

ETF_MODEL+

feature -- supplier attributes

starfighter: STARFIGHTER
score: SCORE
print_state: PRINT_STATE

feature -- collections
enemy_collection: HASH_TABLE[ENEMY, INTEGER]
enemy_proj_collection: HASH_TABLE[ENEMY_PROJECTILE, INTEGER]
friendly_proj_collection: HASH_TABLE[FRIENDLY_PROJECTILE, INTEGER]
states: LIST[STATES]

feature-- ids
projectileid_counter, enemyid_counter: INTEGER

feature -- booleans
in_game, isin_setup, isin_debug: BOOLEAN

feature -- game commands
play(row: INTEGER_32 ;
column: INTEGER_32 ;
g_threshold: INTEGER_32 ;
f_threshold: INTEGER_32 ;
c_threshold: INTEGER_32 ;
i_threshold: INTEGER_32 ;
p_threshold: INTEGER_32)
-- Initially used to enter setup_mode and to cache the threshold value

play_game
-- used when in_game state

pass
-- Starfighter passes

fire
do
-- fires based on weapon choice
end

move(row: INTEGER; column: INTEGER)
-- SF moves

special
do
states[power_choice].special
-- use special based on power selection
end

abort
-- game aborts

preemptive_action(str: STRING)
-- preemptive action of enemies that are alive

action
-- Enemy action of enemies that are alive and whose turn does not end

feature -- enemy related
enemy_enemies
-- reports all enemies that are still `on_board`

enemy_spawn (row: INTEGER; column: INTEGER)
-- natural enemy spawns at location [row, column]

feature -- queries
retrived_id_by_pos [row: INTEGER; column: INTEGER]: INTEGER
-- returns an `id` of an on_board and alive entity at location [row, column]

feature -- projectile related
projectile_show
-- reports all projectiles that are `on board`

starfighter+

STARFIGHTER+

feature -- additional attributes
id: INTEGER
initial_pos, old_pos, pos : TUPLE[row: INTEGER; column: INTEGER]

feature -- sf attributes
total_health, total_energy, total_move, total_move_cost, total_vision: INTEGER
current_health, current_energy, total_armour, total_projectile_cost : INTEGER
total_projectile_damage: INTEGER

feature -- model access
model_access: ETF_MODEL_ACCESS

feature -- queries
seen_by_sf (row: INTEGER; column: INTEGER)
-- if SF can see the position [row, column]
can_see_starfighter(row: INTEGER; column: INTEGER)
-- if [row, column] can see current pos

feature -- commands

starfighter_setup
-- loops for the current equipment selection and setup starfighter initially

apply_health_regen
-- health regeneration

apply_energy_regen
-- energy regeeration

set_current_health (h: INTEGER)
-- set h to current health

set_current_energy (e: INTEGER)
-- set e to current energy

set_pos[row: INTEGER; column: INTEGER]
-- updates the starfighter pos to [row, column]

set_old_pos[row: INTEGER; column: INTEGER]
-- updates the starfighter old_pos to [row, column]