

The IoT: a world of connectivity



Lesson 4

Resources

- PowerPoint presentation

Intro (10 mins)
Slides 2-8

Introduction

Use the slides to introduce the lesson, the module overview, and learning objective for today. Remind them that the module is designed to help practice 'big thinking' - using creative and analytical skills to challenge ideas and develop opinions, key capabilities for the tech and digital future.

Recap the 'Big Thinking' question on slide 4: should smart devices be allowed to make decisions for us without our consent?

Should smart devices be allowed to make decisions for us without our consent?

If available, you could allow students some more time to finish the 3D visuals of their product.

Big Thinking...

In this module, we will consider:

*What are the **risks and benefits** of the IoT?*

*Should smart **devices** be **allowed to make decisions** for us without our **consent**?*





Resources

- PowerPoint presentation
- Pens and paper
- Internet-connected devices (1 per group)

Preparing presentations (15 mins) Slides 9–10

Preparing presentations

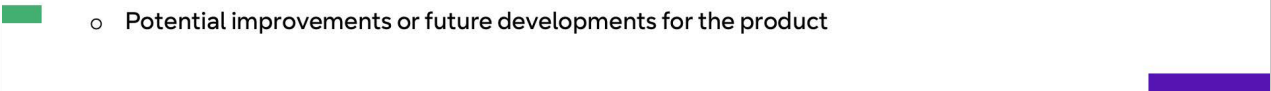
Show slide 10 and explain that they will have 15 minutes in their groups to create a simple presentation, in the style of an ‘elevator pitch’ to promote their product.

They should keep in mind:

- Team roles and contributions to the project
- An outline of your product, how it works and how it can benefit the user
- Visuals showing the final 3D model
- Any challenges or learnings
- Potential improvements or future developments for the product



Prepare your presentation

- You have 15 minutes to create a presentation to promote your product
 - Your presentation should be no more than 2 minutes long in an ‘elevator pitch’ style
 - Your presentation should include:
 - Team roles and contributions to the project
 - An outline of your product, how it works and how it can benefit the user
 - Visuals showing the final 3D model
 - Any challenges or learnings
 - Potential improvements or future developments for the product
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Resources

- PowerPoint presentation
- Projector / interactive whiteboard

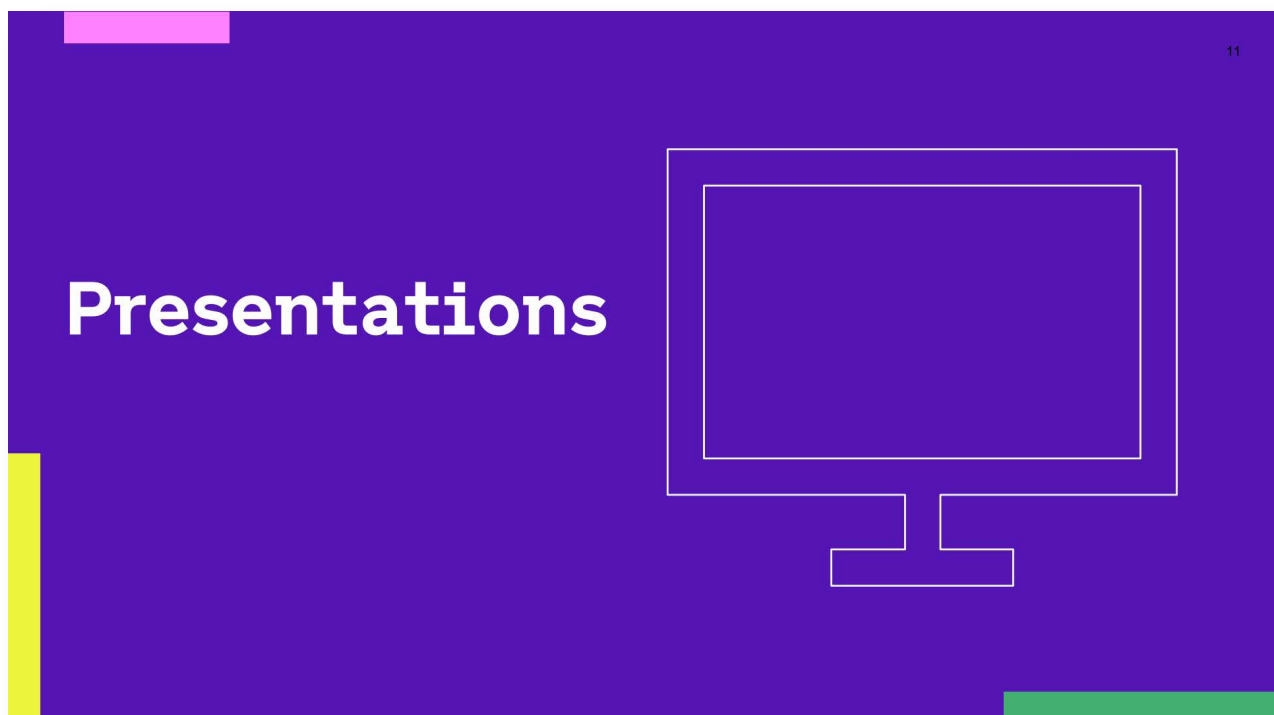
Delivering presentations (30-40 mins)
Slides 11-12

Delivering presentations

Allow time for each team to deliver their presentations and receive feedback from their peers. You can use the considerations on slide 12 to get teams discussing how they felt the project went.

Use the suggested criteria below to provide students with feedback on their presentations:

- How well have students met the project brief?
- Is there evidence that every team member has played an equal role?
- Have they demonstrated the use of the technical skill using and managing digital devices, platforms and apps?
- Is there evidence to show that human skills of communication, critical thinking, and teamwork is being put into practice?
- How well have they embedded learnings from throughout the module?
- Have they fully considered the ethical concerns permissions and data protection?



Resources

- PowerPoint presentation

Plenary (5 mins)

Reflect on learning

Support students to recap learning from the module and explore their opinions on the 'Big Thinking' question: 'Should smart devices be allowed to make decisions for us without our consent?'

You might want to use some of the questions below to start the discussion:

- What is the IoT?
- What is metadata?
- What is an API?
- How can the IoT benefit our lives?
- What risks and ethical considerations does IoT technology present?
- Why is consent so important when using IoT systems in our day-to-day lives?



Recap

What have you learnt today?

- ✓ What is the IoT?
- ✓ What is metadata?
- ✓ What is an API?
- ✓ How can the IoT benefit our lives?
- ✓ What risks and ethical considerations does IoT technology present?
- ✓ Why is consent so important when using IoT systems in our day-to-day lives?

Should smart devices be allowed to make decisions for us without our consent?