

# ASH

Ai - Pocket Field Guide

Made by [FINH](#), the creators of [Cubetto](#) and [Pigzbe](#).



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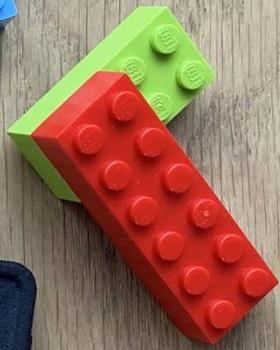
← NEW SPECIES!



001\_Honey\_Bee

Insect Friend Rare

Bees, related to wasps and ants, are pivotal to pollination and honey.



**PROBLEM**

**Over 1 Million Species  
are now at risk of  
extinction.**

Preserving our wildlife is  
one of the major  
challenges future  
generations face today.

“Environmental education  
has failed as it doesn’t  
keep up with environmental  
degradation.”



Loss of habitat  
and species threatens  
all life on earth.

“2021 must be the year  
to reconcile humanity  
with nature...”

Antonio Guterrez

UN Secretary General

**RESEARCH**

# Ecology in schools

Children **ages 5 to 10** engage in Ecology activities, but they are:

**Classroom oriented** - With little field experiences to be had.

**Quickly outdated** - Don't keep-up with environmental degradation rates.



## Early learning

Children still learn through hands on, unstructured play, which balances out the rigours of school based learning.

But after a year inside, with the strong, addictive hand of technology around us, we must reconnect with our natural world.



## Status quo

Existing toys that teach children about ecology are mostly desktop board games, and present the same challenges current curriculums do. The few toys that do marry active play with real world outcomes are concepts that rarely make it to production.



**PRODUCT**

# Meet ASH

Inspired by the legendary Pokedex, ASH is a digital encyclopaedia for **Ecology Guardians** age 6 to 96.

It allows children to discover and learn about the **magic of the natural world** through Computer Vision, Machine Learning, and Active Play.



## How it works

ASH's list of creatures however is incomplete, and It's up to each child to fill it up by finding plants and animals in their surroundings. ASH gamifies the topic of Biodiversity through a familiar digital medium, and an active, discovery led play pattern.



# How it works

## The Camera

Lets children capture images of life-forms.

## The Screen

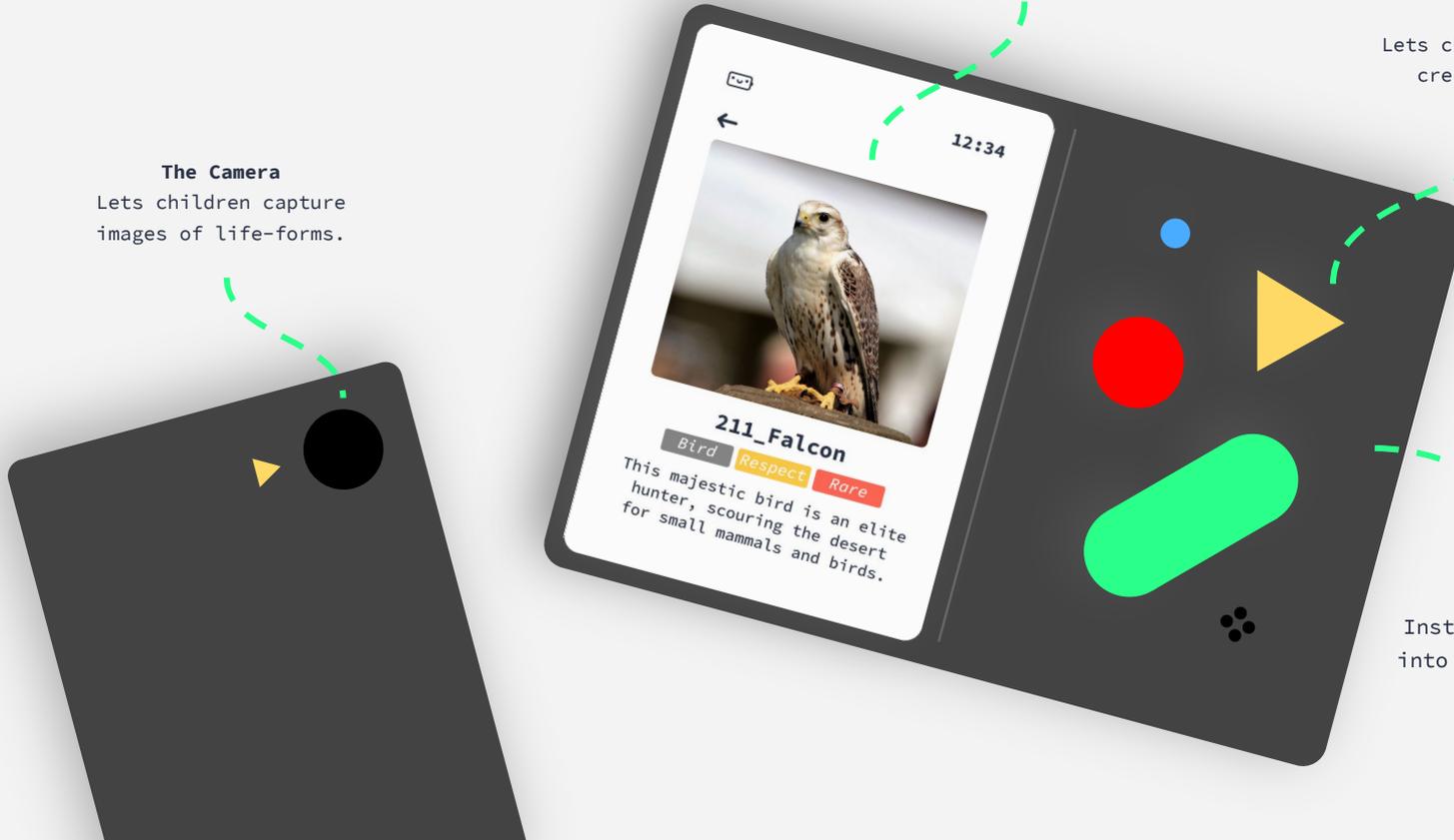
Shows children what the computer can see.

## The Interface

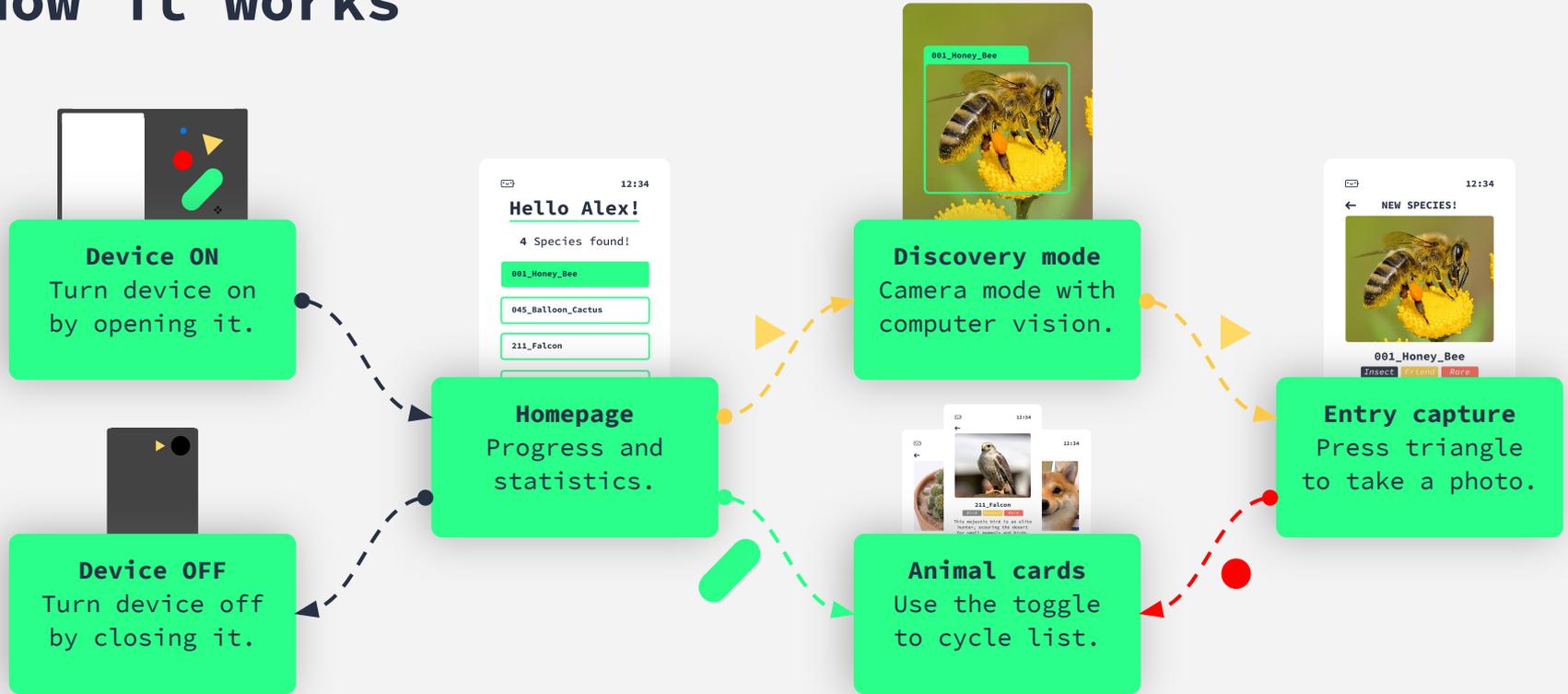
Lets children navigate the creatures they find.

## The Ai

Instantly turns images into fact filled cards.



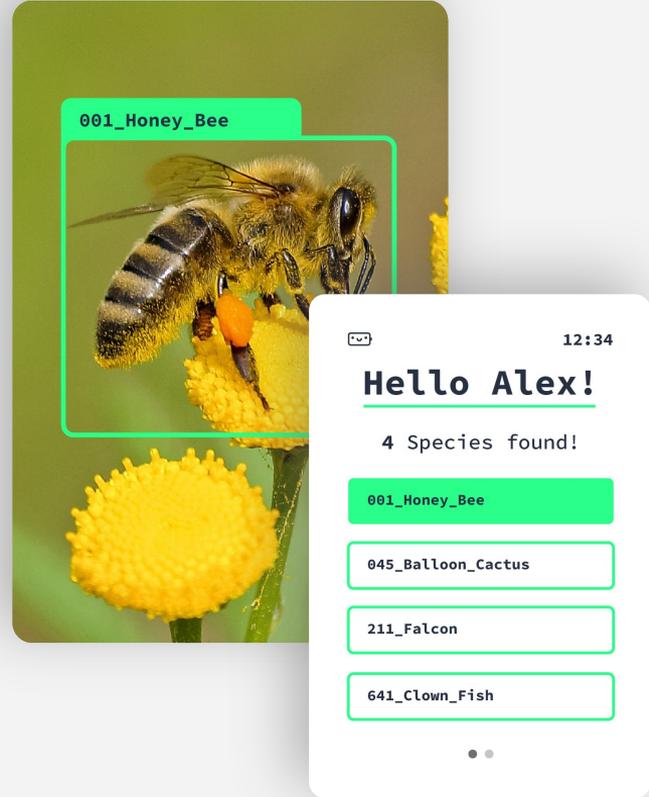
# How it works



# Discover species

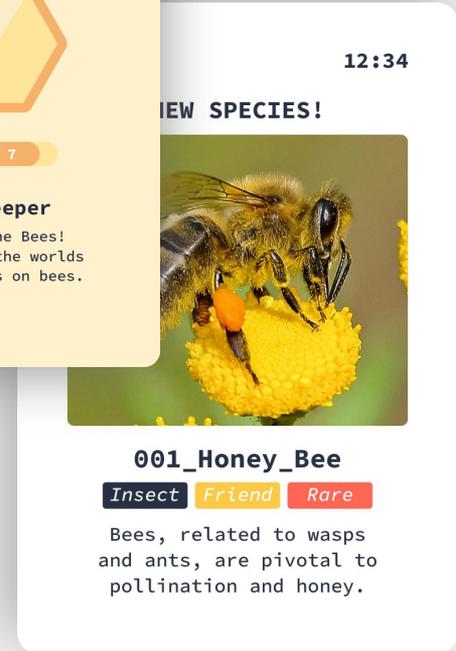
Nature discovery is done through a familiar **point and click interaction**.

Whether you are on a nature walk or strolling through town, look out for lifeforms, big and small, and **take a picture with ASH**. The Ai does the rest...



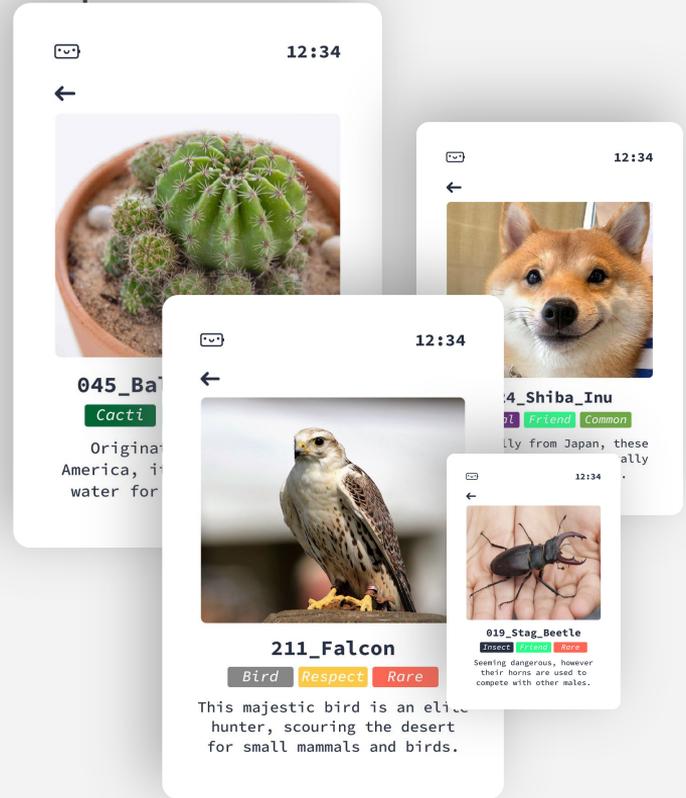
# Learn to protect

ASH's Machine Learning model, recognises new species instantly, creating information rich entry cards inside the device, filled with important facts on habitat, population and lifecycle for the creature you find.



# Collect them all

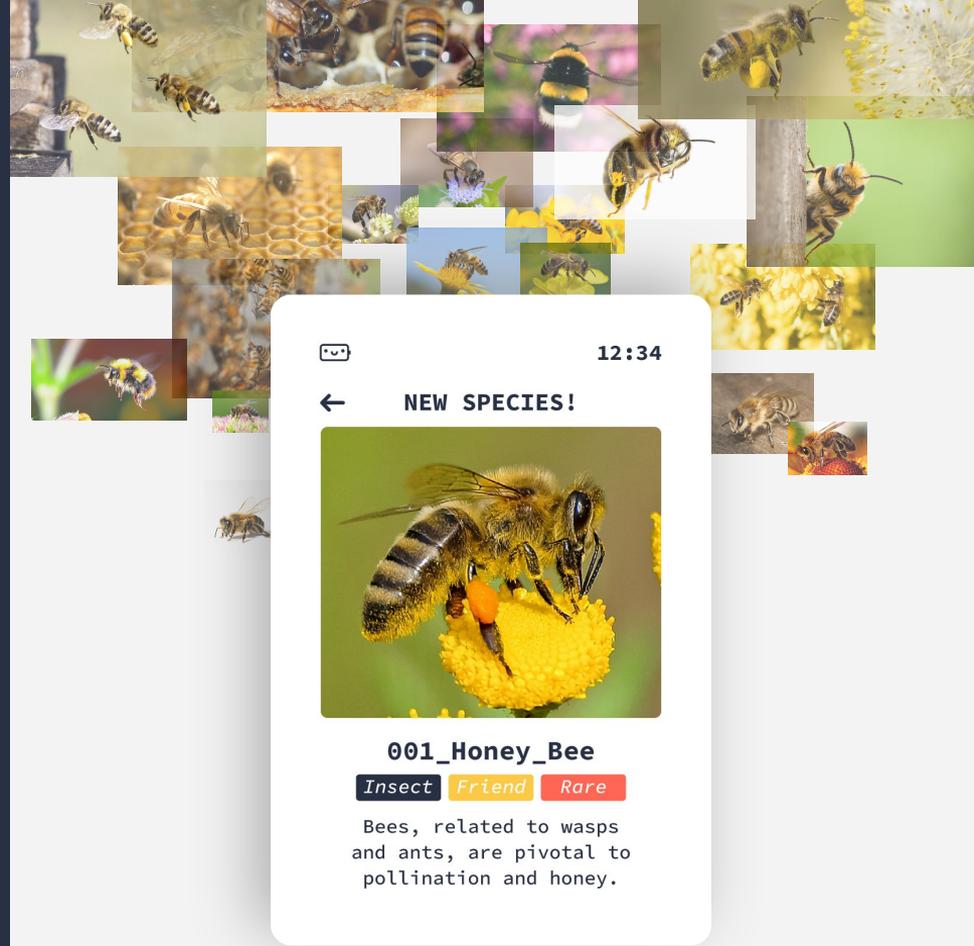
From rare Insects to common house pets, from Fungi to Cacti, ASH is capable of collecting entries on millions of different life-forms. The world is filled with magical creatures worth preserving, but we can't protect what we don't know.



**AI & DATA**

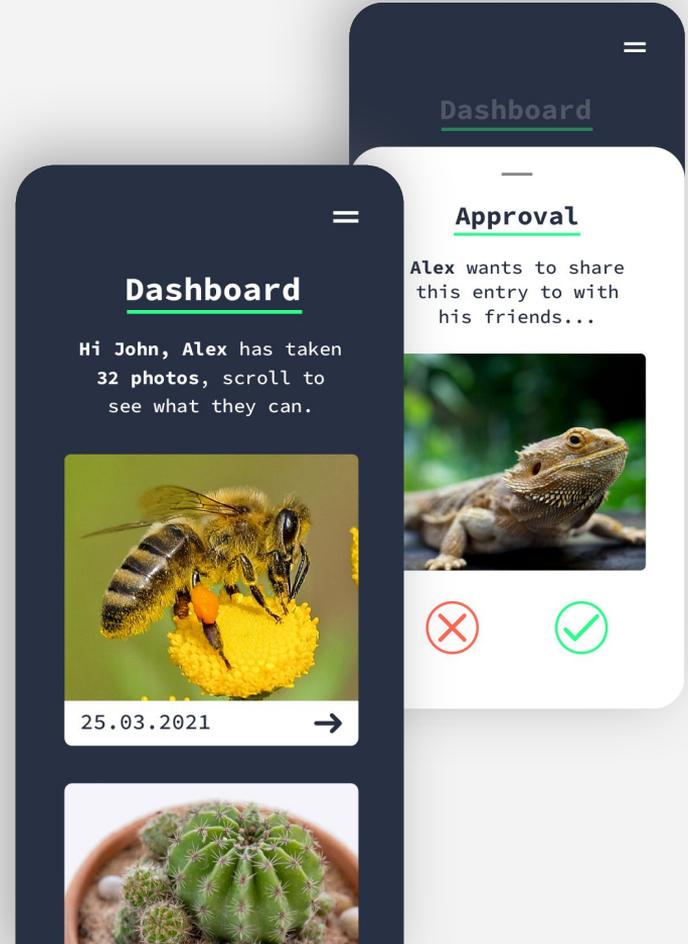
# Ai for learning

ASH's Ai works with a decentralised machine learning with neural networks on each device that uses image recognition to match the photos taken on ASH with thousands of photos of the same life-form from the web, and presents an accurate data match.



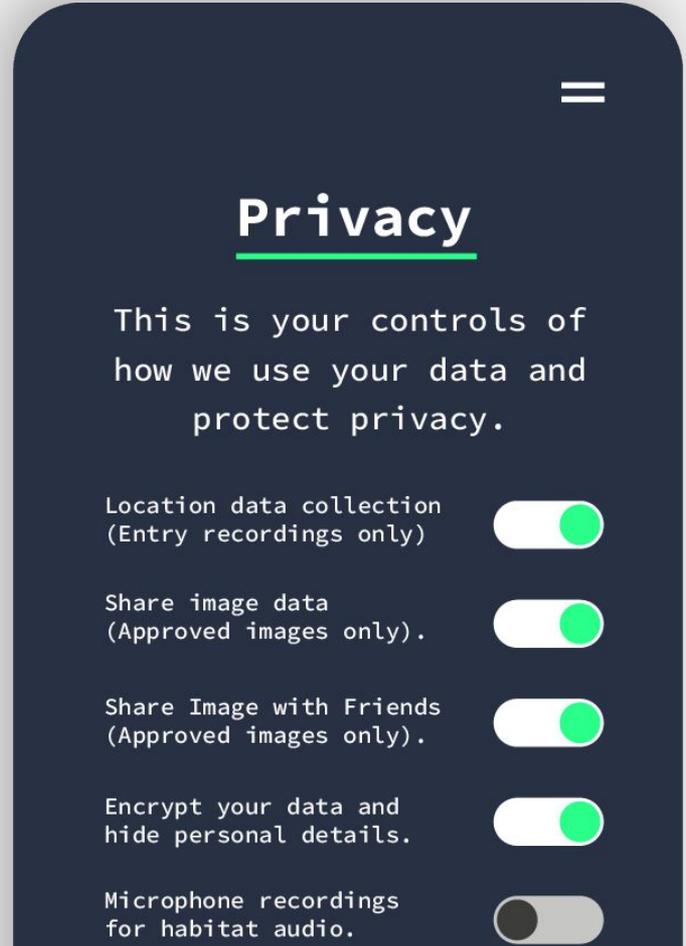
# Parental controls

Parents can monitor ASH's usage through a dashboard App that shows them what their children can see. It allows children to explore the natural world around them freely, and it allows parents to intervene and protect them when things don't feel quite right.



# Data policy

ASH will never collect personal child data, and is COPPA and GDPR compliant, while the images taken will be used for scientific purposes only to improve Species recognition. ASH's Ai is also only updated if approved by the user.



# Inclusivity

Children on the **ASD spectrum** can struggle with socialisation, confidence, and communication... ASH has the power to **transcend disabilities**, and positively impact all children by helping them reconnect and **interact with the natural world**.



# Accessibility

ASH is a **Language agnostic toy**, so anyone can use it irrespective of their nationality or background.

**Preserving our planet's Biodiversity is an important mission that children and parents from all cultures should take part in.**



# CREDITS

## The team

ASH was designed a small team comprised of:

[Filippo Yacob](#) - Design & Creative Direction

[Alexis Bardini](#) - Ideation & Product Design

[Joe Brown](#) - Tech & Machine Learning Support.



## The technology

ASH was developed with an Open Ai platform and Nature dataset:

[Coral](#) - Hardware prototyping platform.

[iNaturalist](#) - Dataset for species recognition.





Made by **FINH**

[finh.cc](http://finh.cc)