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Homework 5 User Manual

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User Manual

- The game of Lunar Lander is based on a variety of similarly themed games inspired by the Apollo 11 space mission of July, 1969 in which US astronauts first landed on the Moon.
- The program output instructions for the user if he enter 'Y' or 'y'.
- The program will output the logs to file if the user enter 'Y' or 'y' and then prompt user to enter the output file name.
- The program will prompt user to enter fuel.
- The program repeatedly output current information which includes measurements height (distance above the lunar surface, in feet), velocity (speed of descent toward the lunar surface, in feet/second), elapsed time (one second expires on each iteration), and remaining fuel.
- If there is more fuel to burn then the program prompt the user for a number of units of fuel to burn which cannot be more than 30 units or less than 0 units at any time.
- The interaction continues as long as the craft is above the lunar surface.
- If there is no fuel left, the program will show "**** OUT OF FUEL ****". If there is more fuel and the user tries to burn more than available, then only burn what's left.
- If the craft hit the surface, program corrects the final touchdown values, print out the "Contact" information, print out the final message, and quit.
- Once the craft intersects the lunar surface, final computations are made, final touchdown information is output, as is a message based on the final velocity.
- The instructions, final analysis, calculations and prompts are all based on the original game by Dave Ahl, and transcribed by Joe Morrison.