

# Engage, Educate, Inspire & Retain

Barclays

November 2019  
Session QH



# Agenda

- Who we are
- Overview of the apprenticeship
- What we talked about last year
- What do our school sessions involve
- Why should you go into schools
- How do you get involved with schools

IT  
background

Career plan  
before

Our  
perception  
of the  
mainframe  
now

# Who We Are

What we  
want to  
achieve with  
this initiative

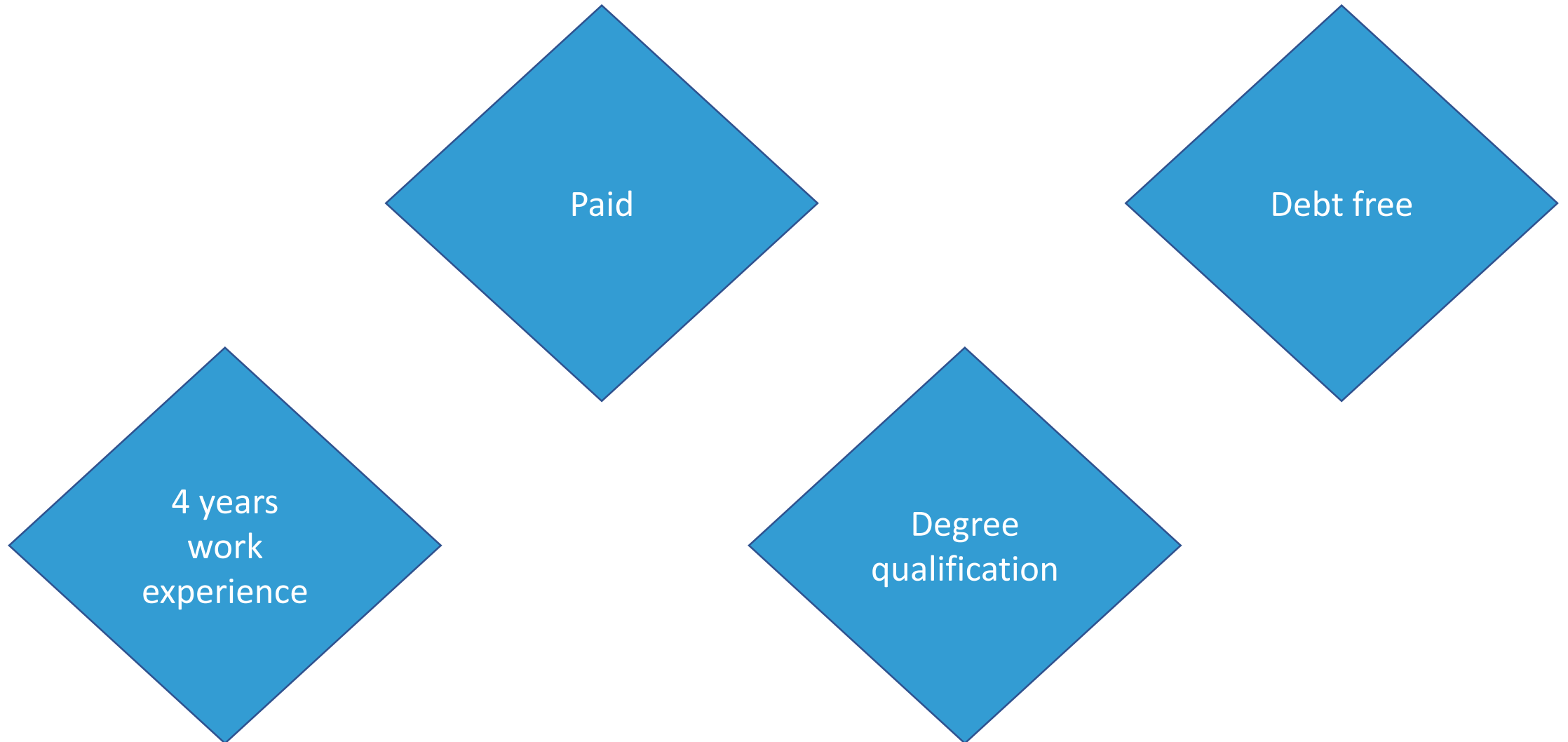
Our  
perception  
of the  
mainframe  
before

# Overview of the Apprenticeship

- 4 year Technology Solutions Degree
- Working full-time
- Study part-time
- Mainframe / Business / Technology related subjects
- All pathways can be related to your current job roles
- Funded degree



# Why a Mainframe Apprenticeship?



# This time last year

A thing to research  
stuff on

A device that you can  
use electronically to  
programme or search  
websites

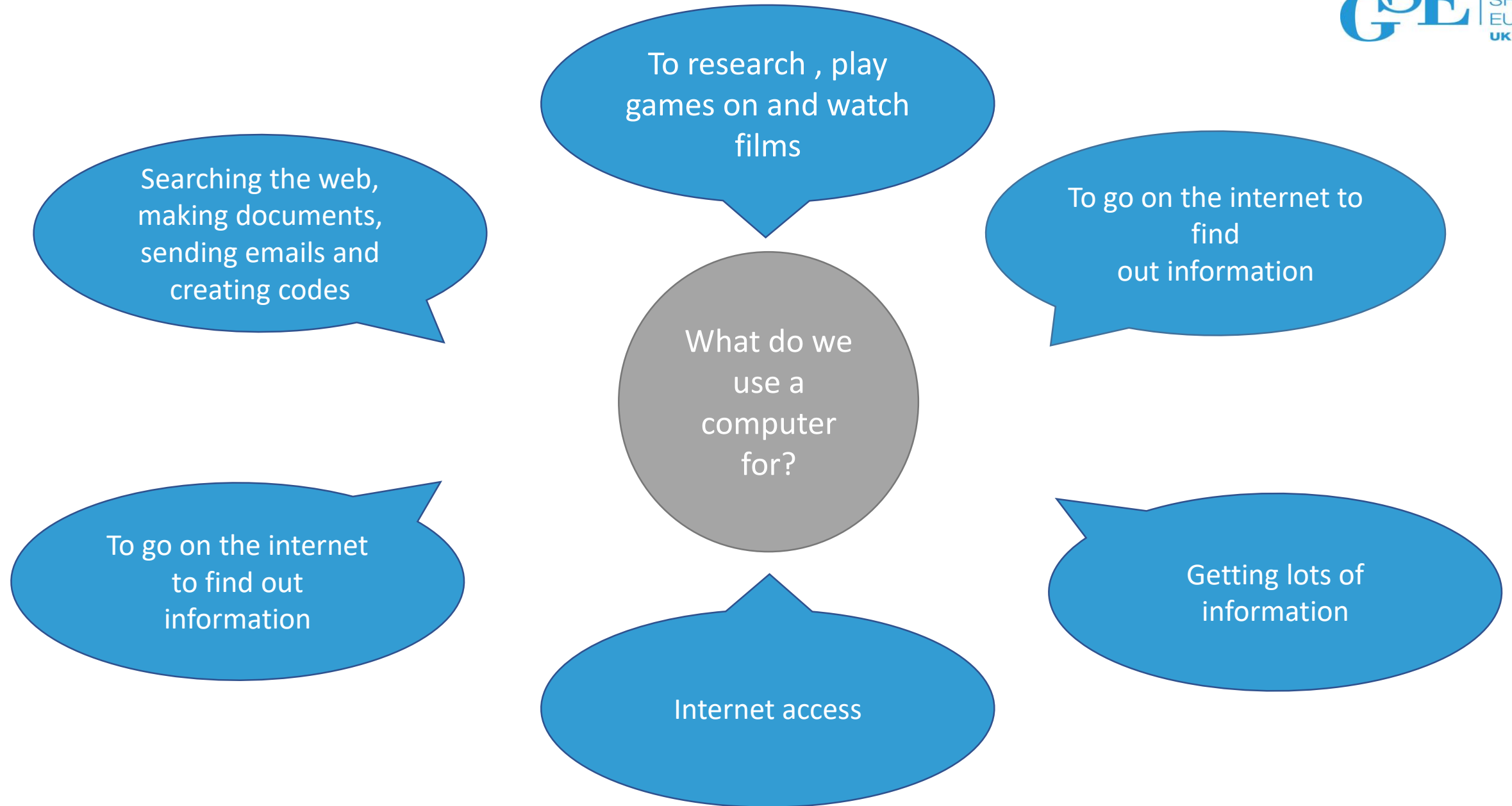
An electrical device like  
an iPad, phone or  
obviously a Laptop/PC  
kinda thing

What is a  
computer?

It's an electronic item  
which you do work on

A sort of artificial  
intelligence

A working device





Information

If you had a stick you collect data on it like a spy like James Bond!

Data is research

What do you think when you hear the word 'Data'?

Data being what you use up when you're not connected to WiFi, or data as a database, as in where data is based at?

Storage, information and 4g

Access internet when not at home

Never in my life.

Yes I have heard of that

No, I'm not sure what a  
mainframe is

Have you  
heard of a  
Mainframe?

No

No

No!

A lion mane on a  
frame?

I am pretty sure it's a  
piece in the monitor  
that helps work the  
computer

The part of the  
computer  
you use the most?

What do you  
think a  
Mainframe  
is?

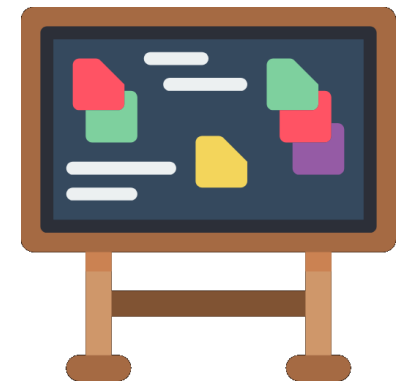
Frame around the  
monitor?

Something that you  
hang up on the wall

The frame around the  
screen

# What did we find out?

- Children know key words related to technology such as 'Data' and 'Computers'.
- Most have never heard the word Mainframe before – yet all have ICT lessons at school
- There is a lack of knowledge and awareness of what a Mainframe is or does



# Challenges in the Industry



- Ageing workforce
- Encourage women into technical roles
- Stigma around the mainframe
- Limited knowledge or awareness of the mainframe in all age groups



# What are we doing to combat these issues

# School Outreach

- We reached out to 5 schools in our local area (Cheshire)
- Promote awareness of mainframe technology
- Educate students on programming languages used on the mainframe
- Drive forward careers in mainframe
- Liaise with teachers to find the most appropriate way of educating the students and furthering their knowledge






Putting **employers** at the heart of  
**inspiring**, informing and  
communication with the next  
generation in Cheshire and  
Warrington

- Aims:

- Encourage the next generation to join apprenticeships
- Replace our ageing highly skilled workforce by 2025

- Why us?

- Opportunity to develop a local talent pool
  - Ensure employers and educational institutions are informed through a coherent programme
  - Ensure young people are getting information they need to make informed decisions about what they will study
  - Support the improvement of the overall quality of education by ensuring the curriculum meets the needs of the local employers
- 



# Who are we targeting?

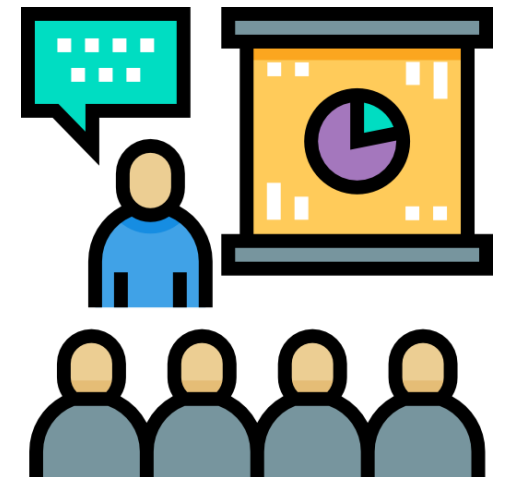
- Anyone interested in computing
- Individuals that express an interest for Mainframe
- Individuals interested in technology apprenticeships



# What do the school sessions involve

# Presentation

- Job roles within the Mainframe sector
- Mainframe awareness
- How the mainframe supports banking
- Mainframe apprenticeships



# Mainframe

Encrypts  
100% data

Can process  
up to 30  
billion  
transactions  
per day

Late 1950's

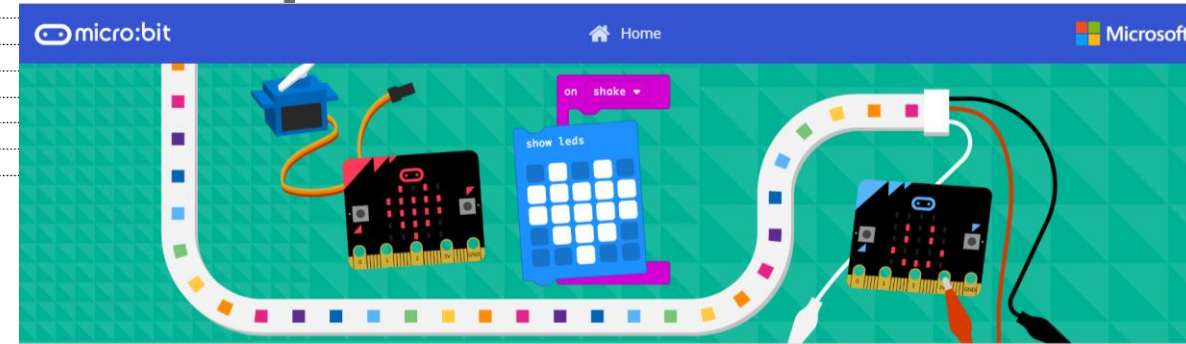
Run up to  
8,000 VM's

Supports  
multiple  
operating  
systems

Resilience  
99.9999%  
uptime

**Contents**

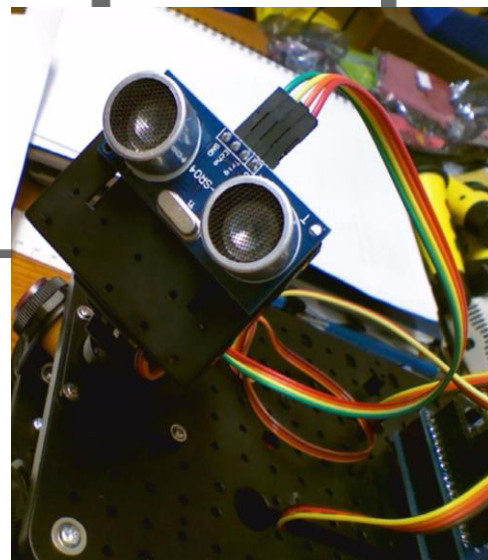
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1.2 Using the REXX compiler.....	2
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3. Loops .....	
3.1 Do .....	
3.2 If, Else.....	
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5.1 FIZZBUZZ.....	
5.2 Cheat sheet.....	



# INTRODUCTION TO REXX

Workbook and Exercises

02/07/2019



# INTRODUCTION TO COBOL

Workbook and exercises

02/07/2019

**Contents**

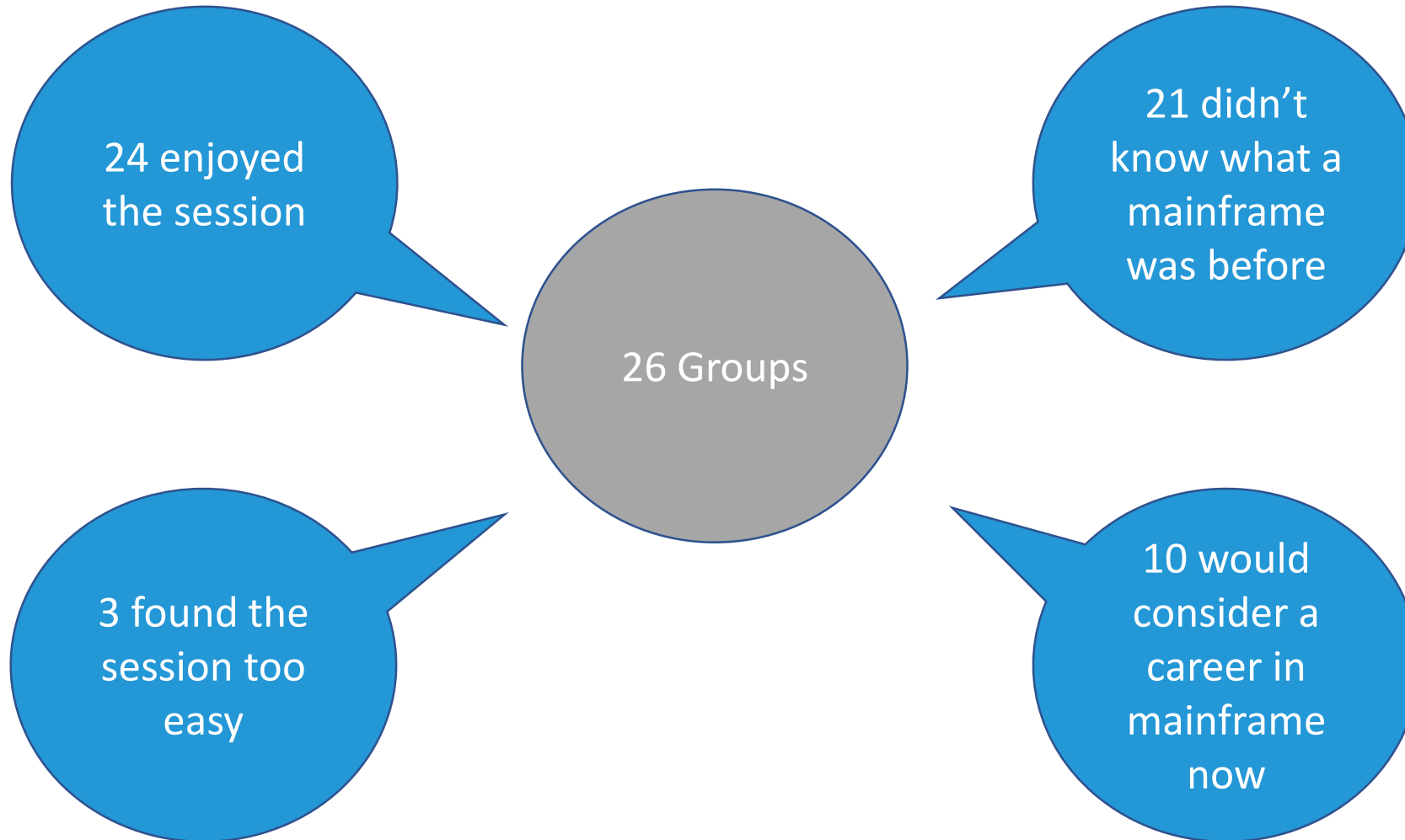
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# Our most recent session – 01/10/2019

- 180 year 11 students (20 of these computing students)
- Short presentation about us and the Mainframe
- Activity focused on REXX



# Feedback



# Feedback Cont.

Behind the  
scenes of  
the bank

Something  
that contains  
data that is  
big

A big  
computer  
network

Bank  
supercomputer  
processor

A very big  
computer

It is a large  
computer that  
processes a  
million bits of  
data

A massive  
piece and  
interesting  
technological  
advancement

A big storage  
device used  
for  
transactions



# Why should you go into schools?

Introduce  
schools to a  
different  
career  
pathway

Educate  
students and  
teachers  
about the  
mainframe

Get a steady  
flow of people  
working for the  
mainframe

Introduce  
another  
variant of  
programming

Change  
people's  
perceptions  
of the  
mainframe

# How can you get involved?

Speak to your local University to get on the apprenticeship ladder.

Get in touch with local schools and we can give you some guidance on how to do this

# Recap

Last year  
vs now

Outreach

Sessions

Next  
steps

# Q & A

# Please submit your session feedback!

- Do it online at <http://conferences.gse.org.uk/2019/feedback/QH>
- This session is QH

1. What is your conference registration number?

🔦 This is the three digit number on the bottom of your delegate badge

2. Was the length of this presentation correct?

🔦 1 to 4 = "Too Short" 5 = "OK" 6-9 = "Too Long"

1  2  3  4  5  6  7  8  9

3. Did this presentation meet your requirements?

🔦 1 to 4 = "No" 5 = "OK" 6-9 = "Yes"

1  2  3  4  5  6  7  8  9

4. Was the session content what you expected?

🔦 1 to 4 = "No" 5 = "OK" 6-9 = "Yes"

1  2  3  4  5  6  7  8  9

