Tests:

Spacebar and right-click entered by the user must file a missile and add to a counter that has a maximum of 5 active missiles. No other input should result in the firing mechanic. Every “fire” input will add to the counter until it’s at 5 and no more can be fired. The counter for missiles will be displayed on the screen. The counter should never exceed 5.

When a missile is fired, the missile should maintain a constant speed in a straight direction from the bottom to the top. This path should be the only direction a missile can travel. When a missile travels to the top of the screen without contact of a ship, the missile will become inactive, disappear, and take one away from the missile counter to be used again by the user. Missiles fired without contact are the only way a user can retrieve more missiles.

Check that ships should be configured to have different images and configurable rates (The default is 30%). When the system doesn’t detect an active ship on the screen and doesn’t exceed the maximum of 10 ships present through a counter, it must initiate a ship launch by the ships configurable rates. Ships can never exceed 10 and never below 0.

Ships should be launched at random locations from the upper two-thirds of the screen and move to the right or left at the ships configurable rate. Movement to the left or the right are the only directions ships can travel. When a ship goes off screen, it will become inactive, and the total ship counter will go down by one.

When a ship is hit by a missile launched from the user, the ship will detect contact and explode. A missile can only contact one ship and mustn’t continue to hit multiple ships. The ship will then disappear as well as the missile fired from the screen. These hits will add to a counter to be displayed to the user.

The game will initiate its ending program when 10 “hits” have been achieved, an idle checker reaches 5 minutes, or the inputs of the esc or left-click buttons are pressed by the user. The game will end when only 10 hits have been achieved and not sooner. No inputs other than the esc or left-click buttons will end a game. The idle counter will start immediately if no inputs are detected by the user, and must reset after every input.