THE REPTILE ZOO

To update and modernize the outdated The Reptile Zoo website

Team Members

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THE PROBLEM:

The current **The Reptile Zoo** website is outdated and relies on manual processes that limit efficiency and growth. It lacks secure authentication, interactive features, and a centralized system to manage volunteers, events, and animal information. As a result, operations are inefficient and visitor engagement is reduced.

THE SOLUTION:

We built a centralized, modern web platform designed specifically for reptile zoos and wildlife centers. The system integrates secure authentication, interactive animal pages, volunteer management, and an event calendar into one streamlined solution. This modern digital ecosystem improves operational efficiency while creating a more engaging and informative experience for visitors.

PROJECT STATUS:

All critical features have been implemented, including secure authentication, an enhanced home page, interactive animal pages, a dynamic calendar, and an improved contact page. These core components establish a strong and secure foundation for the platform. We are now refining functionality and preparing for final testing and deployment.

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Tech Stack

Backend:

- Node JS
- Express
- MongoDB
- JWT (Auth)
- Cloudinary
- Nodemailer
- Axios

Frontend:

- ReactJS
- TypeScript
- React-Router-Dom
- MUI
- MUI-Icons
- LEAFLET MAP (Mobile Friendly, Interactive Maps)
- i18next

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Live Demo

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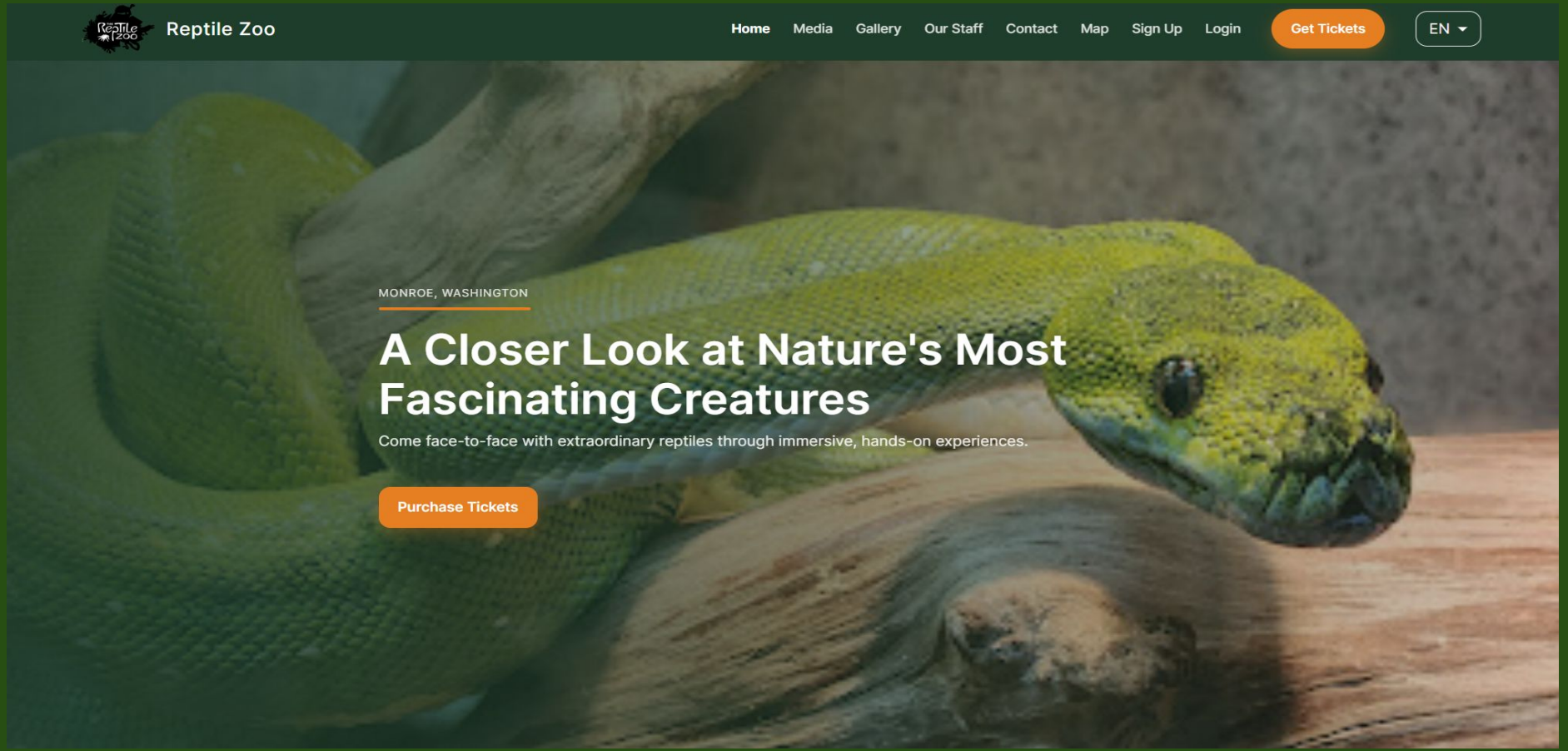

Biggest Challenge/ Biggest Learning/ Most Enjoyed

Biggest Challenges:

- One of the biggest challenges was understanding and integrating new technologies such as MUI, Cloudinary, i18next, and Leaflet. Each tool required time to learn, configure properly, and integrate smoothly into the existing architecture.
- Another major challenge was time management — balancing practicum work with personal schedules while meeting project deadlines and maintaining consistent team communication.
- Additionally, coordinating team collaboration and merging code across multiple branches required careful planning, clear communication, and frequent code reviews to avoid conflicts and ensure stability.

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Biggest Challenge/ Biggest Learning/ Most Enjoyed

What We Learned:

- Throughout our collaborative journey, every team member worked as a full-stack developer, contributing to both frontend and backend development. This allowed us to truly understand how each layer of the system connects, communicates, and depends on one another.
- Through regular standups, screen sharing, and code reviews, we strengthened our communication and built real trust within the team. Together, we solved API mismatches, debugging challenges, and Git conflicts, which improved our technical confidence and problem-solving skills. By the end of the project, we grew not only as developers, but as adaptable, collaborative full-stack engineers.

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💚 THANK YOU!

We want to sincerely thank **Gina Castromonte** – **Node CIL and Scrum Leader**.

Gina helped us organize clear and productive meetings and kept the team focused and motivated. Her technical knowledge and guidance supported us through challenges and helped us grow as developers.

We are also very grateful to **Code the Dream**. This program truly changed the rules of the game for us. It gave us real-world experience, strong technical support, and the confidence to move forward in our tech careers.

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❓ Questions?

Thank you for listening!

We appreciate your feedback and questions.

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