

User Manual

Species Identification Guide

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Application Usage

The section will cover the general use and navigation of the application.

Installation

To install the application for iOS devices:

1. Connect to wireless network
2. Search for “Species Identification Guide” in the app store
3. Download and run the application

Currently the application is not available for android devices

Basic Navigation and Controls

Home Screen

1. Search Bar
2. Species Shortlist
3. Characteristics dropdowns

The home screen is the main point of function for the application, from here you can search for a species by name, search for a species by their characteristics and view the species currently matching the search results.

Species Shortlist

1. Species search result
2. Return to Main screen

The species shortlist displays all current results that match the given search criteria being name or characteristics. Each of the listed options is tappable to go to a creatures profile for further information regarding the species.

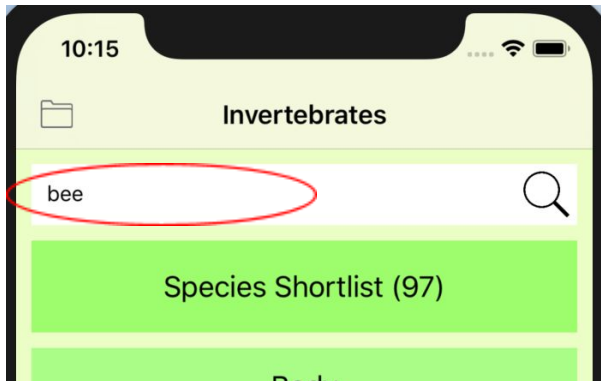
Menu

To access the menu tap the menu button on the title bar, or swipe right from the left edge of the screen.

Using the Search Systems

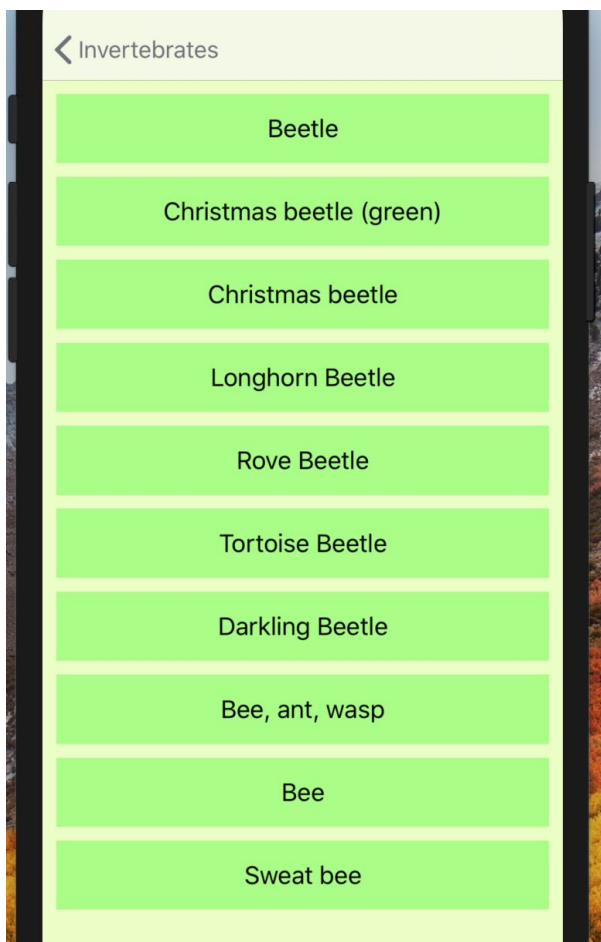
Search for a Creature by Name

To search for a species by their name, tap the search bar located at the top of the home screen and input part or all of the name. Once the search term is entered tap the confirm button on the right side of the bar (small arrow) to search.



You will be automatically taken to the species shortlist page containing all results that match the name used to search by. Results returned will include words that match the search term or contain a segment of it, Example: 'bee' → 'bee', 'beetle', 'honeybee'.

Note: Searching by name requires the spelling of the invertebrate species to be correct. If you cannot find the species by name, confirm the spelling or attempt to identify it with the characteristic search system described below. If you cannot find the species confirm the characteristics selected apply to the creature. If this does not return any results, check if there are updates available on the app store. Should none of these methods work, contact an administrator or member of staff to confirm the species exists within the database or request an entry to be added.



Search for a Creature by its Characteristics

To search for a species by its characteristics, observe the visible characteristics of the species and select the applicable choices from the list of options available within the drop-down menus. Once enough characteristics to define the species have been entered tap the species shortlist located at the top of the screen to be taken to the list of all species that match the selected characteristics.

For each top level drop-down menu, there is a list of submenus for each characteristic option, Example: 'Body' opens to 'Body Type', 'Body Constriction', etc.

The species shortlist will contain all viable species that fit the current characteristic filters. Each of these options link to the profile page containing further information regarding the species.

The screenshot shows a mobile app interface for searching species. At the top is a green bar labeled 'Species Shortlist (7)'. Below it are three main filter sections: 'Body', 'Head', and 'Legs'. The 'Body' section has a red circle around 'Tough Exoskeleton', with 'Yes' and 'Size' below it. The 'Legs' section has a red circle around '6', with 'Leg Type' and 'If Greater than 8 Legs' below it. The 'Head' section is currently empty.

The screenshot shows a list of invertebrates under the heading '< Invertebrates'. The list contains six items, all of which are 'Ant': 'Meat ant', 'Army ant', 'Pony ant', 'Bull ant', 'Ant', and 'Ant'.

Note: When searching using characteristics it is **NOT** necessary to enter select an option for every creature as many species may not have the characteristic described in the drop-down, Example: For a 'Spider', 'Wing Type' is not relevant and should be left blank. If you cannot find the species confirm the characteristics selected apply to the creature. If this does not return any results, check if there are updates available on the app store. Should none of these methods work, contact an administrator or member of staff to confirm the species exists within the database or request an entry to be added.

Other UI elements

Search Reset Button

Located in the side-menu the search reset button will clear the current search results and reset all selected characteristics to their default values. This buttons primary function is to clear search system for use on another species

Characteristic Reset Button

Each characteristic button has an individual reset button that resets the characteristic choice for each menu individually. This buttons primary function is to reset a dropdown in the case it has accidentally been selected or in the case that a search result needs to be expanded to include more species.

Characteristic Information Button

Many characteristic choices cannot be described through simpler language and will include an information button that when tapped will provide additional information about the option to provide assistance in understanding what certain menu options mean.

Setup and Administration

The section will cover the setup of the application as well as any administration related tasks.

Entry of Additional Species

The process for adding more species to the database is as follows;

- 1) Open source folder for application
- 2) Navigate to file named “invertebrates.csv” located at “pace-group24/Species Identification Guide/invertebrates.csv” within the application folder
- 3) Enter the new species into the CSV or make the chosen updates to existing
- 4) Submit the changes as an update to the app on the app store
- 5) Download update

In the case where there is substantial changes/additions to the list of species it may be easier to export the working copy of the spreadsheet as a CSV under the name “invertebrates” and replace the existing copy within the application files and then continue with steps 4 and 5.

Adding Creature Images

Each image added must have the **UNIQUE** morpho species name used at the beginning of the title and then any descriptive tags following. An example name would be as such;

- Morpho Species Name = COLEOPTERA_005
- File Name = “COLEOPTERA_005 ventral view” or “COLEOPTERA_005_123”

The steps to add images are as follows;

- 1) Open source folder for application
- 2) Navigate to the ‘resources’ folder at “pace-group24/Species Identification Guide/resources.bundle”
- 3) Place images in the folder using the previously described naming convention
- 4) Submit the changes as an update to the app on the app store
- 5) Download update

Updating the Application

When changes have been made to the application and it is ready to be pushed as an update to the app store follow the instructions detailing how to upload a new build at the following links. These describe the process of how to prepare and upload an app to the app store ready to be released as an update,

<https://help.apple.com/itunes-connect/developer/#/dev82a6a9d79>

<https://help.apple.com/xcode/mac/current/#/dev442d7f2ca>

From here you then submit this uploaded build to be reviewed by the app store to ensure it aligns with their policies as detailed here.

<https://help.apple.com/itunes-connect/developer/#/dev7cbda8c55>

Once it has been reviewed follow the instructions following to release this build as a new version of the application to your users.

<https://help.apple.com/itunes-connect/developer/#/dev480217e79>

Help

Should any issues be encountered that are not covered by this user manual contact the original developers at the following email addresses.

David Rosetti: davyee1@gmail.com

Cyrus Ng: cyrus.ng@students.mq.edu.au

Daniel Chin: daniel.chin@students.mq.edu.au

More Information

This app was created by for students use at Stanwell Tops. It currently enables students to identify invertebrates to Order, although some organisms may be identified to Family and Sub-family. Development of the app was made possible via a Macquarie University Strategic Priority Grant 2018. The app was designed by David Rosetti, Daniel Chin and Cyrus Ng with guidance from Linda Beaumont and Katherine McClellan. The underlying database information was collated by Gabrielle Soares, Theotime Colin, Stephen Fellenberg and Katherine McClellan. Photographs were taken by Gabrielle Soares.