**Protecting Wildlife**

**Overview of the Application:**

Government has decided to create an informative website, to share information about wildlife with the people of the country. With the growing population of the country is increasing harm on environment. The primary concern of the government is to implement and share policies and programs for conservation of the ecosystem, welfare of animals. This website will give insights to people/public about policies, programs about wildlife. It will contain information/data about extinct animals,(if any new animals being imported from another country). This will help people to understand the need to save wildlife, create awareness among people.

Now, The Government of Philippines **has** hired Geco Asia developers to create a website with following features mentioned below. Developers are supposed come up with a name for the website.

**For Geco Asia Developers**: In below content, (Wherever “For your reference” is mentioned) it means suggestion, that can be incorporated in individual page. Do research, check reference website, it will help you while developing UI (Add carousels, cards, parallax, accordion, etc.).

**Key Features:**

1. Landing page: This page should always be informative, it should depict what website is about, what services does the govt. offers to save wildlife, programs and policies, latest initiative etc.
2. Join our team: Govt. is coming up with so many initiatives and want to give chance to people of country to contribute.
3. Contact us page information is really important; it will provide a way (to govt.) and to collect queries.
4. Services page: It should include detailed information, about what and how many types of services govt. offer to save ecosystem and wildlife (for example, if some anonymous person found animal being ill-treated then they can immediately inform to govt through the website, hence it is one of the services govt. is offering). There should be individual detailed page for every service.
5. It is always a good idea to make people informed about new programs, initiative government and have and including blogs in the website.
6. About the Government: It should tell the people subordinate government helping with environment and wildlife. Highlight people
7. FAQ
8. User should be able to read blogs related to conservation, saving the wildlife.
9. UI should be user friendly, even a non-technical person should be able to navigate throughout the website easily.
10. Quick links: It is a good way to provide flexibility to the users to navigate.

**Detail Information for Individual Web Pages:**

**On Landing Page**: When user visit the website, user should get the clarity and the idea what website is about, what it offers to users. For reference: you can add section like what is wildlife conservation, why it matters, how you (user) can contribute, upcoming events government is organizing, etc. Mention about sustainability, climate (how climate change effect the wildlife), reputed experts/leaders who have already joined the hands. Here attach a page that will contain information (data should come from API) regarding animals (here, add category (Endangered species, Vulnerable, Threatened Species). User should be able to filter data and search by category . Here, you can visually display data in the charts.

**Join Our Team Page:**

Here, user can fill the form (do brainstorming and come up with what input we can take from user). Take necessary input, if Volunteer is the citizen of Philippines, then ask user to fill identity field (capturing data like **Philippines Identity Card (IC) information, etc.).**

For reference: Create an UI in a way that it motivates users to save wildlife, adopt and animal, sign up for the initiative, become a volunteer. You can link our work page here. Here, do post request (if API is not available, store in local storage for time being). Here, add content like (20000+ volunteer joined).

**Contact Us Page:**

This form will help candidate with clarifying all the queries. For Reference, add FAQ, so that user can use as a reference for any doubt and query.

**Service Page:**

Here, user should get the clear picture of what initiative, events, solutions government is working on for saving and protecting wildlife. Mention different services here. This page should include detailed information, about what and how many types of services govt. offer to save ecosystem and wildlife (for example, if some anonymous person found animal being ill-treated then they can immediately inform to govt through the website, hence it is one of the services govt. is offering). There should be individual detailed page for every service. When user click on any service, open new webpage,(having detailed information about service). Here, you can visually display data in the charts.

**Add/Link blog/articles page (use API), educational resources.**

**Add Privacy and T&C section:** (Suggestion: here you can use modal)

**Dev Requirements:**

1. Develop the web application using SPA technology and state management library. React + Redux, azure, Devops.
2. Data should be dynamic, even blog website link should come from API.
3. All input fields should be validated.
4. Folder Structure and File naming Convention should be proper.
5. Give attention to details.
6. Implement carousel, card hovering, etc.
7. It should be responsive.
8. Implement Unit testing to ensure bug free application. (Test, API, forms)

* Jest for React (or equivalent)
* xUnit for .NET Code(or any equivalent)

**Back End : WebAPI in .Net Core 6**

Concepts to be implemented

* Follow C# Coding Standards
* Implement .Net WebAPI Best Practices
  + Connection string should be specified in appsetttings
  + Use Async Methods
  + Validate input datas
  + Return status according to the process

* Use Entity Framework for Database(Can use either Code first or DB First Model)
* Implement Logging (Log Descriptive Messages accordingly).
* Implement Global Exception handling for the controllers.

**Hosting Requirements:**

1. Website needs to be hosted on Cloud - using Azure App Service.
2. App Service should be integrated with your version control platform (eg. Github) to pull the changes when made.
3. Two deployment slots for the App Service are required - UAT and PROD.
4. Application code will be first pushed to UAT then tested and finally swapped with the production slot if approved.

**Azure – Devops Deployment**

**Deploy React Web App using Azure DevOps.**

1. Create the Azure DevOps Project and connect to the App service instance.
2. ­ the release pipeline and Deploying to Azure
3. Resources Clean Up

**Evaluation Parameters:**

1. Requirement Analysis
2. Output Design
3. Folder Structure and File naming Convention
4. Functionality - Validations, Page linking etc
5. Presentation Skill
6. Added Advantage: Implementation of carousel, new feature, etc.

All the best!