

# Graphics - Assignment 1

## Jetpack Joyride

### Instructions

1. A for moving left, D for moving right.
2. W for jumping.
3. S for quick jump down.
4. Spacebar for shooting water Balloons from player.

### About The Game

1. The world consists of a bottom floor, top ceiling, score display on the top right, health display on the top left and a player. The player will have a Jetpack attached to him with which he can move up. The player can move forwards and the scene will follow, and move backwards only upto the extent that the scene allows.
2. Coins of different colours (each corresponding to certain points) appear above the ground at random heights. These can be collected by the player, and the score will update on the top score display.
3. Magnets, should appear at random locations which will cause the player's motion to be influenced. The magnet will attract the player if the player gets too close to the magnet. The player will then have to press the down button (S) multiple times in order to escape the pull of the magnet.
4. Special flying objects (moving in a projectile) appear randomly and give the player certain bonuses. There are three kinds of power ups - one that gives a burst of 20 points, one that refills the player's health back to 100, and one that gives the player a shield, that gives it a short period of invincibility.
5. The game has four kinds of enemies
  1. Fire Lines - Two circular or small cylindrical objects appear and a "Fire" like line should be created between them. Coming in contact with this will result in a drop of health of the player.
  2. Fire Beams - Two pairs of circular or small cylindrical objects appear and a "Fire" like beam created between each pair. The beams should be parallel to platform and moves along Y axis. Coming in contact with this will result in a drop of health of the player and a drop in the score.

3. Boomerang - A boomerang appears randomly and moves in a projectile motion or a horizontal 'U' direction or a flattened 'C' direction ,i.e. the boomerang starts ahead of the player, goes behind it and then comes back and cross the player. Coming in contact with this will result in a larger drop of health of the player and a larger drop in the score.
4. Viserion - Dragon - A flying dragon appears ,adjust its position according to player, and throws Ice balls. Coming in contact with the ice balls reduces health and score.
6. Fire can be extinguished by throwing water balloons on a key press.
7. Circular ring: A semi circular horizontal ring appears after a certain distance, if the player goes inside this ring he follows the semi circular path and will be protected from the enemies.