



Product Document

Save The Hoodie

Support conservation of Hooded plovers in Victoria

Faunalytics | Handover Package | 29-Oct-2020

Overview and Description

Hooded Plover, as one of Australia's unique Shorebirds, has been marked as an endangered species in 2012. Currently in Victoria, there are only about 550 hooded plovers remaining. These poor creatures are facing survival threats from different reasons, especially during their nesting period, which is the summer in the southern hemisphere, including human beach behavior, coastal development, and attacks from natural enemies.

We developed Save The Hoodie to appeal to more citizens, especially adults who like outdoor activities on the beach, to support the conservation and habitat restoration of Hooded Plovers starting with minor adjustments in their daily behave.

Chek more information of Save The Hoodie from our Product Video:

<https://www.youtube.com/watch?v=NCFmEXjLnAM>



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1 The Key Features

1.1. Notification

As the main feature of Save The Hoodie, Notification reminds users when they are close to Hoodies, an endangered bird, who visit their habitats often and also want to contribute to biological diversity and sustainability. Within this function, users can take preventive measures in advance, such as leash their pets, when they are close to the sandy beach where Hooded Plover nests 1km, to reduce the threats their beach behavior poses to Hooded Plovers.

1.2. Information

These people who have begun to participate in the protection of Hoodie can use this part of the function to understand the reasons for the true endangerment of Hoodie Plover and the status quo before they engage in their contributions, so that it is easier to support the recovery activities of this endangered species in a targeted manner.

This function consists of three parts, including the threat to hoodies, the life cycle of Hoodies and the distribution of hoodies. They allow users to obtain the current research and analysis results of Hoodie Plovers summarized from authoritative protection agencies. Users can use these facts to understand the real threat of this endangered threat, especially those caused by human beach behavior, and maximize the use of

interactive maps and life cycles to further obtain popular science information about this species.

1.3. Poster Design and Share

This Android application provides a user a creative platform to customize a poster about Hooded Plover Conservation. As an application focusing on endangered waders, the main purpose of this function is to provide users with a conversion insight and increase participation. Preserving the hoodie provides such a way to share ideas to help those who are really eager to participate in Hooded Plover volunteer activities to find a way to start. Helping users to take action in this regard is basically actually expanding the influence of these non-profit organization platforms in sharing and dissemination.

1.4. Community

Save The Hoodie has made a recommendation list for Hooded Plover's online community. These online communities include volunteer teams with appeal in Facebook, and users can choose to join these communities or teams to participate in more conservation actions. In addition, Save The Hoodie also provides access to these official organizations and convenient contact methods, encouraging users to report sighting of Hooded Plovers to support these offline substantive protection behaviors and academic research.

2 Risk and Benefits

The risk of this project is that although the project is running normally, it is developed by a four-person virtual team based on master-level knowledge for an endangered species. With the support of the school, this project does not currently need to pay any resources. This means

that if this fully functional small APP may require some investment and data support from NGOs to further develop this application.

On the one hand, Save The Hoodie reserves the information display function. The plan to expand

it into a real-time information platform in the future requires a server to implement further information headline collection, or financial support to pay for the API key.

On the other hand, although we have reserved enough layout entries to support the information entry required for future function expansion, future user strategies and operational strategies also need to balance the attractiveness of the

application and the user experience, especially considering the application Set itself as a public welfare tool.

Another risk is the need to obtain data usage licenses from Birdlife and eBird, two major bird conservation organizes, to support the data visualization function used to display the distribution of Hooded Plover in the application.

3 Data Sources

The data source currently used by Save Hood Hoodie is free. However, in the future continuous use rights, it is necessary to negotiate with relevant agencies including Birdlife Australia and eBird about the information and data use permission in the future stage.

Names	Physical Access Used	Frequency of source updates	Frequency of Iteration system updates	Granularity	Copyright
<u>Mapbox</u>	API	Every minute	The coordinate will be updated every minute as the API's	Not applicable	<u>Register to legally use</u>
<u>eBird</u>	CSV	Monthly	Yearly	High	<u>Free for not commercial use</u>
<u>Birdlife Australia</u>	Statistic figures	Yearly	Yearly	Not applicable	<u>Free for not commercial use</u>

4 Security and Privacy

Our project is building on public information, datasets, and open sources. However, we do take user inputs to generate the most suitable suggestions for them. User inputs will be on general level answering in binary values, it won't include anything personal to guarantee no leaking users' information as we may concern.

Although there are some points that might be the potential issues for the project:

- Poor data encryption is a common data risk caused to any online platform application.
- Improper Transport Layer Security (TLS) in the Open System Interconnection (OSI) can allow intruders to access the data.

5 Scope for Further Development

Save The Hoodie may be expanded as a new drainage platform for existing animal protection organizations' websites. In addition, some functions may have extended or improved scope. This project also considers expanding the endangered animal species and the area of concern for this application in the future.

In addition, with the establishment of the online community about Hooded Plover, you can consider updating articles on the information page and offline event notifications in real time to help users get timelier event information.

Our team identified the last two potential areas for further development: 1. Seek opportunities to collaborate with offline communities and provide information on volunteer activities in Hooded Plover Habitat in the app. 2. Expand the types of endangered animals and areas of interest that the app rescues, so that the app supports more conservation for endangered animals.

6 Cost Structure

Item Category	Details	Amounts	Cost Structure
Ideation /Design	The design cost involved in the Save The Hoodie project include images, animation, audio, published official texts, research reports and open data. These materials are all authorized for public use or independent creation, and some of them are prohibited from commercial use.	-	35%
Development /Production	The implementation tools chosen for the project include development tools and operation and maintenance tools. In the future, this will involve personnel costs as well as hardware and space costs. Android Studio is an open source free project development tool. For GitHub and AWS Cloud Database, we use the Education free tier, which is a feature-rich, free-to-use plan for students. We also chose some commercial tools with free trial, including Mockinbot, Moovly, Prezi, FlipClip, and Canva, which allow us to complete our media production for a limited trial period.	-	45%
Operation /Management	The tools involved in teamwork and project management include Microsoft365, LeanKit, Mahara, Microsoft Teams, Zoom and Google Cloud Service. Notably, most of these tools are purchased services provided by Monash University for its students, so we did not have to pay further cost.	-	30%

7 Appendices

For more information, please refer to our technical documentation. The links to supporting documents and maintenance documents are provided below.

Our Support Document can be found at:

<https://github.com/lisihan123/MONASH-IE-MP13/blob/master/doc/Support.pdf>

Our Maintenance Document can be found at:

<https://github.com/lisihan123/MONASH-IE-MP13/blob/master/doc/Maintain.pdf>

SAVE THE HOODIE

SUPPORT CONSERVATION OF HOODED PLOVERS IN VICTORIA



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Only about 550 Hooded Plovers left in Victoria.

Scan QR code and check our app!!!

