



CY AND BUG'S Big Data Show

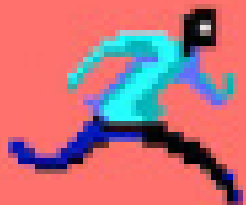
Teacher's Handbook



cividdigits.com | [@cividdigitstheatrecompany](https://twitter.com/cividdigitstheatrecompany)

Thank you for taking part in *Cy and Bug's Big Data Show*. We hope you have fun.

This handbook will explain what you need for the show and what is going to happen step by step.



The Premise of The Show

Cy and Bug are young female ethical hackers who have made a live interactive experience for young people, teachers, parents and guardians to tell the story of the first prosecuted hack in the UK.

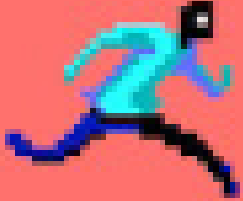
This was a test case at Southwark Crown Court in 1985. The defendants were accused of forgery because there was no crime of 'hacking' then. Because of this case the Computer Misuse act of 1990 was made into law. There is a public archive of the case at Bletchley Park.

Cy and Bug find they are being hacked by Rupert Goodwins, one of the hackers from that case, who escaped prosecution. Rupert is now a famous tech journalist. But he wants to make amends for getting his friends in trouble when he was a teenager.

Cy and Bug have to work out if he is who he says he is, if they should trust him, and discover what secrets really mean to them as the show unfolds.



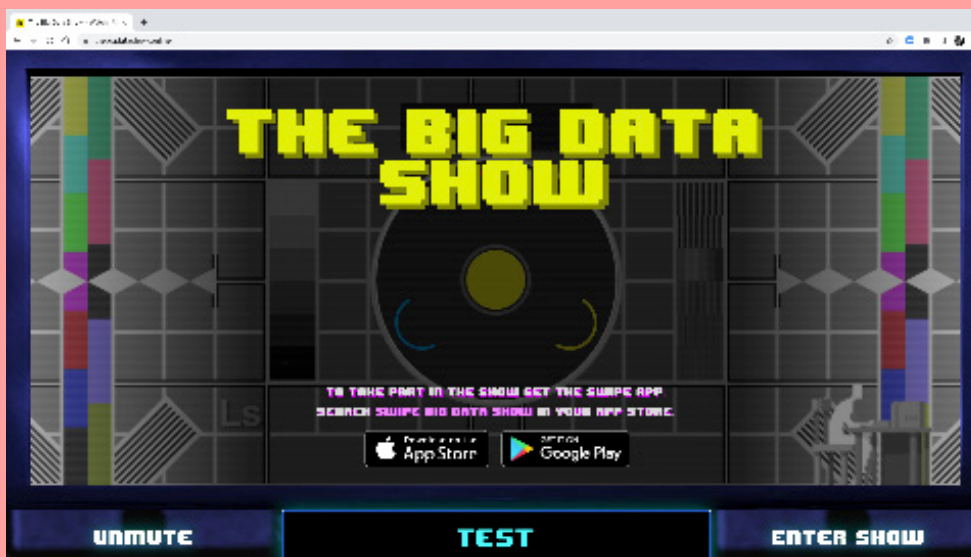
Preparation: What You Will Need



The show happens on the pupils' own mobile phones via an app Super Swipe and through our website (thebigdatashow.online) So every pupil needs to be able to see two screens: the website and a phone with the app on it.

You can do this either with:

- 1) a computer connected to www.thebigdatashow.online with the screen projected for your class to see.
- 2) or set the class up sharing computers. We advise 2-3 per computer.



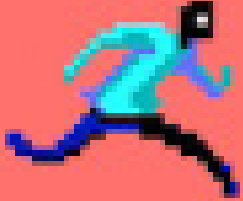
When you go to the website there are links there for the pupils to download Super Swipe.

If they go to the website on their own phones this will be easier.

Or they can search for Super Swipe on the app store or google play.



Preparation: What You Will Need



The show will work best if you walk the class through downloading the app and exploring the website at least one week before the show you are coming to. There is a hidden game on the website.



You can find it if you click on the Civic Digits icon of a figure typing at a computer in the bottom right hand corner of the screen. It will take you to 'Name that Microbe'. This is a simple, fun game, it will be part of the actual show. We hope it signals that in The Big Data Show experience, you have to keep your eyes out for hidden clues and prizes.

Each show has its own six figure code. You need to put the code into both the website and the app. This makes you a team. This will allow us to have a 'Swipe Off' competition at the start of the show and find out live who is the best at Swipe that day.



Preparation: What You Will Need



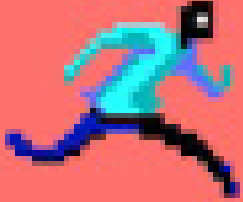
We want the pupils to feel that the show is as 'live' as possible and specifically for them. So we want pupils to send in a picture of themselves. This isn't a photo or a selfie. For data protection reasons we only want drawings or photos of things they feel represents them.

The show will work really well if you can encourage pupils to play Super Swipe as much as possible in the week leading up to the show.

The structure of the show

The show works in five x10 minute episodes with intervals of a couple of minutes in between. During the intervals there will be mini puzzles to complete. Each puzzle unlocks a prize and an important part of the show in the form of photos or film. The breaks are designed to give participants a chance to talk, stretch and rest in between episodes. We have made suggestions for conversation during each interval below.

The Structure of The Show



Episode 1: It's Cy and Bug's digital adventure

Cy and Bug are digital magicians. They have made this show for you to tell the story of one of the first ethical hackers, Rupert Goodwins. There is a swipe off competition. We see all the self portraits of the pupils in the class. Cy and Bug ask if anyone can hack the app. They tell them how to do it and the players get a new, previously hidden game on the app called "Infinite Rupert". Infinite Rupert is an infinite runner game. It shows Rupert collecting passwords to try and hack the internet in 1984, which was then called ARPANET. But then Cy and Bug get hacked by Rupert Goodwins himself. The episode ends abruptly.

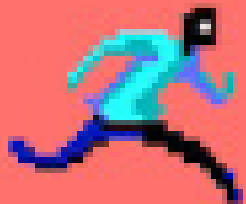
Interval:

The prize is an article about the Pretsel Hack.

To talk about: Who do you think Rupert Goodwins is? What does he want? How would you respond if someone you didn't know contacted you online?



The Structure of The Show



Episode 2: Is it really Rupert and what does he want?

In this episode Rupert explains that he wants to make amends for how he got his friends arrested in 1984 and asks for the magicians' help. Bug doesn't trust him, but Cy is more of a risk taker. They continue to play Infinite Rupert and work out how they can find out if he is who he says he is. Rupert starts to text the audience. Has he hacked their phones as well? What is going on? Bug is not happy. They shut down to investigate further.



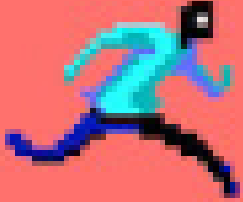
Interval:

Solving the puzzle unlocks a video of Rupert on the BBC 6 o'clock news, telling the world how he hacked Prince Philip's email. There is also a short animation of Prince Philip and Mrs. Thatcher's response.

To talk about: Who was Mrs. Thatcher? Who is Prince Philip? Why are such important people upset by Rupert hacking BT Pretsel? How would you feel if your personal data was breached?



The Structure of The Show



Episode 3: The arrest of Robert Shiffreen

Cy thinks she's proved that Rupert is who he says he is. They play Infinite Rupert again, now collecting usernames and passwords. When you match a username and password you get access to the next level, a new area on ARPANET: BT Prestel. When you are in there, if you collect Prince Philip's username and password you turn into a crown and if you collect a bank's username and password you turn into a £ sign. Cy and Bug act out the scene where Rob Shiffreen was arrested by DI Austin. Rupert then sends all the players their own GPS data. So they can see where they were every time they played Super Swipe before the show started. (This works best if the players have played in different places over the past week)

The Infinite Rupert game becomes finite and the players are tasked to save Rupert from the police dogs he is now running away from. Now if he dies, that's it. Game over.



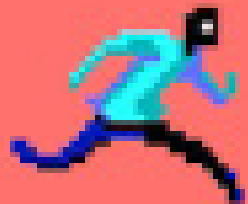
Interval:

Players can access a private recording Bug sent to Cy, about when she stole a poem which belonged to her mum. It seems Rupert has breached her data.

To talk about: What is the value of a secret? Why do we have secrets? Can there ever be good outcomes when secrets are told?



The Structure of The Show



Episode 4: How does it feel to lose control of your data?

Bug is furious with Rupert for exposing her private message to Cy. But Cy has to admit that he could only do it because she sent it to the wrong email group by mistake. Now it's just out there. Bug leaves, leaving Cy to cope on her own. It transpires that Cy has an ADHD diagnosis and struggles without her right hand person. There are a series of digital tricks, which explore what companies can know about you from the data they take, because you have agreed to the Terms and Conditions for your free apps. Cy works out that you would be 75 years old by the time you read all the terms and conditions on the average S1's phone.

- ! Fake Data Breach! At the end of this episode we would like to stage a fake data breach, performed by 2-3 or your senior drama pupils.

If you want to include the fake data breach element of the show make sure you tick that box in the joining form. We will then rehearse the senior pupils 30 minutes before the show starts over the phone. There is a starring role for you, as you will need to show how outraged you are at what we have done and say that you are going to the head's office to sort it out.



The Structure of The Show



Interval:

Solving the puzzle unlocks the terms and conditions for SuperSwipe. To talk about: Has anyone ever read the terms and conditions for an app they have downloaded? Why do you think they are written like that? Do you know what data the apps on your phone collect?

Episode 5: The trial of Robert Shiffreen

Bug, Cy and Rupert explain that the whole show has been full of set ups and tricks from the start. Rupert, Cy and Bug have made the show with Civic Digits Theatre Company. There has been no breach of data. Everyone is safe. If you want to find out more there will be a link to our website where Rupert Goodwins answers questions about cybersecurity, resilience and working in the tech industry.

We play finite Rupert again. When the countdown ends if you have saved Rupert you have a green screen. If your Rupert is dead, you have a purple screen. This will determine how you interact with the final courtroom scene in the show. If you saved Rupert you can vote whether you think Rob Shiffreen will be found guilty or innocent of forgery. This final division of the players into different groups is meant to demonstrate how everything you do online affects what you can do in the future. How you are profiled and what opportunities you may or may not have access to.

To talk about: We hope this is the beginning of a big conversation about who has access to our data and how it is used in every area of life, from advertising to political campaigns.



Who We Are

[Civic Digits Theatre Company](#) blends digital technology, gaming and live performance to create innovative and interactive theatre, to question what it means to be a digital human in the 21st century. At the heart of everything we do, is our aim to create a digital future where we all can flourish.

We are a feminist, anti-racist and intersectional organisation and we want to encourage young girls to explore STEM subjects and careers. The company was founded in 2018 by award-winning playwright Clare Duffy, after a chance meeting with ethical hacker, Rupert Goodwins. Civic Digits' first production is *The Big Data Show*, telling the story of the first prosecuted hack in the UK (which was by Rupert Goodwins).

With Thanks To...

The Big Data Show is produced by Civic Digits Theatre Company, with co-producers Perth Theatre at Horsecross Arts and Unlimited Theatre. It is funded by Creative Scotland, Scottish Government, Digital Xtra and the Garfield Weston Foundation and is performed as part of the Scottish Credit and Qualifications Framework.





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