

SpaceMan

Authors: Talya Nir, Yara Abu Saude, Malar Raguraman

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Introduction:

A famous astronaut named SpaceMan crashes into an unknown planet thousands of light years away from Earth. He's found by aliens who want him dead. SpaceMan starts running away, and the aliens chase after him. SpaceMan must avoid asteroids while trying to escape the aliens. Survive as long as possible for the highest score!

Our program is an interactive game inspired by the traditional game of Hangman. The user must dodge SpaceMan away from asteroids while running away from aliens. If SpaceMan hits an asteroid, they must guess a word in 45 seconds in order to continue running. If they don't guess the word in time, it's too late, and they are killed by the aliens. All of the words fit into the theme of space, and the user must quickly guess letters until they correctly guess the word. However, a second is lost for every incorrect letter guessed. The goal is to avoid asteroids in order to get more points, and if an asteroid is hit, get back quickly to increase your score!

Our program solves the growing problem of boredom. It gives users a fun game to play either on their own or with friends when they find themselves bored out of their mind. It also improves people's spelling skills and widens their vocabulary. We are writing this program to provide users with a fun game to enjoy anytime.

Instructions:

The user will use the up and down arrow keys to move SpaceMan away from the asteroids (the screen will be continuously moving sideways with asteroids in SpaceMan's way). If SpaceMan hits an asteroid, the hangman-inspired screen will appear, and the user will need to type letters into a text box in order to guess the word (you will need to click on the text box, guess a letter, then delete the letter, and guess again). If they guess correctly in time, the game will resume. If they don't, "You lose!" will appear, as well as the word they were guessing and their score.

Class List:

- SpaceMan - Main method that will create the window
- RunningGameScreen - Second drawing surface/screen for the game involving the astronaut running up and down
- HangmanScreen - Screen that the user comes to if they hit an obstacle, so they play a game similar to hangman
- HangmanGame - Class that generates words for the HangmanScreen and has code for the game's rules
- Sprite - A superclass representing all of the objects drawn in each screen (background, aliens, astronaut, etc.)

- Asteroid - Subclass of Sprite that represents the asteroids that are obstacles in RunningGameScreen

Credits:

Internal Credit:

- Talya: Edited and incorporated photos, coded Astronaut class, coded Asteroid class, wrote and updated README, coded StoryAnimation (later deleted), and added vocabulary
- Yara: Edited and incorporated photos, coded Astronaut class, coded Asteroid class, fixed bugs in RunningGameScreen, and added vocabulary
- Malar: Coded the classes HangmanGame, HangmanScreen, RunningGameScreen, Sprite, incorporated demo code, background images, and updated UML

External Credit:

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