Australian Coding Competition 2027

OVERALL PROJECT & SUBMISSION GUIDE

Code, Create & Protect - Australian Endangered Species

CREATE YOUR WAY Choose a competition stream and create using block coding, text-based Python code, or 3D design tools. Every project must connect to Australian wildlife, conservation or environmental protection.

Open to students aged 5-15 years residing in Australia

FOR REGISTERED PARTICIPANTS - USE THE OFFICIAL SUBMISSION LINK IN THIS GUIDE

PROJECT SUBMISSION DEADLINE

15 JANUARY 2027

Winners & runners-up announced via STEM Birds social media: 15 February 2027

1. Competition Overview

The STEM Birds Australian Coding Competition 2027 invites young people to combine technology, creativity and environmental awareness through the theme 'Code, Create & Protect - Australian Endangered Species'. Participants choose one stream and create an original project that raises awareness of Australian wildlife, habitats, conservation challenges or positive actions that can protect the environment.

Who can participate?

- Age range: 5-15 years, according to the age requirements of the selected stream.
- Location: Participants must currently reside in Australia.
- Entry type: Individual entries.
- Original work: The final project must be created by the participant.

Important dates

Milestone	Date / Information
Project submission deadline	15 January 2027
Winners & runners-up announcement	15 February 2027 - announced via STEM Birds social media

How to Submit Your Entry

Open the official STEM Birds submission form using the link below. The same submission link will also be available on the STEM Birds website.

SUBMIT YOUR PROJECT:

STEM Birds Australian Coding Competition 2027 Submission Link

Select the competition stream and the correct age category for the participant.

Complete all required participant and project details in the submission form.

Paste the final working project or video link into the submission form and check it carefully before submitting.

Submit the completed entry by 15 January 2027 and save the submission confirmation for your records.

OFFICIAL PROJECT SUBMISSION LINK

STEM Birds Australian Coding Competition 2027 Submission Link

The same submission link will also be available on the STEM Birds website. Your project is not entered for judging until the submission form has been completed successfully.

2. Choose Your Competition Stream

Students may create with coding blocks, text-based code, or 3D design tools depending on the selected stream. The table below shows the required age group, creation method and final deliverable.

Stream	Age	Create With	Submit
Scratch Jr Animation	5-6	Block coding	Video up to 3 minutes + YouTube link
Scratch Programming	7-11 and 12-15	Block coding	Shared Scratch project URL
Tinkercad 3D Design	7-11 and 12-15	3D design tools	Public/shared Tinkercad design link
Python Turtle Programming	9-15	Text-based Python code	Accessible Pickcode project/share link

Project theme

Every project must connect to Australian nature and endangered or threatened species. Students can focus on a specific animal, a habitat, a conservation problem or a positive action that helps protect wildlife.

- Conservation challenges: habitat loss, pollution, climate change, invasive species, environmental degradation and related threats.
- Positive actions: wildlife education, habitat protection, animal rescue, ecosystem care, sustainable choices and conservation solutions.
- Students should research facts before coding or designing and avoid making unsupported claims about an animal's conservation status.

Research before you create

Australian Government threatened species: https://www.dcceew.gov.au/environment/biodiversity/threatened/species - Current national information about threatened species under the EPBC Act.

Australian Government threatened species hub: https://www.dcceew.gov.au/environment/biodiversity/threatened - Background on Australian threatened species and conservation.

Australian Museum - Koala: https://australian.museum/learn/animals/mammals/koala/ - Student-friendly species facts, habitat and conservation information.

Australian Museum - Greater Bilby: https://australian.museum/learn/animals/mammals/greater-bilby/ - Information about bilbies, habitat changes and threats.

National Geographic Kids - Australia: https://kids.nationalgeographic.com/geography/countries/article/australia - Accessible background on Australian geography and wildlife.

3. Scratch Jr Animation - Ages 5-6

CREATE WITH Scratch Jr graphical coding blocks. Children snap blocks together to make characters move, speak, change scenes and tell an interactive story.

Scratch Jr is designed for young children. For this competition, the participant should create a short animation or interactive story connected to an Australian animal, habitat or environmental message.

Platform setup

1. Download or open Scratch Jr on a supported device. Scratch Jr is available as an app for compatible tablets and some other supported devices.
2. Scratch Jr projects are normally stored locally on the device. A separate Scratch Jr account is not required to create the project.
3. Open Scratch Jr, go to My Projects and select the plus sign to create a new project.
4. Keep the project saved on the same device until the competition entry has been submitted and judging is complete.

What can you create?

- Meet My Australian Animal
- Saving the Koala
- Wildlife Rescue Story
- Protecting Our Environment
- Animal Habitat Adventure
- Another original Scratch Jr story connected to the competition theme

What should the child demonstrate?

- A clear beginning, middle and end or a simple interactive sequence.
- Use of coding blocks to control characters, movement, messages, sound or scenes.
- An environmental message connected to Australian wildlife.
- The child should be able to explain what some of the coding blocks do.

How to submit Scratch Jr

Complete the project and test it from beginning to end.

5. Record a video of no more than 3 minutes showing the project in action.
6. The participant should explain their project and the coding blocks they used.
7. A parent/guardian should manage the YouTube upload. Sign in to YouTube or YouTube Studio, choose Create/Upload video, select the recorded Scratch Jr video, add a simple title, and choose a visibility setting that allows the judging team to open the link. Unlisted is suitable because anyone with the link can view it; do not use Private.

After the upload finishes, copy the YouTube video URL. Open the link in a private/incognito browser window to confirm that it plays without requiring access to the uploader's account, then paste that YouTube link into the official STEM Birds submission form.

Scratch Jr official website: https://www.scratchjr.org/ - Platform information, resources and activities.

RESOURCE - YouTube official upload instructions: https://support.google.com/youtube/answer/57407

For Scratch Jr entries, the video must be no longer than 3 minutes and should show the project in action while the child explains their project and the coding blocks used.

4. Scratch Programming - Ages 7-11 and 12-15

CREATE WITH Scratch graphical coding blocks. Build a game, animation, quiz, simulation, interactive story or educational project.

Scratch Programming has two age categories: Ages 7-11 and Ages 12-15. Select the correct age category when completing the submission form.

Create a Scratch account

8. Go to the Scratch website and select Join Scratch.
9. Choose a username that does not reveal the participant's real name or other identifying information.
10. Create a secure password and complete the requested account information.
11. Enter the requested email address. Where Scratch asks for a parent/guardian email, use the parent/guardian email address.
12. Open the confirmation email from Scratch and confirm the account. Email confirmation is required before a project can be shared publicly.
13. Sign in and select Create to start a new project.

Project ideas

- Animal Survival Game
- Habitat Protection Challenge
- Wildlife Rescue Adventure
- Endangered Species Quiz
- Interactive Educational Story
- Conservation Simulation

Recommended project features

- Events and sequencing to control when actions happen.
- Motion, looks and sound blocks used with a clear purpose.
- Loops, conditions, variables or scoring where appropriate for the participant's level.
- User interaction such as keyboard input, clicking, choices or questions where relevant.
- Accurate environmental information and a clear connection to the selected animal or conservation issue.

Share and submit the Scratch project

14. Finish and test the project while signed in to Scratch.
15. Add a clear project title. Do not place personal contact information in the public project description.
16. Click the orange Share button at the top of the Scratch project page. If the Share button is unavailable, confirm that the Scratch account and email have been set up correctly.
17. Once the project is shared, open the public project page and copy the complete project URL from the browser address bar.

18. Test the link in a private/incognito browser window while signed out. The project should open without requesting your login.

Submit the working Scratch project URL using the official STEM Birds submission form in this guide or on the STEM Birds website.

Scratch: https://scratch.mit.edu/ - Create and share Scratch projects.

Join Scratch: https://scratch.mit.edu/accounts/modal-registration/ - Official Scratch account registration flow.

RESOURCE - Scratch official "Share Your Project" tutorial: https://scratch.mit.edu/help/studio/tips/howto/get-started-12/

Scratch sharing steps: sign in -> open the finished project -> click Share -> open the project page -> copy the project URL -> test the URL while signed out -> submit that URL to STEM Birds.

5. Tinkercad 3D Design - Ages 7-11 and 12-15

CREATE WITH Tinkercad 3D design tools. This is a design stream: participants create an original 3D model rather than programming a coded project.

Tinkercad 3D Design has two age categories: Ages 7-11 and Ages 12-15. Select the correct age category when completing the submission form. The goal is to design a digital 3D solution, model or environment connected to wildlife conservation.

Account / classroom setup

19. Go to Tinkercad and use the account or classroom method provided for the participant.
20. If STEM Birds provides a Tinkercad classroom link or class code, follow those instructions. Students may be able to join a classroom using an existing account or a teacher-provided nickname, depending on the classroom setup.
21. For child accounts, parent/guardian or teacher moderation and Safe Mode settings may affect public sharing. Follow the platform prompts and the STEM Birds submission instructions.
22. Create a new 3D Design and give it a clear project name.

Project ideas

- Wildlife Shelter
- Nesting Box
- Protected Habitat
- Water Station
- Wildlife Crossing
- Conservation Centre
- An original conservation invention

What judges should be able to see

- A complete and purposeful 3D design.
- Clear use of shapes, alignment, sizing, grouping, holes or other Tinkercad design features where appropriate.
- A design that addresses a wildlife need, environmental challenge or conservation idea.

- An original solution and evidence of problem solving.

Share and submit the Tinkercad design

23. Complete the design and inspect it from multiple angles.
24. Open the completed Tinkercad design and use the Share/Send To sharing controls available in the participant's account. If the account allows public designs, make the design Public in its Properties/Privacy settings so it can be viewed without the participant's login.
25. To generate a sharing link, open the design and select Share (or the current sharing control), then choose the link-sharing/invite option and copy the generated link. Sharing controls can vary for child, classroom and Safe Mode accounts; a parent/guardian or teacher moderator may need to enable the permitted sharing option.
26. Copy the shared/public design link and test it in a private/incognito browser window. The judging team must be able to open the design from the submitted link. Do not submit a link that only works while signed in to the participant's account.

Submit the working design link using the official STEM Birds submission form in this guide or on the STEM Birds website.

Tinkercad: https://www.tinkercad.com/ - Autodesk web-based 3D design platform.
RESOURCE - Autodesk Tinkercad guide for making and sharing public designs: https://autode.sk/tinkercad-sharing

RESOURCE - Tinkercad Learning Center: https://www.tinkercad.com/learn

Tinkercad sharing steps: finish the design -> check the design privacy/sharing settings -> use Share/Send To or the available link-sharing option -> copy the generated design link -> test it while signed out -> submit the working link to STEM Birds.

6. Python Turtle Programming - Ages 9-15

CREATE WITH Text-based Python code using Turtle graphics on Pickcode. Projects can combine drawings, animation, logic, interaction and simulations.

Python Turtle participants use text-based programming to create a conservation-themed project. This stream is suitable for students ready to type, understand and explain Python code.

Create a Pickcode account and project

27. Go to Pickcode and create a free account. Pickcode supports Google login or username/password login.
28. Select New Project.
29. Choose Python as the programming language and a graphics-capable project type suitable for Turtle.
30. Give the project a clear title and begin coding. Pickcode auto-saves projects while you work.
31. Use Python Turtle commands and your own logic to create the project.

Project ideas

- Save the Bilby
- Wildlife Habitat Challenge
- Endangered Species Conservation Simulation
- Wildlife Rescue Maze

- Turtle Conservation Poster
- Bushfire Escape Challenge
- Clean the Habitat

Recommended programming features

- Clear, working Python code.
- Turtle movement, drawing, colour, shapes or text used purposefully.
- Variables, functions, loops, conditions or event handling where appropriate.
- Code organised so the participant can explain how it works.
- A clear environmental purpose or conservation message.

Share and submit the Pickcode project

32. Run and test the project from beginning to end.
33. Open the Pickcode project and click Share at the top-right of the editor. Pickcode projects are private by default, so a share link must be created before the judging team can access the project.
34. For the competition, create a non-editing link. Choose View Code so judges can review the participant's Python code, then select an appropriate link-sharing option such as Anyone with link. Do not submit an Edit Code link unless STEM Birds specifically requests it.
35. Copy the generated Pickcode share link and test it in a private/incognito browser window. Pickcode notes that some Python/Java execution features may require a viewer to be signed in, but the submitted link should still open with the sharing permissions you selected.

Submit the accessible Pickcode link using the official STEM Birds submission form in this guide or on the STEM Birds website.

Pickcode: https://pickcode.io/ - Coding platform used for the Python Turtle competition stream.
RESOURCE - Pickcode official sharing help: https://help.pickcode.io/docs/using-code-editor/sharing/

Pickcode sharing steps: open project -> Share -> choose View Code -> select the link-sharing permission -> copy link -> test link -> submit the link to STEM Birds.

7. Judging Criteria

Projects are assessed according to the criteria for the selected stream. Judges consider both technical/design quality and the strength of the environmental connection.

Scratch Jr - Ages 5-6

- Creativity: Is the animation original and engaging?
- Understanding of coding blocks: Can the student explain what the blocks do?
- Sequencing: Do actions happen in a logical order?
- Project explanation: Can the child clearly describe the environmental message?

Scratch Programming - Ages 7-15

Criteria	Weighting
Technical Skills	30%
Creativity & Originality	25%

Environmental Connection	20%
Problem Solving	15%
Project Explanation	10%

Tinkercad 3D Design - Ages 7-15

Criteria	Weighting
Design Skills	30%
Creativity & Originality	25%
Environmental Connection	20%
Function & Problem Solving	15%
Project Explanation	10%

Python Turtle Programming - Ages 9-15

Criteria	Weighting
Program Functionality	30%
Programming Skills	25%
Code Organisation	25%
Problem Solving	20%

8. Original Work, Support & Integrity

All submissions must represent the participant's own work. The competition is intended to show what the student can create, code, design and explain.

Parents and teachers may:

- Explain the competition rules and platform basics.
- Help the participant research Australian animals, habitats and conservation issues.
- Discuss project ideas and teach new coding or design concepts.
- Help with account setup, privacy settings, video upload and submission logistics where appropriate.

Parents and teachers must not:

- Write or dictate the participant's project code or coding-block logic.
- Build the Scratch or Scratch Jr project for the participant.
- Create the Tinkercad design on the participant's behalf.
- Complete the technical execution of the Python project for the participant.
- Submit a pre-made or copied project as the participant's original work.

ORIGINAL WORK PRINCIPLE Adults can support learning, but the participant should make the final

coding, design and creative decisions and be able to explain the project.

9. Certificates, Winners & Recognition

- All eligible participants who successfully submit a competition entry will receive a Certificate of Participation.
- Winners and runners-up will receive exciting prizes.
- Winners and runners-up will be announced through STEM Birds social media on 15 February 2027.
- Judging decisions are final.

10. Final Submission Checklist

Before opening the submission form, check every item below.

[ ] The correct competition stream is selected in the submission form.

[ ] The correct age group/category has been selected where the stream has multiple age categories.

[ ] The project clearly connects to Australian wildlife, conservation or the environment.

[ ] The project is the participant's own original work.

[ ] The project is complete and has been tested.

[ ] The sharing/privacy setting allows STEM Birds judges to access the entry.

[ ] The final link has been tested while signed out or in a private/incognito browser where applicable.

[ ] Scratch Jr video is no longer than 3 minutes and includes the child's project/code explanation.

[ ] The participant/parent has saved or bookmarked the official STEM Birds submission link from this guide or the STEM Birds website.

[ ] The final submission is completed by 15 January 2027.

Official submission form:
https://forms.zohopublic.com.au/stembirdsptyltdcodingandrobot1/form/STEMBirdsAustralianCodingCompetition2026/formperma/hdM48F7KbuWb5CgF9XuMxtZZdcLyxZ-sCuyTXNPZtYU

11. Email Communications & Marketing

The email address provided to STEM Birds will be used for competition-related communications, including reminders, important updates, judging information, results and certificate information.

The email address may also be used by STEM Birds to share information about future competitions, coding and robotics programs, workshops, holiday programs, classes, events, promotions and other STEM Birds programs and services, in accordance with the competition terms. Recipients may unsubscribe from marketing communications using the unsubscribe option provided in marketing emails. Essential competition communications may still be sent where required to administer an entry.

12. Participant Agreement - Summary

By submitting an entry, the participant and parent/guardian acknowledge that they have read the competition information, will follow the rules for the selected stream, will submit original work, and will provide an accessible project or video link for judging.

Participants are responsible for ensuring their final entry can be accessed by the judging panel and is submitted by the deadline. STEM Birds may exclude entries that are inaccessible, incomplete, outside the eligible category or inconsistent with the competition requirements.

KEEP THIS GUIDE Save or bookmark this guide and the official submission link. The same submission link will also be available on the STEM Birds website when your project is ready to submit.

Quick platform links

Sharing & submission help resources

Scratch - official project sharing tutorial: https://scratch.mit.edu/help/studio/tips/howto/get-started-12/

YouTube - official video upload instructions: https://support.google.com/youtube/answer/57407

Tinkercad - public design sharing guide: https://autode.sk/tinkercad-sharing

Pickcode - official project sharing help: https://help.pickcode.io/docs/using-code-editor/sharing/

Scratch Jr: https://www.scratchjr.org/ - Block coding for the Scratch Jr Animation stream.
Scratch: https://scratch.mit.edu/ - Block coding for the Scratch Programming stream.
Tinkercad: https://www.tinkercad.com/ - 3D design for the Tinkercad stream.
Pickcode: https://pickcode.io/ - Python coding platform for the Python Turtle stream.

