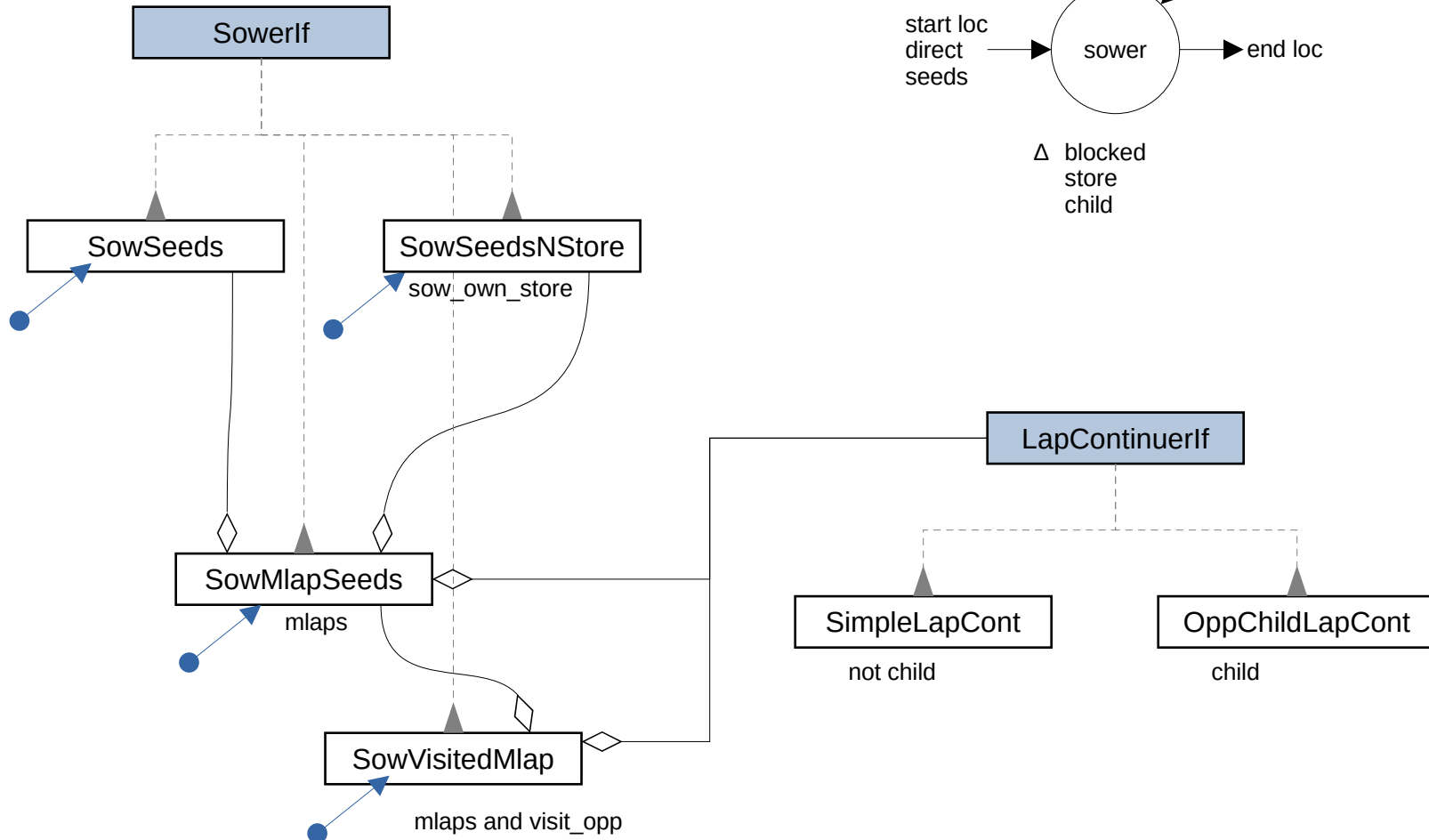
Sow Starter Classes and Deco

sow_starter.py



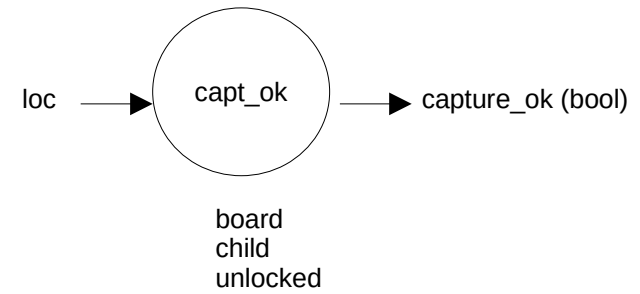
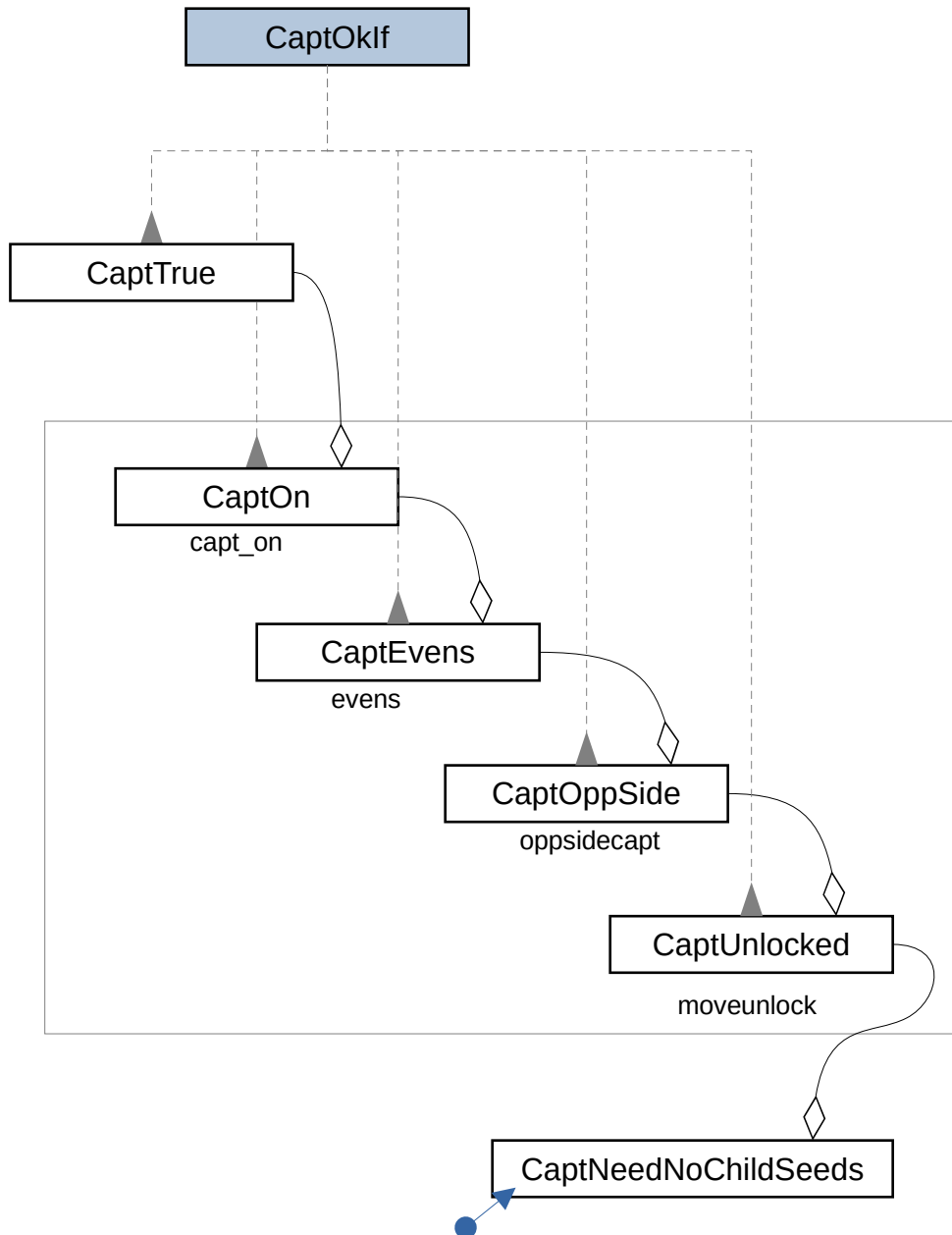
Sower Classes and Deco

sower.py



Capt Ok Classes and Deco

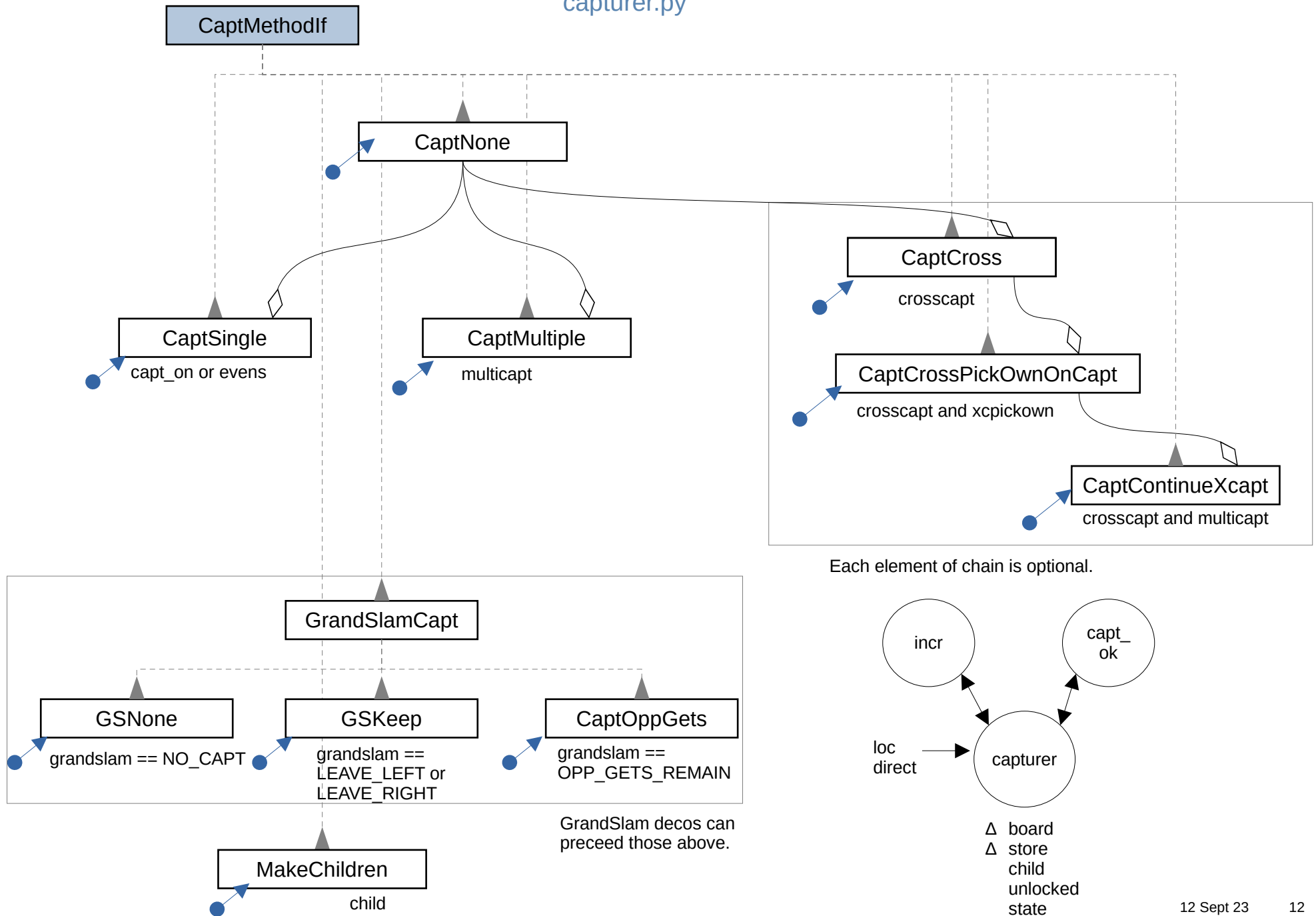
[capt_ok.py](#)



Each element in the chain is optional based on specified conditions. The link goes to the next deco that applies. Deco's are effectively anded together.

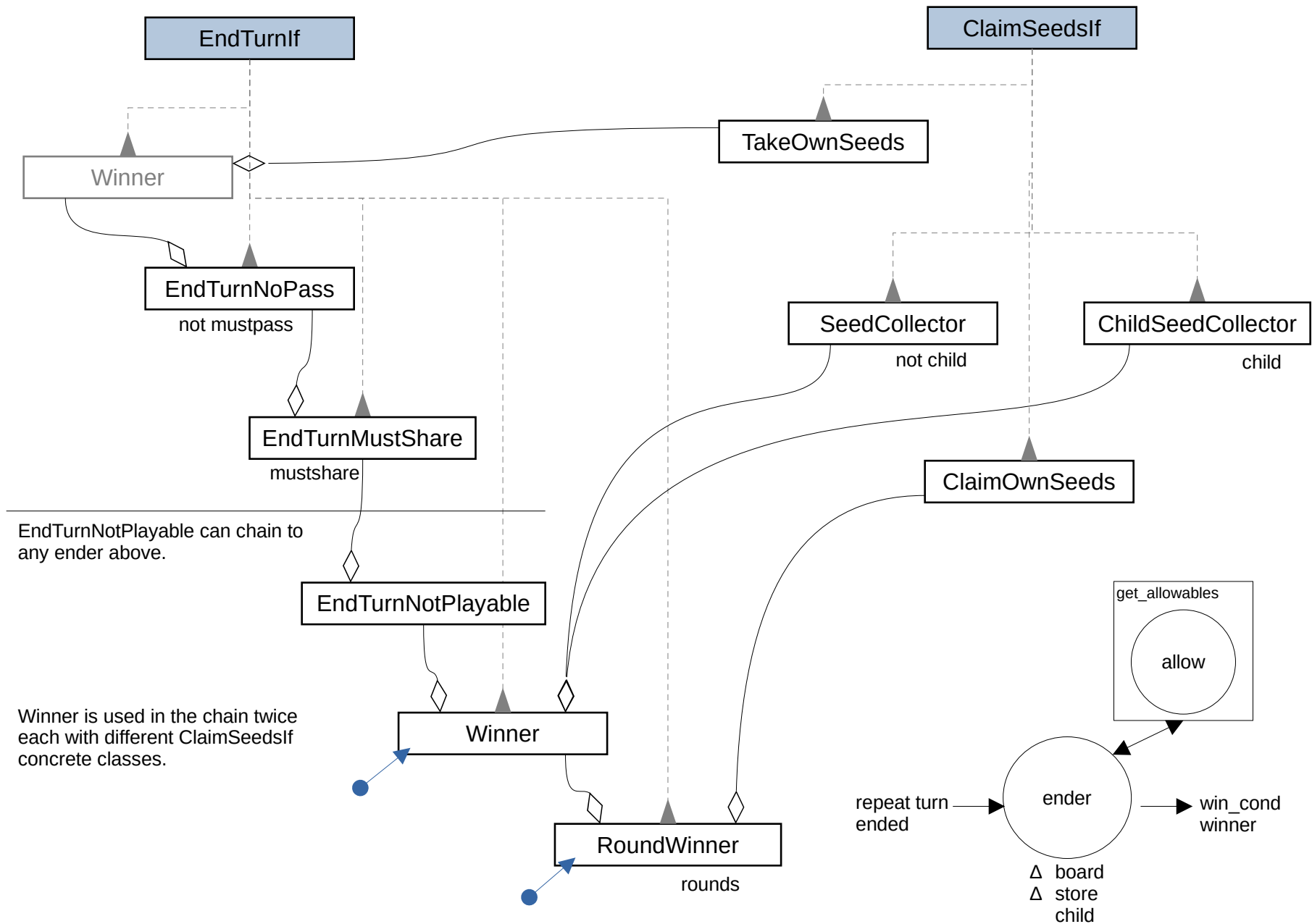
Capturer Classes and Deco

[capturer.py](#)



Move Ender Classes and Deco

end_move.py



Quitter Classes and Deco

[end_move.py](#)

