DOC's AR Image System (DARIS)

By: Emily Benyamin, Ayush Agarwal & Aditya Garg

Advisor: Thi Thu Trang Do　　　　　　　　　　　　　　　　　　　**Client: Gavin Walker**

| Information Fragment | Splash Screen | Camera Screen |

INTRODUCTION

The main goal of this project is to produce a user-friendly POC mobile application, which people will be able to use their smartphone camera to interact with the virtual 3D animal models. The objective of DARIS is to make its use a memorable experience for the user. This is done by capturing the user's photo with animals and educating them about wildlife conservation through information about habitat, breeding and fun facts. This is achieved via a pop-up. The application integrates with a database and a visualization tool (Microsoft Power BI) can be connected to create a dashboard or receive a report out of it. For example, visualizations and dashboards will contain data about how users are rating the application via their smartphones.

Several endangered animal species like the little blue penguin, yellow-eyed penguin, and many others are at risk from interaction with the public. It is important to limit public interaction with wildlife as it can disturb the animal's habitat.

New Zealand's flora and fauna, and conservation efforts are popular among the public, and any interaction must be in a way that does not do any damage. This is accomplished through our augmented 3D POC application: 'Click the Wild Blink'.

DEVELOPMENT

Our project "DARIS" is developed in six phases, each phase is briefly discussed below:

1. During the first phase, we gathered requirements from the client and created a business proposal document for client approval.
2. After the business proposal was approved, we started the analysis work and created the user stories, activity diagrams, use case diagrams, etc.
3. We started the design work in parallel to the analysis work, and during this phase we focused on creating the diagrams for the application architecture, system design, prototype/wireframes, etc.
4. Once the analysis and design part was over, we started with the development phase in which we developed the primary deliverables first and then the secondary deliverables. During the development phase we also developed an additional feature requested by the client.
5. Alongside the development we also did the testing which included unit testing, system testing, performance testing, API testing, and UAT.
6. Since we were agile towards our approach for developing the application, we documented all the developed features and tests in parallel to the development and testing phases.

CONCLUSION

The outcome for the final project was positive. The team members of The Conservation Crew worked well in parallel for a good outcome for 'Click the Wild Blink'.

We were able to complete all project deliverables outlined inside the project proposal.

We were also able to complete all the secondary deliverables.

If time permits storage of the rating data will be stored in a database; integration of Power-BI into the database that stores the data; creation of a dashboard and insights into the data.

We were also able to successfully implement a change request by the client – Gallery Button Feature.

DoC's AE Image System (DARIS)

Team Blurbs

Emily

Kia ora!

I'm Emily, 21 and a third year BIT student doing a major in Software Development at WelTec completing my final trimester in June/July of this year. While my major is Software Development my strengths lie in testing and the BA side of IT. I am the project manager of The Conservation Crew working on a project for DOC (Department of Conservation) and I will be assisting Ayush and Aditya with developing, testing, facilitating, and managing the workload. I will try my best to meet all the requirements and deadlines set while assisting my teammates so we can create a quality application for DOC (Department of Conservation) and finish off our project on a good note.

Aditya

Hi!

I am Aditya, 21 and a BIT student doing Software Development as a Major, I am working as a Data Analyst for Department of Conservation. My skills lie in Development, Testing and Analysis.

I'm working with Ayush and Emily on a project called DOC's AR Image System and we're developing android application called "Click the Wild Blink". We will be testing and connecting it to a visualization tool to create useful dashboards.

Ayush

Hello!

I'm Ayush, 21 and a final year BIT student majoring in Software Development at WelTec. I work at the Department of Conservation as a Data Integration Analyst in Strategy as a member of the Architecture team. Currently, I am working with Aditya and Emily on a project called "DOC's AR Image System" for DOC. We are developing an AR android application called "Click the Wild Blink".