

# ISACA: A Software Development Case Study

ISACA is a non-profit organization dedicated to advancing and promoting the profession of information security management through education, professional certification, and community outreach. They work with industry leaders, government agencies, and educational institutions to provide the resources needed to succeed in this exciting field. In addition, they approached plecco.net to provide technical support for the organization and build an online platform.

## Tech Stack

Platform – Custom made

Python

React

Rails

## How we built ISACA.org

Our team at plecco.net is passionate about helping business owners create custom websites uniquely tailored to their needs. The following case study will outline how we approached the development of a new website for ISACA, a professional organization that provides a networking and learning platform for IT players.



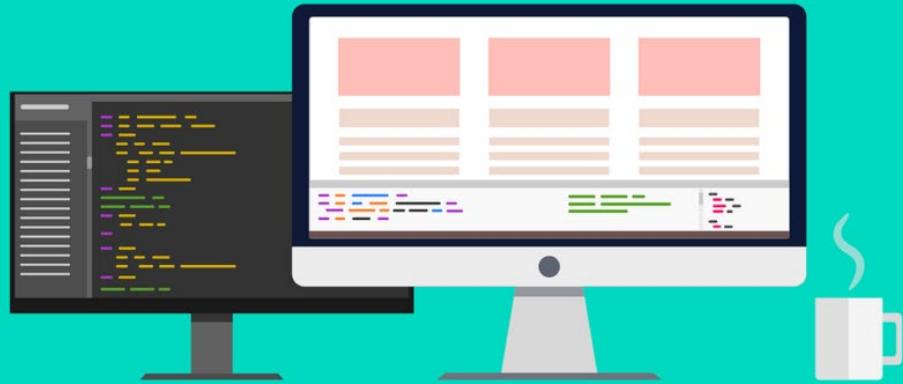
### Domain choices

We started by working with our client to understand what they wanted to achieve with their website. We then created a list of priorities for the new site, which included the following:

- A simple design that would be easy for clients to navigate on their own
- A mobile-friendly interface
- A simple way for clients to create accounts and log in securely
- An efficient way for clients to learn online
- An online resource for professionals and students in the cybersecurity field

From there, we created a wireframe prototype using Ruby and React to test different layouts and designs before committing any resources to actual development work. We aimed to ensure all these features were possible within the framework before moving forward with actual coding. After the client approved the prototype, we proceeded to develop the site.

Our goal was to create a platform that would allow us to quickly update the site as new content is added without needing a dev team. We also wanted it easy for our clients to access important information independently. We tried to make the site simple and easy to navigate, emphasizing information delivery to ISACA members. We also wanted to ensure it would work well across all major devices and browsers, including mobile phones, tablets, and desktop computers.



## Frontend Development

The website we developed is multifunctional. We've created a custom membership tier system for Isaca.org that allows the company to develop a tiered pricing structure based on the membership's value. You can sign up as a professional, a recent graduate, or a student. These tiers come with varying functionalities.

The system also allows for online training, accessible to all members anytime. From the backend, our clients can create classes and courses for members and provide them with immediate access to their new course materials. They can also monitor which tutorials are popular among users and focus on relevant fields.

We have also developed a credentialling resources system that allows our clients to easily track their progress in completing courses. We can also use this as another way to track member activity.

Finally, we created an events calendar so our clients can see all upcoming events and register directly through our website. This makes it easier for them to keep up-to-date with what's going on in their industry.

To enable our clients to scale their services quickly and efficiently as they grow, we set up AWS Lambda functions using python. as part of their serverless architecture. Using Python and the AWS Serverless Application Model, we were able to build a simple API service with some pre-built libraries that would allow them to serve their users without worrying about data storage.

## **Results**

ISACA has gone on to become a home for over 165,000 professionals in the cybersecurity field. They're present in 188 countries, with the most common point of reference being the website built by plecco.net. This site receives over three million visits annually and ranks among the top 25,000 websites globally.