core29
A Peterson Solutions company

Hackathon Challenge 2026

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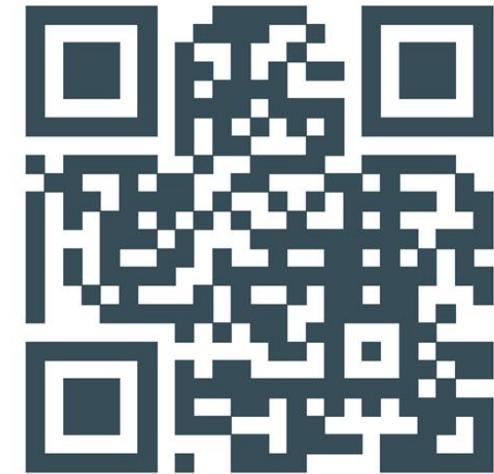
You?
Winning Hack Team

Who are Core29?

Consulting

- Whole business analysis
- Digital transformation consulting
- Technology due diligence

Project Management

- Systems delivery
- Digital procurement
- Digital system implementations

Data & Applications

- Data analytics & visualisations
- Application development
- Data engineering

Find out more

Scan the code below to visit our website.

core29.co.uk

SCAN ME

Agenda

1. Real World Relevance

2. Challenge Introduction

3. Challenge Brief

4. Further Considerations for Advanced Teams

5. Assessment Criteria

6. Final Notes

Real-World Relevance

In 2025, our hackathon challenge explored environmental data and wildlife tracking.

In February 2026, **Birdex** launched in the UK – a gamified birdwatching app where users log sightings, earn points, and compete with friends.
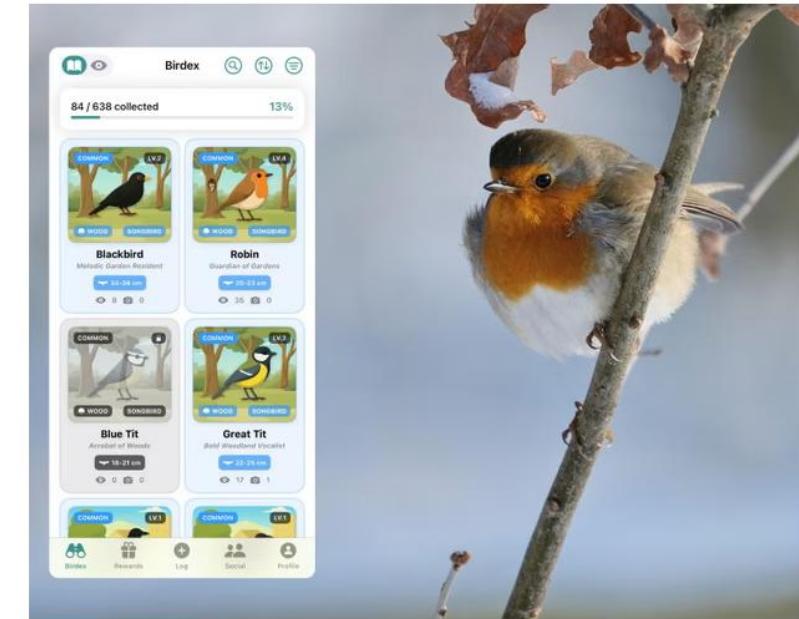
It demonstrates how:

- Environmental ideas can become real products

- Gamification drives engagement

- Technology can influence behaviour

Our challenges reflect real-world needs and opportunities.

Gotta watch 'em all? Pokémon-style app for birdwatching launches

Users of Birdex get points for each bird they see and can compete with friends, with 200,000 sightings logged so far

📷 The app is currently free to use but some content or features may eventually be paywalled. Photograph: Pixabay

A new app has launched that aims to gamify birdwatching by allowing people to collect digital cards of UK bird species whenever they record seeing one.

Challenge Introduction

Travel decisions happen every day.
But sustainability is rarely visible.

CO2 is abstract.
Health impact is hidden.
Convenience dominates.

That is the problem.

Challenge Brief

Build a Sustainable Travel Decision Tool that:

- Accepts a journey input

- Compares transport modes

- Calculates travel time, CO2, and calories burned

- Clearly shows impact vs driving

The goal:
Make sustainable decisions visible and easy to understand.

Core Features

❖Journey Input:

   o Distance and/or route input

   o Selection of transport modes

❖Output Metrics:

   o Estimated Travel Time

   o CO_2 Emissions

   o Calories Burned

❖Comparison & Visualisation

   o Direct comparison Vs driving

   o Clear visual output (chart / side-by-side comparison / cards)

❖Use - solution may take the form of a:

   o Web app
   o Mobile app
   o Prototype demonstrating core functionality

We are looking for your solution to be....

○ Functional

○ Demo-ready

○ Clear in purpose

○ Focused on impact

What You *Could* Add...

Behaviour & Insight

Helping users think differently about their choices

Impact Summary

› "You saved X kg CO2"

› "Equivalent to planting X trees"

› "You burned X calories"

Sustainability Score

Give the user a score based on:

› CO2 saved

› Sustainable transport frequency

› Total calories burned

Smart Recommendations

"If you cycle instead of driving twice a week, you could save X kg CO2 per month."

Engagement & Competition

"I will be the very best!"

Leaderboards

› Solo comparison

› You Vs Others

› "Top CO2 Saver this week"

› "Top Calories Burnt this week..."

Achievements

Reward badges for reaching milestones:

› 1 000 calories burned

› 5 journeys logged

› 20kg CO2 saved

Streak System

Reward consistency:

› 3-day sustainable streak

› 7-day low-carbon commuter

› 30-day green habit
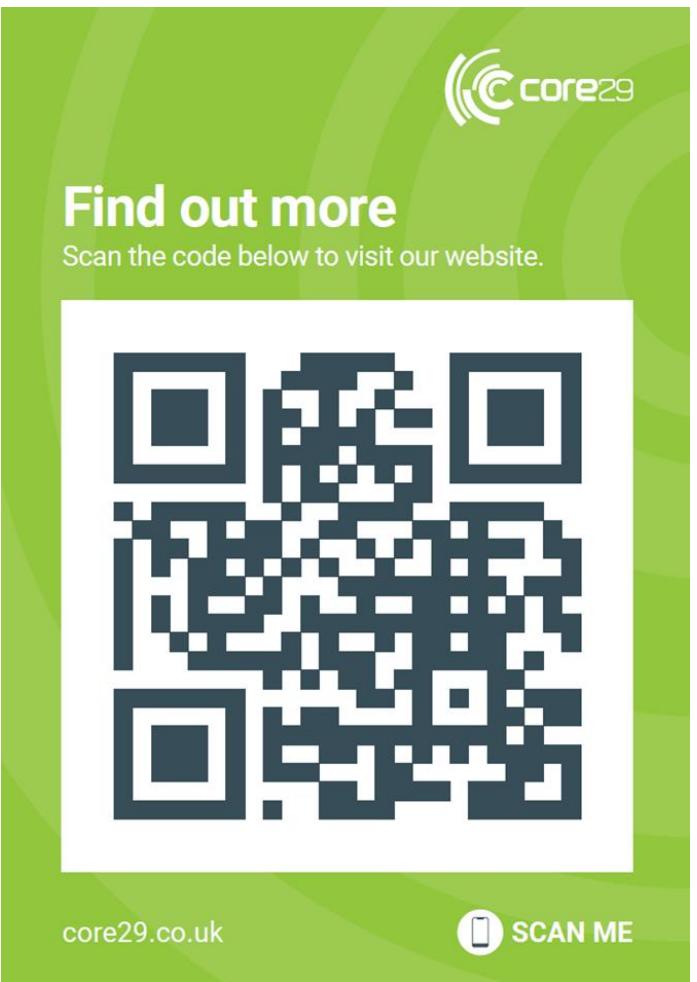
Why This Challenge?

❖ Encourages measurable behaviour change

❖ Makes sustainability tangible

❖ Simple enough for 24 hrs

❖ Flexible for advanced teams

❖ Strong demo potential

Assessment Criteria

Marking Category	Marking Weighting (%)
Technical Execution	30
Uniqueness and level of Innovation	30
User Experience	20
Presentation of a compelling solution	20

Core29 Challenge

Thank You & Good Luck!