Spacewar!

Spacewar! was originally developed in 1962 by Steve Russell in collaboration with Martin Graetz on a PDP-1 at Massachusetts Institute of Technology. It was an early graphical game that had significant impact. It quickly spread to other PDP-1 locations and was ported or recreated on other machines that had suitable graphical capability. Only 55 PDP-1's were sold and graphics was an option. Graphics hardware was not common on computers in 1962. The Computer History Museum has a working PDP-1 which can run Spacewar! Nolan Bushnell founder of Atari was inspired to bring computer games to the masses by playing Spacewar!

Figure 1: https://commons.wikimedia.org/wiki/File:Spacewar!-PDP-1-20070512.jpg

Spacewar! is a two player game where the players maneuver the ships around the gravity well of a central star while firing torpedoes to kill the other ship. Also has hyperspace jump if you hit both rotation buttons at the same time. Ship will jump to a random location with some probability of being destroyed.

The common implementation was to use the switches on the front of the computer to control the ships. To prevent wearing out the switches and increase convenience gamepads were made like I have done.

There were a couple independent implementations of Spacewar! for the PDP-8. DEC never made the various versions of PDP-8 graphics hardware instruction level compatible. Some versions of the game supported multiple graphics options and others were coded for specific hardware. They also varied on how closely they matched the original PDP-1 game. I have the one I liked best available for play.

The arcade game Galaxy was an expanded version of Spacewar!. It was originally powered by a PDP-11 and installed in November 1971 in student union building at Stanford University and cost 10 cents or 25 cents for 3 games to play. It was popular but hardware was too expensive to make a viable product. Computer Space by Nolan Bushnell and Ted Dabney was a single player arcade space game inspired by Spacewar! It significantly changed the game play. It used custom hardware to get to an acceptable cost and sold 1,300 to 1,500 units. It was first sold in 1971 and had a great looking cabinet. That was successful for the time but not a smash hit.

In 1977 SPACE WARS was introduced by Cinematronics. This was Spacewar! basic game with select-able gameplay options and was vector. The player with most kills in the fixed time limit wins. Space Wars was the best-selling coin-operated video game of 1978 and ultimately sold more than 7,000 units. There was also a short lived Vectorbeam spinoff of the game. Atari released a raster graphics version Orbit in 1978. It used Enterprise and Klingon ships.

My first exposure as a kid with Spacewar! descendants was either the Cinematronics or Vectorbeam version. For a number of years, my siblings and I would boat over to Weirs Beach in NH where an arcade had this game and others, until it disappeared. There is still an arcade there, Funspot, which has many classic games. Need to see if they have it.

See Rolling Stones Article on Spacewar! on table.