

SPACE CATS - A GAME WEB APPLICATION

PURPOSE

Space Cats is a game web application similar to Newgrounds [1], where users can play games and view interactive art. Unlike Newgrounds, to play games or view art, the user does not require an account; the user does not require an account; however, to upload their work for review, they do have to sign up.

Ultimately, Space Cats aims to unite people who enjoy simple and cute games.

FRONTEND

The front end of Space Cats uses React - a library for web and native interfaces [2]. It also employs React Bootstrap [3] to create a better user experience without sacrificing custom CSS.

BACKEND

Space Cats' back end engages Node.js, a cross-platform, open-source server environment [4].

DATABASE

In Space Cats, MongoDB, a cross-platform NoSQL database, helps store data about users [5]. The backend uses the mongoose library to help Space Cats connect with MongoDB [6].

GAMES AND ART

Space Cats utilises p5.js - a JavaScript client-side library for creating graphic and interactive experiences [7].

DEPLOYMENTS

The backend and frontend deployments were handled separately, making the process more straightforward due to breaking down the code bases into two separate entities. Essentially, the code bases are two different projects, and -- it makes sense -- to keep things separate for decoupling, modularity and API considerations [8].

BACKEND DEPLOYMENT

Space Cats uses railway for backend deployment [9], and render [10] serves as a backup.

WEB SERVER URL: <https://space-cats-production.up.railway.app> ✓

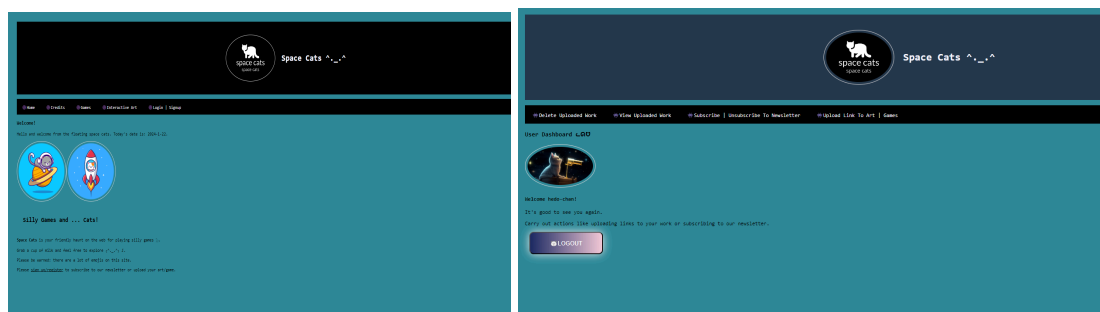
BACKUP WEB SERVER URL: <https://space-cats-backend-rfpo.onrender.com> ✓

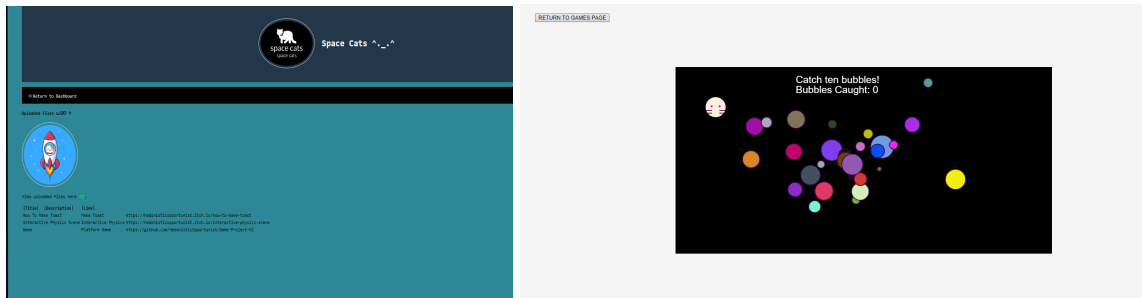
FRONTEND DEPLOYMENT

Space Cats uses Vercel for frontend deployment [11].

STATIC SITE URL: <https://space-cats.vercel.app/> ✓

(REPRESENTATIVE) SCREENSHOTS





REFERENCES

- [1] <https://www.newgrounds.com/>
- [2] <https://react.dev/>
- [3] <https://react-bootstrap.github.io/>
- [4] <https://en.wikipedia.org/wiki/Node.js>
- [5] <https://www.mongodb.com/>
- [6] <https://www.npmjs.com/package//mongoose>
- [7] <https://p5js.org/>
- [8] <https://blog.elaniin.com/is-it-truly-necessary-to-separate-backend-and-frontend/>
- [9] <https://railway.app/dashboard>
- [10] <https://dashboard.render.com/>
- [11] <https://vercel.com/>