

Group Presentation Content v1.0

Fauna Finder

Ana Monteiro | 14 Feb 2023

Ethan Cude, Connall Shurey, Roman | 19 Feb 2023

Connall

Oscar

Tom

Ethan

Roman

What is Fauna Finder

Fauna Finder is a mobile application designed to help users identify and learn about the wildlife in their local environment (their university). The app provides information about birds in the university's vicinity and it aims to provide more information about other animals and creatures.

This app could be useful for nature enthusiasts, researchers, and anyone interested in learning more about the natural world around them, as it includes a database of different species, including pictures, descriptions, and behavioural information. It also provides an amazing opportunity to promote eco-tourism and bring awareness to wildlife conservation.

Motivations behind the creation of Fauna Finder

Current information available on campus is not accessible everywhere.

Not completely accurate because a lot of the birds included are rarely or never seen

What is currently available

Currently there are a few bird identification apps available, however we selected 8 competitive apps to compare with ours:

1. **Merlin Bird Id:** This app features photo, audio and attribute recognition and provides picture and sound databases.
2. **iBird:** Provides sound and picture databases.
3. **Birda:** Provides A log book of what birds the user has seen, nearby locations/hotspots for the user to visit and spot birds.Has Challenges for the user to complete and a feed of other users sightings and the ability to follow them.
4. **BirdNET:** an app that specifically identifies a bird from its song and produces a spectrogram, targeted towards serious amateurs/professionals who require lots of detail.

5. **Birds of Europe Field Guide:** an app that allows identification through filtering and an image quiz, targeted towards the general public with no prior knowledge required.
6. **BirdWatching2:** an app that logs user sightings, plays bird calls/songs, and provides a list of birds the user hasn't seen, targeted towards the general public with no prior knowledge required.
7. **GoBird:** an app with a map of nearby hotspots, recent rare finds and their general location, and links to bird sounds and Wikipedia, targeted towards the general public with no prior knowledge required.

How are we better than our competitors

Penelope's app is targeted towards universities, providing them with a customizable bird guide specific to their area. This makes the app a valuable resource for students and faculty, as it provides detailed information on the birds found there. This campus-specific information gives the app a competitive advantage over other bird guides available in the market.

Features

User accessibility

The app includes educational resources on bird species and their behaviours, which are easily accessible to users. This is especially useful for students studying biology or environmental science, as they can access the app on their mobile devices while in the field. The app also uses colours that consider its usage by visually impaired users.

Information

Tailored specifically to the University of York's campus, providing detailed information on the wildlife that can be found there. This makes it a valuable resource for students and faculties at that university who are interested in studying the local wildlife. It can also be helpful for visitors to the campus who are interested in learning about the birds and other wildlife they might encounter.

Customisation

Fauna Finder will be sold to universities with the ability to customise the app to their specific area. This customisation feature will allow universities to add birds that are unique to their campus and provide detailed information on the birds that can be found there. This feature will add value to the app and increase its appeal to universities.

Finance

Predicted Weekly Closing Balance

The predicted weekly closing balance is an estimated calculation of the amount of money that Penelope will have in their account at the end of each week. It considers all expected incoming funds and outgoing expenses for the week and calculates the expected balance after all transactions have been completed.

Description of graphs or material supplied

There are two spikes in the cash-in plot that correspond to the bank loan coming in. Before receiving the next loan, the spending of the first loan will be analysed to decide if adjustments need to be made for more efficient spending. From the 30th week, there is a sharper decrease in the closing balance due to increased marketing expenditures, but it is predicted to increase once the app is completed and profits start to increase. The loan was calculated to leave a "buffer" before each instalment to avoid bankruptcy from miscalculations of predicted task completion hours.

Predicted Cost Breakdown

The predicted cost breakdown provides a detailed analysis of the expected expenses associated with the Fauna Finder project. It breaks down the projected costs into different categories, helping to identify potential cost savings and areas where expenses can be optimised. This provides a clear understanding of the cost structure of the project or product.

Description of graphs or material supplied

The graph shows how our income will be spent during the development period. It's clear that rent and wages are going to be the biggest expense representing 47.9% of our total costs. There's no way around not paying wages as the team cannot be expected to work for free. However, in the future (post-development) the company could move to being completely run online. This would introduce costs of its own but would eliminate the cost of rent which is considerable.

Marketing Strategy

The approach Penelope will use to promote its product to its target audience. With our marketing strategy we aim to increase brand awareness, drive user engagement and, ultimately, generate revenue for our business.

It starts by defining the target audience, the target market, the user's needs and preferences, and developing a unique value proposition that sets the company apart from competitors.

The Target

The marketing strategy aims to sell the app directly to universities, rather than individual users.

Branding and Messaging

The branding and messaging for Fauna Finder will focus on the app's unique selling point of providing campus-specific information on birds and its value as a resource for students and faculty. The messaging

will be clear and concise, highlighting the benefits of the app for universities and its ease of use for their students.

The branding is designed to be simple and eye-catching, featuring a bright orange colour scheme.

Advertising and Promotion

The app could be promoted through various channels, including social media, targeted advertising on university campuses, and partnerships with local bird-watching groups. The promotion should highlight the app's unique features and its value to the target audience.

Promotional Tactics

In order to attract more app users, universities could leverage the following content ideas:

1. **Creating social media accounts**
2. **Sharing user-generated content:** Encourage users to share their bird-watching experiences and photos on social media using a specific hashtag. This will help to create a sense of community around the app and encourage others to get involved.
3. **Hosting social media contests:** Run contests on social media to encourage users to engage with the app and share their experiences.
4. **Collaborating with influencers**
5. **Promoting campus-specific events:** Use social media to promote bird-watching events and educational resources that are specific to each university. This will help to increase awareness of the app among students and faculty, as well as the wider community.

These ideas will help increase the visibility and awareness of the app among the target audience.

Pricing and Subscription Model

Fauna Finder will implement a subscription-based pricing model for universities, which will allow them to purchase a subscription to introduce their campus into the app and distribute it among their students. The pricing model will be affordable and competitive, making it an attractive option for universities. This strategy aims to achieve continuous, large subscription purchases by fewer customers rather than small one-off purchases by many. The goal is to provide campus-specific information on birds, making the app a valuable resource for students and faculty at universities.

Development plan

Product Development Cycle

Penelope follows a 5-stage product development cycle, which includes the Scrum Framework, allowing for evolutionary design and changes to the product vision without threatening the existing

project plans. Clients can expect a working version of the product every two weeks and give early feedback, ensuring the final product meets their vision and needs. Our Client won't be locked in to an initial set of requirements and won't be receiving a final product that doesn't meet expectations.

QA

Penelope considers Quality Assurance (QA) a vital component in team projects to ensure the final product meets quality standards and customer expectations. Key reasons why Penelope believes QA is essential for a successful product include:

1. **Identifying and preventing defects:** The QA team works to ascertain defects and potential issues in the product before it is released to customers, allowing early addressing of these issues and saving the company time and resources in the long run.
2. **Maintaining consistency:** A well-structured QA process ensures that all team members are adhering to the same set of quality protocols. This consistency helps ensure that the final product is cohesive and the desired quality level.
3. **Improving customer satisfaction:** A high-quality product that meets or exceeds customer expectations is key to building customer loyalty and increasing satisfaction
4. **Minimising risk:** QA processes can help to recognise and alleviate potential risks associated with the product, such as security vulnerabilities and/or performance issues.

High-Quality Product

We at Penelope believe our product is of high quality due to numerous key factors that include:

1. **Test driven development:** Penelope uses a test-driven approach to develop their product, which involves writing unit and instrumentation tests at the beginning of each development cycle. We also use automated end-to-end tests to ensure that the user experience is maintained and all GUI features work as intended. This methodology helps to avoid bugs and ensures high-quality design of each feature of the product.
2. **Reliable and durable:** Using the test-driven development methodology leads to fewer bugs in the code, making it reliable and long-lasting, ensuring a consistent user experience and avoiding frustration. Maintenance of the product after release also ensures its durability.
3. **Intuitive and user friendly design:** The product has been designed with usability in mind, emphasising simplicity and ease of use. The user interface follows usability heuristics to ensure that users can navigate through the application with minimal effort. The result is a highly operational product that is reliable, functional, and enjoyable to use for customers of all technical skill levels.

4. **Innovation:** Innovation is not just about adding new features, but also reimagining existing ideas and bringing a fresh perspective. Penelope achieves this by monitoring competition, improving on their flaws, and constantly seeking feedback from users and stakeholders. This helps to improve the product and introduce new features that cater to their needs, which attracts and expands their target audience.

Quality maintenance strategy (after the product is released)

In order to make sure the product continues to fulfil the requirements of the client/customers, we can incorporate these key maintenance strategies which will be followed after the initial release:

1. **Conduct regular maintenance and updates:** By maintaining the product this way, continuous customer satisfaction is achieved.
2. **Monitor user feedback:** Penelope can track user feedback and reviews to categorise any issues or areas for further improvement that customers may be experiencing. This feedback can be used to prioritise updates and bug fixes.
3. **Provide ongoing customer support:** Penelope can offer continuous customer support to help users troubleshoot any issues they may be experiencing with the product. And therefore establishing valuable customer loyalty and ensuring the product continues to meet the needs of users.
4. **Conduct regular quality audits:** Penelope can conduct regular in-house audits to ensure that the product continues to meet the required quality standards. This can also help to spot and areas for improvement and ensure that the product remains competitive in the market.