



ZANZIBAR CREATE WITH AI STEAM CHALLENGE 2027

Teacher Toolkit

A practical guide for teacher-mentors: from registration to the finale

Version 1.0, October 2026. Dates and rules follow the official Rules on the challenge website, which take precedence if anything differs.

1. Welcome

Thank you for mentoring a team. This toolkit helps you guide your students through the challenge, step by step: registering, forming teams, collecting consent, running weekly sessions, building and testing a prototype that uses AI, and submitting the project.

You do not need to be an AI expert. Your role is to organise, encourage, keep students safe and help them think. The students do the work. Taking part is **free** for schools.

How to use this toolkit

Read sections 2 to 4 before registration closes on 5 February 2027.

Use the 8-week plan in section 6 from February to the deadline on 2 April 2027.

Print the templates from the Resources page: project brief, AI Use Log, team plan, user testing record, video planner and consent forms.

2. The challenge at a glance

When (2027)	What happens
Mon 11 Jan – Fri 5 Feb	Teacher registration and team registration
Thu 21 Jan or Tue 26 Jan	Orientation session (or watch the recording)
Mon 8 Feb (proposed)	Submission opens
Fri 2 Apr, 23:59 EAT	Submission deadline
5 – 8 Apr	Screening (fixes within 48 hours if asked)
5 – 16 Apr	Round 1 judging
Mon 19 Apr	Top 50 announced; gallery and public voting open
Sun 2 May, 23:59 EAT	Voting closes
Tue 4 May	Top 20 finalists announced
Sat 15 May	Finale and awards

Who can take part

- Every secondary school in Unguja and Pemba.
- Students in Forms 1 to 5 (not Form 6).
- Up to **3 teams** per school; each team has **3 or 4 students** and **at least one girl**.
- Each student is in **one team only**.
- One **teacher-mentor** per school, approved by the head of school.

The four categories

Category	Covers
A. Blue Economy, Environment and Climate	Ocean, coasts, fishing, seaweed, water, waste, energy, weather and climate

Category	Covers
B. Learning, Kiswahili and Inclusion	Reading, numeracy, study skills, the Kiswahili language, learners with disabilities
C. Health, Wellbeing and Community Services	Clinics, nutrition, hygiene, mental wellbeing, transport and local services
D. Creative AI: Arts, Culture and Tourism	Music, art, storytelling, Swahili culture, history, visitors to Zanzibar

3. Your role as teacher-mentor

- ☐ Get approval from your head of school before registering.
- ☐ Register the school and teams on the website between 11 January and 5 February.
- ☐ Attend orientation (21 or 26 January) or watch the recording and confirm it in the portal.
- ☐ Collect the three consent forms for every student before any photo or video is taken.
- ☐ Run regular sessions with your teams (suggested: once or twice a week, 45 to 60 minutes).
- ☐ Supervise students' use of AI tools and check each tool's age requirements.
- ☐ Make sure the work is the students' own and the AI Use Log is honest.
- ☐ Upload the project and declare it complete before 2 April, 23:59.
- ☐ Check your SMS messages during screening (5 to 8 April) in case a fix is requested.

Your mindset

Ask questions rather than giving answers. "Who has this problem? How do you know? What did the AI get wrong?" are more useful than solving the problem for the team.

4. Registration, teams and consent

Registering

1. Go to the challenge website and choose **Register**.
2. Enter your mobile number and confirm it with the SMS code.
3. Enter your school, your name and your head of school's name, and confirm their approval.
4. Wait for the SMS saying your account is active. The organisers check every registration.

Forming strong teams

- Mix skills: someone who likes talking to people, someone who likes building, someone who likes writing or drawing.
- Every team needs at least one girl. Consider girl-led teams and give girls real roles, not only note-taking.
- Choose students who can commit time from February to April.
- Students from different forms can be in the same team.

In the portal, enter only each student's **first name, form and sex**. Never enter surnames, phone numbers, addresses or dates of birth.

Consent: three forms for every student

Form	Signed by	What it covers
Parent or guardian consent	Parent or guardian	Permission for the student to take part
Student assent	The student	The student's own agreement to take part
Media consent	Parent or guardian	Yes, Partial or No for photos, video, first name, website and gallery, social media, reports and news

- Send the forms home early and explain them to parents in Kiswahili.
- Record each student's media consent choice in the portal.
- Upload a clear photo or scan of every signed form with the project. They are stored privately.
- A student **without** media consent can take part fully, but must stay off camera and their name is not shown publicly.

Before any photo or video

Check the media consent of every student who might appear. When in doubt, film hands, screens and drawings, not faces.

5. Introducing AI to students

What AI is, in simple terms

Artificial intelligence (AI) is software that learns patterns from large amounts of examples, then uses those patterns to make predictions: the next word in a sentence, what is in a photo, or which answer is most likely. It does not think or understand like a person, and it can be confidently wrong.

Kinds of AI tools students can use

Kind of tool	What students can do with it	Examples
Chatbots	Brainstorm ideas, explain topics, draft questions for users, help write code	ChatGPT, Gemini, Claude, Microsoft Copilot
Train-your-own models	Teach a computer to recognise images, sounds or poses with their own examples	Google Teachable Machine
Block coding with AI	Build simple apps that use a trained model or speech	MIT App Inventor, Scratch with ML extensions
Image, audio and translation tools	Create illustrations, read text aloud, translate between Kiswahili and English	Built into many phones and free web tools

Age rules and supervision

Many AI services set a minimum age (often 13, sometimes 18) or require parental permission. Check each tool's terms before students use it, and use it under your supervision or on a teacher account where required.

Never type anyone's personal information (names, phone numbers, health details, photos of faces) into an AI tool.

Good habits with AI

- **Be specific.** Tell the AI who it is helping, what you want and in what format.
- **Check everything.** Compare answers with a textbook, a teacher or the people affected.
- **Test in Kiswahili too.** Many tools are weaker in Kiswahili. Note what works and what does not.
- **Keep the log.** Record every important use in the AI Use Log as you go, not at the end.

Responsible AI: questions to discuss with your team

1. Who could be harmed if our tool gives a wrong answer? How can we prevent that?
2. Does our tool work equally well for girls and boys, for people in Pemba and Unguja, for people with disabilities?
3. What personal information does our tool need? Can we avoid collecting it?
4. How will users know the answer came from AI and might be wrong?
5. What did the AI do, and what did we do ourselves?

6. An 8-week project plan

Use this plan from the week submission opens (8 February) to the deadline (2 April). Adjust it to your school timetable. Each week assumes one or two sessions of 45 to 60 minutes.

Week	Focus	What students do	Output
1	Explore AI and problems	Try two AI tools; list problems they see at home, school and in the community; pick a category	List of 5 problems
2	Understand the problem	Choose one problem; talk to at least 5 people affected; write what they said	Problem statement
3	Design a solution	Brainstorm ideas; decide how AI helps; sketch the solution on paper; split roles	Sketch and team plan
4	Build (part 1)	Build the first version of the prototype; start the AI Use Log	First prototype
5	Build (part 2)	Improve the prototype; fix what does not work; keep logging AI use	Working prototype
6	Test with users	Test with at least 3 real users; record what happened; make one or two improvements	User testing record
7	Tell the story	Write the project brief; plan and record the video (max 3 minutes); write the 50-word gallery summary	Brief, video, summary

Week	Focus	What students do	Output
8	Check and submit	Check consent for every image; complete the AI Use Log; teacher uploads everything and declares	Submitted project

Low resources? No problem

A prototype can be a paper design, a chatbot conversation, a simple model trained on a shared phone, or a working demonstration recorded on video.

Judges score content, not polish or language. Kiswahili and low-resource projects are equally valid.

Talking to users (week 2)

- Ask open questions: "Tell me about the last time this happened."
- Listen more than you talk; write down their words.
- Do not collect names or phone numbers. Note only general details such as "fisher, about 40, Nungwi".
- Students should go in pairs and with permission, and never alone with adults they do not know.

7. Preparing the submission

The seven items

#	Item	Tips
1	Project brief	About 2 pages. Use the Project Brief template. PDF, Word or a photo of a handwritten brief.
2	Demo video link	Up to 3 minutes. Upload to YouTube as Unlisted (or Instagram) and paste the link. Only students with video consent on camera.
3	Prototype evidence	A link, files, screenshots or photos that show it working. Up to 5 files of 10 MB each.
4	AI Use Log	Fill in the table in the portal, or upload the AI Use Log template.
5	Gallery summary	A title, no more than 50 words, and one image without faces unless consent allows.
6	Consent copies	Three signed forms for every team member.
7	Teacher declaration	You confirm the work is the team's own and the information is correct.

Making a good video on a phone

- Plan it first with the Video Planner template: problem (30 s), solution and demo (1 min 30 s), what you learned and next steps (1 min).
- Film in a quiet place, in landscape, with light in front of the speaker.
- Show the prototype working. Screens, hands and drawings are better than faces.
- Upload as **Unlisted** on YouTube so only people with the link can see it.

Final checklist

- ☐ All seven items show as complete in the portal.
- ☐ Every photo and video respects each student's media consent.
- ☐ No surnames, phone numbers or other personal information appear anywhere.
- ☐ The AI Use Log is honest and complete.
- ☐ The gallery summary is 50 words or fewer.
- ☐ You submit before Friday 2 April 2027 at 23:59 (do not leave it to the last hour).

8. How projects are judged

Every project is scored out of 100 on seven criteria. Judges choose a level from 1 to 4 for each criterion (half levels allowed). Level 1 earns 25% of the points, level 4 earns 100%. Share this table with your students: it shows what judges look for.

Criterion	Level 1 (beginning)	Level 4 (outstanding)
1. Problem and relevance (20)	The problem is vague or not clearly linked to the community.	An important local problem is explained convincingly, with clear evidence gathered from the people affected.
2. Use and understanding of AI (20)	AI is mentioned but plays little real part, or its role is unclear.	AI is used purposefully and well, and the team clearly explains how it works, where it fails and why they chose it.
3. Creativity and originality (15)	The idea copies an existing solution with no clear change.	The idea is fresh and imaginative, and clearly shaped by the team's own context and insight.
4. Technical execution (15)	There is a plan or design, but no working prototype is shown.	The prototype works reliably, was tested with users, and was improved based on what the team learned.
5. Responsible AI and ethics (10)	Risks such as privacy, bias or mistakes are not considered; the AI Use Log is missing or unclear.	Privacy, fairness, safety and errors are considered throughout, with clear safeguards and an honest, detailed AI Use Log.
6. Impact and feasibility (10)	The benefit is unclear, or the solution could not realistically be used.	The solution could make a clear difference, with a realistic plan for how it would be used and kept going.
7. Communication and teamwork (10)	The brief and video are hard to follow; it is unclear who did what.	The project is explained clearly and confidently, and every member's contribution is visible.

Judges do not see the school or island of a project, declare any conflicts of interest, and score content, not polish or language.

9. Safeguarding and conduct

- Meet students in school settings or other safe, visible places.

- Students should never meet adults they do not know alone while doing research or testing.
- Do not share students' personal information with anyone outside the challenge.
- Do not offer anything in exchange for votes, and do not let anyone pressure students or parents to vote.
- If you are worried about a student's safety, use the Report a concern form on the website. It goes straight to the designated safeguarding leads.
- If a child is in immediate danger, contact the police or local child protection services first.

10. Getting help

Website	Rules, FAQ, key dates, voting rules and this toolkit
TUSOME Technologies	info@tusome.africa · +255 617 725 691
Asili Zanzibar Tekno Hub	Contact details on the website
Safeguarding	Report a concern form on the website