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Referee Actor
(class of static methods)

|STATIC METHODS|

↝ run_game (List[PlayerActor],
  TrainMap, CardDeck,
  dest_Sorting_func)
  - Returns
  Tuple[Ranking, Rank]

maintains and
-- iterates
*   on*

Referee State (immutable)

• cards (CardDeck)
• train_map (TrainMap)
• players (~~List~~[PlayerState])
        Tuple
• cheaters (FrozenSet[PlayerState])
• turns_without_state_change (int)
|METHODS|
↝ is_acquisition_allowed (TrainConnection)
↝ generate_current_player_state_wrapper()
↝ accept_player_turn (ActionOption)
↝ various scoring methods
↝ remove_cheater()

Player Actor

• name (str, default "")
• strategy (Strategy)
• train_map_for_start (TrainMap)
• active_train_map (TrainMap)
|METHODS|
↝ Player API methods
↝ play (PlayerStateWrapper)
↝ pick (Set[Destination])

Player State (immutable)

• occupied (FrozenSet[TrainConnection])
• destinations (FrozenSet[Destination])
• cards (CardHand)
• num_rails (int)

|METHODS|
↝ acquirable_connections (Iterable[
        TrainConn
        ])
↝ various scoring methods
↝ occupy (TrainConnection)

Player State Wrapper

• player_state (PlayerState)
• other_player_acquireds (List[
        List[TrainConn]
        ])
|METHODS|
↝ get_unavailable_connections()

Strategy (abstract class)
|METHODS|
↝ take_turn (PlayerStateWrapper,
        List[TrainConnection])
↝ choose_destinations (Set[Destination])

constructed
with

[PlayerActor, PlayerActor, ...] → Tournament Manager

[PA,PA,...]   [PA,...]   creates (by round)
                                    [PA,...]

Referee Actor   Referee Actor   Referee Actor

generates   uses

PSW combines:
- Player State
- opponent connections

: Referee State :   : Referee State :   : Referee State :

                                    consists
                                        of

                    : Player State : : Player State : : Player State :

Referee Actor   Player Actor   Player Actor

play (PlayerStateWrapper) →

Action Option

all information about the
represented player, and only
that player