



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.

Check 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 individuals who are already involved in the conservation of Hooded Plovers can use this feature to understand why the Hooded Plover is truly endangered and its current status, and then participate in contributing, making it easier to target recovery activities to support this endangered species.

The feature consists of three parts, including the threat to the hooded plover, the life cycle of the hooded plover, and the distribution of the hooded plover. Through these features, users have access to current research and analysis of the hooded plover as summarized by authoritative conservation agencies. With these facts, users can learn about the real threats to this endangered species, especially those posed by human beach behavior, and maximize the use of the interactive map and life cycle to

gain further scientific information about the species.

1.3. Poster Design and Share

This Android app provides users with a creative platform to customize a poster about the conservation of the Hooded Plover. As an app focused on the endangered Hooded Plover, the purpose of the feature is to support users in providing conservation insights and increasing engagement. Save The Hoodie offers such a way to share ideas and help those who are genuinely eager to volunteer with Hooded Plovers find a Kick-off. Save The Hoodie is not only a great way to share ideas on Helping users in this endeavor is also expanding the idea sharing and dissemination of results by these non-profit organizations.

1.4. Community

Save The Hoodie has formed a referral list of Hoodie Conserve online communities. These online communities include teams of volunteers with a convening power in Facebook, and users can choose to join one or more of these communities or organizations to participate in more conservation efforts. Besides, Save The Hoodie provides access to these official organizations and convenient contact information to encourage users to report sightings of Hooded Plovers to support these offline substantial conservation efforts and academic research.

2 Risk and Benefits

The risk of this project is that although it is functioning properly, the project is being developed by a virtual team of four people with knowledge of endangered species. With the support of the school, this project does not

currently require the payment of any resources. This means that the fully functional little app may need some input and data support from the NGOs if the app is to be developed further.

Notably, Save The Hoodie retains the ability to display information. Plans to expand it into a real-time information platform would require a server to enable further headline collection of information, or financial support to pay for the API key.

Second, while we have reserved enough layout entries to support the information entry required for future feature expansion, future user and operational strategies will need to balance the

attractiveness of the application with the user experience, especially considering that the application is positioned as a public service tool in its own right.

A further risk is the need to obtain data use licenses from Birdlife Australia and eBird, two major bird conservation organizations, to support the data visualization features of the application used to display the distribution of Hooded Plovers.

3 Data Sources

The data source currently used by Save The 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
Mapbox	API	Every minute	The coordinate will be updated every minute as the API's	Not applicable	Register to legally use
eBird	CSV	Monthly	Yearly	High	Free for not commercial use
Birdlife Australia	Statistic figures	Yearly	Yearly	Not applicable	Free for not commercial use

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 diversion platform for the existing Animal Conversations organization's website. Also, some features may be expanded or improved in scope. This project also considers future expansion of the endangered animal species and areas of interest for this application.

Besides, as an online community about Hooded Plovers is established, real-time updates of articles on the information page and offline event notifications could be considered to help users get more timely information about events.

Our team identified two final areas for possible further development.1. Seek opportunities to partner with the offline community to provide information about volunteer events in the app about the habitat of the Hooded Plover.2. Expand the types of endangered animals rescued by the app and areas of interest so that the app supports more endangered animal conservation.

6 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/handover_package/Documentation/word_version/Support%20Document.docx

Our Maintenance Document can be found at:

https://github.com/lisihan123/MONASH-IE-MP13/blob/master/handover_package/Documentation/word_version/Maintenance%20Document.docx