

Initialize game:

- Set car\_speed to 2
- Set car\_speed to 1
- Set max\_speed to 6 \* default\_car\_speed
- Set lives to 3
- Set score to 0
- Load car\_sprite at right lane
- Load highway\_background
- Load other\_car\_sprites off-screen
- Set slow\_down\_timer to 0
- Set game\_timer to predefined\_time\_until\_finish

Display "Begin" menu:

- Wait for user input:
  - IF user presses "Begin":
    - Start Game

Function Start Game:

- WHILE game\_timer > 0 AND lives > 0:
  - Move highway\_background based on car\_speed
  - Generate other\_car\_sprites (from top for slow cars,  
from bottom for fast cars)

- IF user presses "W":
    - IF car\_speed < max\_speed:
      - Increase car\_speed

- IF user presses "S":
    - Decrease car\_speed

- IF user presses "X":
    - Set car\_speed to 0

- IF user presses 'A' and car is not in the leftmost  
lane:

- Move car to left lane

- IF user presses 'D' and car is not in the rightmost  
lane:

- Move car to right lane

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    IF car collides with other_car_sprite:
        Decrease lives by 1
        IF lives > 0:
            Set slow_down_timer to 3 seconds
            WHILE slow_down_timer > 0:
                Reduce game speed to half
                Decrement slow_down_timer
            ELSE:
                Display Game Results (LOSE)

    IF car passes other_car_sprite without collision:
        Increase score by 5 points

    Decrement game_timer

    IF game_timer == 0:
        Display Game Results (WIN)
    ELSE IF lives == 0:
        Display Game Results (LOSE)

Function Display Game Results(result):
    IF result == WIN:
        Show win screen with final score
    ELSE:
        Show lose screen with final score

Wait for user input:
    IF user selects "Restart Game":
        Reset game variables
        Go to "Begin" of the low-level option
    ELSE IF user selects "End":
        Terminate game

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