

Short explanation about what we've done

Web Page Development:

Two web pages have been developed using React: a. Home Page: This page features a navigation bar, providing users with easy access to different sections of the website. b. Login Page: A dedicated page where users can enter their credentials to access restricted areas or features of the website.

Short explanation about the sprint:

Repository Setup:

Two separate repositories were established on GitHub: one dedicated to the backend and the other for the frontend. This separation ensures modularity and independent scaling of both components.

Team members have been granted access to collaborate on these repositories, ensuring smooth teamwork and version control.

Repository Structure:

The frontend repository, tailored for a React application, has been organized with the necessary folder structure. This typically includes folders like `src` for source files, `public` for static assets, and other relevant directories.

Linter:

Added linter, we decided to use the google style conventions and added following rules: double parentheses, indentation of 4 spaces(tab) and removed the limit of characters written in one line of code.

Testing:

Added files for unit testing, as for now there are not real unit testing because the current developed program doesn't require it.

CI/CD Pipeline:

Continuous Integration and Continuous Deployment (CI/CD) pipelines have been set up using CircleCI for both the frontend and backend repositories. This automates the process of integrating code changes from multiple contributors, running tests, linter and deploying the application to production.

The website:

We used react and react bootstrap for the frontend of the website, the website consists of a home page, containing general information about the website and it's purpose, a navigation bar ,containing links to the homepage and the login page,

a login page which has a form requesting the user's email and password and validates the user is in the database, if the user is in the database he will see a welcome message with his name, otherwise a message saying "Invalid Credentials" will appear in the console.

Technologies used

Frontend

Technologies used:

- React – We chose to work with React rather than Vanilla (pure JS, html and css) because some of us did not use js, html or css, and React can really ease up the development process.
- Bootstrap – as our CSS framework we chose to work with Bootstrap, for responsive and modern UI components.
- Chai and Mocha – for unit testing
- ESLint – we use ESLint to enforce a uniform coding style, we extend Google's configuration, we added 3 rules : 4 space tabbing, double quotes for strings, no errors when line length exceeds maximum length.
- CircleCI – we used CircleCI as a tool for CICD.
- NodeJS – our runtime environment, to run Javascript code.

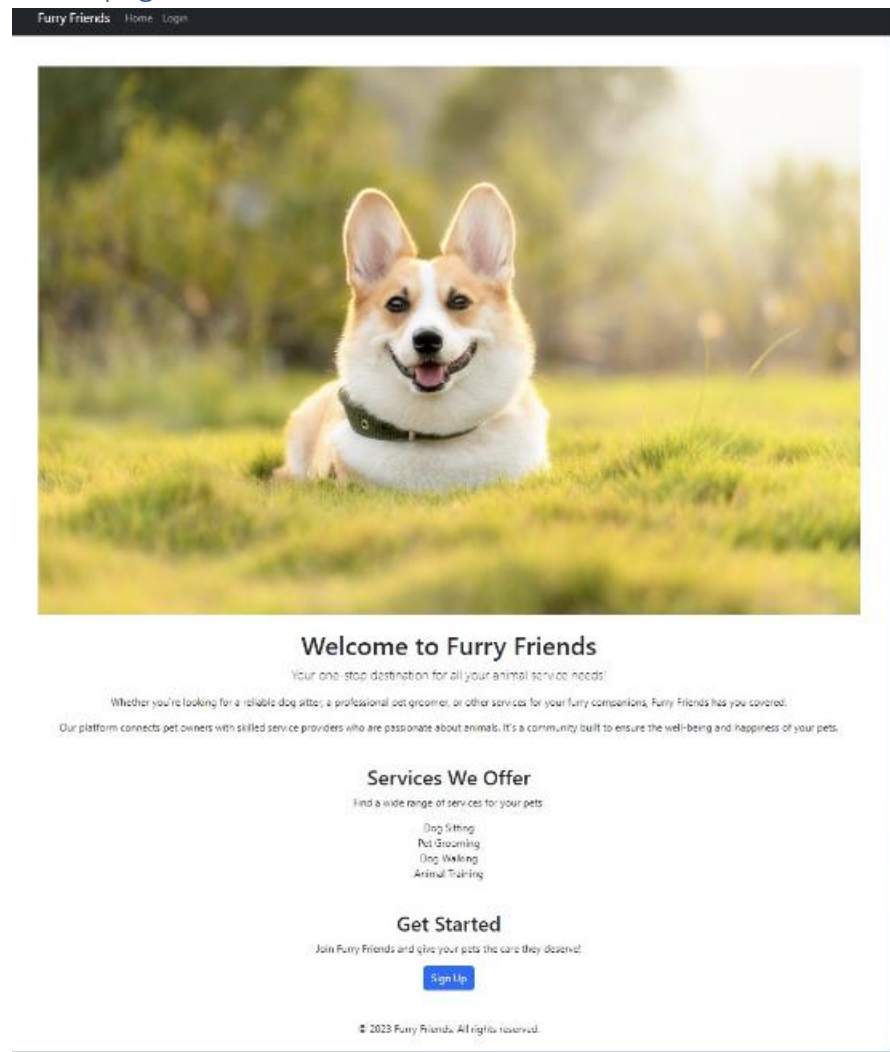
Backend

Technologies used

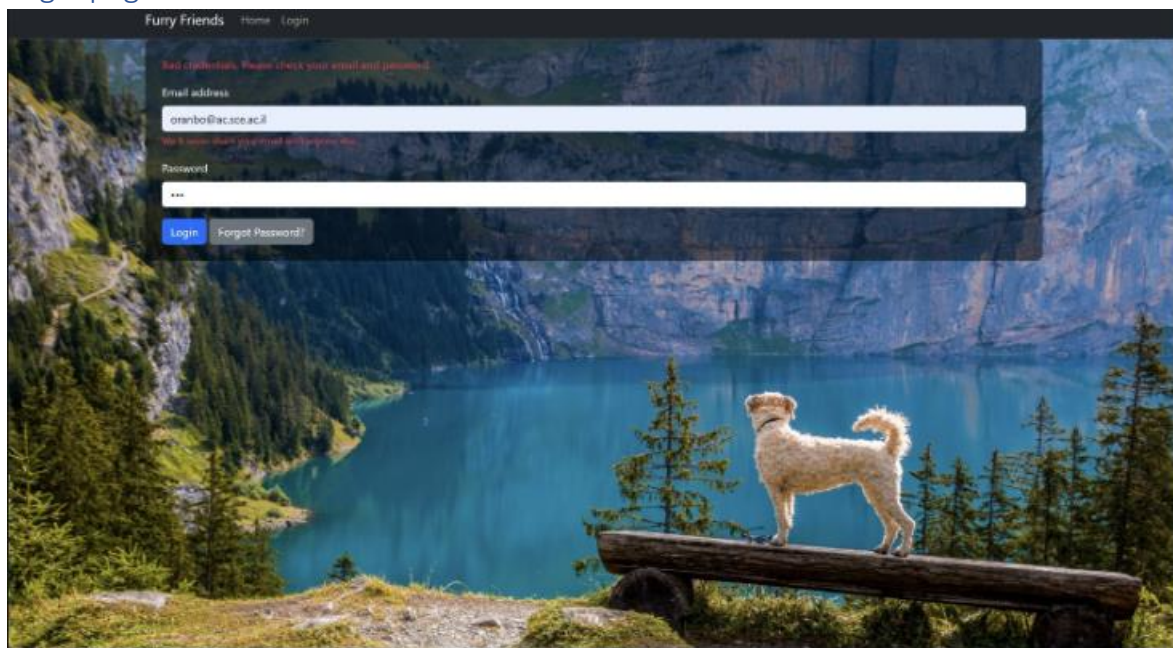
- NodeJS – our runtime environment, to run Javascript code.
- Express – Web application framework
- Nodemon - Utility to monitor changes in the codebase and automatically restart the server.
- Chai and Mocha – for unit testing
- ESLint – we use ESLint to enforce a uniform coding style, we extend Google's configuration, we added 3 rules : 4 space tabbing, double quotes for strings, no errors when line length exceeds maximum length.
- CircleCI – we used CircleCI as a tool for CICD.
- MongoDB – will be used in the future as a database, for now we use a JSON file as the Database. We chose it because it's more robust document database and it is high performant and secure.

Website screenshots

Home page



Login page



Authentication



How to setup and run the project explanation

Front End:

- Clone the frontend repository with
`git clone "https://github.com/OranBourak/FurryFriendsServices_Frontend"`
- Navigate to frontend directory and install required packages with npm i
- CD into my-app
- Start react up with npm start

Back End:

- Clone the backend repository with:
`git clone "https://github.com/OranBourak/FurryFriendsServices_backend"`
- Navigate to the backend directory and install required package dependencies with : npm i
- Start the server with Nodemon with : npm run dev

CICD pipeline and screenshots

Frontend

The screenshot shows the CircleCI interface for the 'cicd-job' in the 'FurryFriendsServices_Frontend' project. The job is in a 'Success' state. The left sidebar contains navigation links: Dashboard, Projects, Insights, Self-Hosted Runners, Organization Settings, and Plan. The main content area shows the job details, including a 'Maintenance Update' banner, a breadcrumb trail (All Pipelines > FurryFriendsServices_Frontend > main > example-workflow > cicd-job (20)), and a 'Rerun' button. Below this is a table of job metadata: Duration / Finished (48s / 30s ago), Queued (0s), Executor / Resource Class (Docker / Large), Branch (main), Commit (083ebab), and Author & Message (take all fets out from my app folder). The 'STEPS' tab is active, showing a list of steps: Spin up environment (12s), Preparing environment variables (0s), Checkout code (0s), Install dependencies - NPM packages (31s), run tests (0s), and Run linter (1s). A 'Parallel runs' section indicates that parallelism is used to run faster tests.

Backend

The screenshot shows the CircleCI interface for the 'cicd-job' in the 'FurryFriendsServices_Backend' project. The job is in a 'Success' state. The left sidebar contains navigation links: Dashboard, Projects, Insights, Self-Hosted Runners, Organization Settings, and Plan. The main content area shows the job details, including a 'Maintenance Update' banner, a breadcrumb trail (All Pipelines > FurryFriendsServices_Backend > main > example-workflow > cicd-job (33)), and a 'Rerun' button. Below this is a table of job metadata: Duration / Finished (9s / 14s ago), Queued (0s), Executor / Resource Class (Docker / Large), Branch (main), Commit (aea628a, 5d05ec7), and Author & Message (deleted one test). The 'STEPS' tab is active, showing a list of steps: Spin up environment (1s), Preparing environment variables (0s), Checkout code (0s), install dependencies - NPM packages (5s), run tests (0s), and Run linter (0s). A 'Parallel runs' section indicates that parallelism is used to run faster tests.

Link to the CICD services

[CICD service used](#)