Blazing
Forest

PROJECT PROPOSAL:
DESIGN & ANALYSIS ARTIFACTS

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Version 1.3

Presented by

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Version Control Table

Version No.	Changes	Author	Date
1.0	Final draft	Faunic	14/08/2020
1.1	Major changes, team feedback	Faunic	15/08/2020
1.2	Minor changes, formatting	Faunic	16/08/2020
1.3	Major changes, mentors' feedback	Faunic	17/08/2020

Executive Overview

Queensland is known for its rich biodiversity and is home to 2,678 fauna species as of 2017. According to the Queensland Government's State of the Environment website, the state has recorded a continuous increase in the count of threatened species since 2007, which has increased by 79 over a decade. Despite persistent recovery efforts by the state government and the non-government organisations, the threat of extinction of fauna species in Queensland is still great. The lack of awareness regarding endangered species and human impacts are leading to lasting effects on fauna, most notably seen as the increase in the number of threatened species in Queensland.

By analysing the past efforts of the Queensland and the Australian governments to involve children to actively participate to conserve fauna species, we have identified that there is a lack of awareness of these endangered species as children are not introduced to the issue from an early age. Our team has planned a unique solution to develop a website for kindergarten- and primary-level children where they can be introduced to local endangered species. Along with these lessons, we will incorporate interactive lifestyle choices games which will foster more sustainable habits that they can carry forward into the future. In addition, for active participation, we also aim to provide them with links to the nearest conservational centers and groups so that they can engage with conservation efforts.

This report further explains the summary of the foundation of the project, which includes the challenge, solution, background, PACT analysis, link to the team's modified lean canvas, and assumptions and risks from a sponsor's perspective that may occur during the development and implementation of the project. It also contains links to the Kanban board (LeanKit), which contains the proposed epics with their corresponding user stories, and design and analysis artifacts as an ePortfolio on Mahara, which includes the system architecture, security aspects, and development artifacts and the open data sources that are required for the project.

Table of Contents

1. Introduction and project description

1.1 Purpose of this report

This report puts forward a solution to the lack of public education on threatened species. We propose the outline of a system geared towards young children that will raise awareness of such species in Queensland. This will foster a lasting sense of responsibility for threatened fauna in the younger generation, as well as raise awareness of this issue in older Australians.

1.2 Solution

To address the problem, we propose a website that educates children about the identification and preservation of threatened fauna in Queensland. Our website will be geared towards 9- to 13-year-old children but may also be useful for people of other ages. The website will incorporate:

- Lessons, to teach students about threatened species, such as learning characteristics of such species;

- Quizzes, to test children's knowledge of threatened species, such as identification of the species that is at higher risk of extinction;

- Situational scenarios, to encourage sustainable habits, such as choosing between paper and plastic shopping bags.

1.3 Challenge

In Queensland, the lack of education surrounding the protection of endangered fauna for children results poor awareness of biodiversity, which may lead to the irreversible destruction of the ecosystem due to human impact.

1.4 Background

The three top locations identified as Australia's national biodiversity hotspots are located in Queensland (Department of Agriculture, Water and the Environment, n.d.), yet according to Cresswell and Murphy (2016), high rates of urban development in Brisbane has been attributed to reductions in distributions of wildlife such as bird species. This, along with public unawareness and inaction to preserve wildlife, has resulted in 224 fauna species being classified as threatened (Queensland Department of Environment and Science, 2017). Species conservation is vital to maintaining the balance of the ecosystem on Earth, which in turn provides essential food, shelter, and medicinal resources for humans (Anderson, 2010). While conservation strategies, such as the Biodiversity Strategy for Queensland, rely

on adults changing their behavior, attitudes by then are mostly difficult to alter. The standard early years education curriculum does not involve direct education about animal conservation, leading to the same attitudes being retained into adulthood. Although the Australian government has made efforts to encourage interest in threatened species from youth, for example through the Department of Agriculture, Water and the Environment's "Green Kids Guide to Threatened Species: 9 Ways You Can Help" (2000) such sites are often aimed at adults; our system will be targeted at children in an effort to engage them directly.

1.5 PACT analysis

PEOPLE	ACTIVITIES
• Children or their parents in Queensland who want to learn basic educational skills innovatively, or want to know more about local biodiversity, and want them to actively participate in related activities. • Mostly targeting the children in the age group of 9 to 13 years. • Users are assumed to be beginners with basic computer and English skills with Internet access. • If users are in their early years, it is advised to have a guardian accompanying them to achieve a better understanding of the contents and terms of the website (although the website is child-friendly).	As this website aims to target children, hence we have activities designed in the form of visuals for the following: • Lessons about animals; • Games: quizzes, scenario-based questions; • Contact numbers and links to conservational centres and groups. Activities are: • Individual (user account); • Short-length; • Multiple serial tasks; • Well-defined; • Frequent.
CONTEXT	**TECHNOLOGIES**
• Anybody can access from anywhere using a computer or mobile phone with Internet browser. • The website can be accessed using different browsers and platforms. • The preferred physical environment should not be noisy or stressful. • Users will access the website when they want to learn, know, and pursue their interest in fauna or become introduced to it as a part of their learning or leisure time.	• Website. • Inputs: user clicks. • Output: photographs, videos, text. • Network. • The website can be accessed in different operating systems like Windows and Mac.

1.6 Link to the final version of the modified lean canvas

https://mahara.infotech.monash.edu.au/mahara/view/blocks.php?id=49436#

Entry: Lean Canvas - Updated

2 Assumptions and risks

2.1 Assumptions

- Users have sufficient technical support such as electronic devices and Internet access, and they are familiar with using electronic devices.

- Users have a parent or guardian to accompany them when using the system if they wish to have extra help.

- Users have basic English skills.

- Users have a high enthusiasm for learning new things or are interested in biodiversity.

2.2 Risks

- **Data resources**: As the website uses open data from the Australian and Queensland governments, if the data is not frequently updated by them or the data permissions or licenses are changed, the data may become inaccurate or in accessible.

Appendices

1. Link to the Kanban board – LeanKit
   https://monashie.leankit.com/board/1210720248

2. Link to the Mahara studio mentor page
   This page includes:

   - Team introduction
   - Security aspects
   - Open data details
   - System architecture

   https://mahara.infotech.monash.edu.au/mahara/view/view.php?id=49436