

Final Game Commentary

Game extensions

I have added a lot of extensions to the base game:

- Random background stars generation with different sizes, positions on the screen, and glow effect using create graphics to render stars only once in the setup;
- Background gradient instead of regular color;
- Effective 2d background clouds procedural generation using Perlin noise and create graphics to render clouds only once in the setup;
- Procedural generation of recursive trees with adjustable angle between branches and glow effect;
- Effective generation of background mountains using Perlin's noise and create graphics to render mountains only once in the setup;
- Adjustable width and size of canyons and effective canyons edges generation using Perlin's noise;
- Different parallax effects of stars and mountains;
- Move animation for platforms;
- Move animation for collectable;
- Rocket object and restriction of player movement past it;
- Blaster that shoots and has different looks for player movement, and is falling when the character is plummeting;
- Fps counter to show smoothness of the game;
- Enemies that patrol the given radius;
- Sound for blaster, collectable pick, character fall and background music;

Bits I found difficult

I didn't find any bits extremely difficult, as I have around 2 years of commercial programming experience, but challenging bits were effective procedural generation of background mountains and trees.

Skills I learnt

I learnt how to create a basic game using p5js, and how to procedurally generate beautiful scenery.