

THE **MALTAVERIANS**

Issue 1

AN AMAZING BIT OF DATA





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arthouse

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This publication is intended for an audience aged 11 years and higher.

Particular attention has been given to ensure that all the content of this comic is correct and up to date as on date of issue. While every care has been taken during production, the publisher does not accept any liability for errors that may have occurred.

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maltaverians.mt

The project of publishing a series of comics focused on digital innovation technology aims to emphasize the importance of expanding teens' knowledge in this rapidly evolving field. These comics will be distributed among students studying Computing and IT to enhance their understanding of the latest technologies and potentially guide them towards their future careers. It will be available in a digital format online as well. By incorporating engaging visuals and storylines, the comics will pique the interest of young readers and promote a deeper comprehension of innovative technologies that are shaping our world. In addition, the inclusion of a glossary within the publications will further clarify technological terms and concepts, making the material more accessible and informative.

THE MALTAVERIANS



Real Name:

Elisa Bonello

Character Traits:

Positive, empathetic, energetic

Personality Traits:

Outgoing, affable

Other Dimension Nickname:

Bella Bit

Nickname Meaning:

Beautiful + smallest size of data

Nationality:

Maltese

Age:

19

Occupation:

Student / Teacher (pre-service teacher)

Main Allies:

Jake Spark (a friend), police, responsible citizens

Main Foes:

cyber criminals (especially bullies and thieves)

Special Abilities:

Digital vision: Sees the inner workings of digital technologies like no other human

Special Powers:

Master Traveller in Virtual Reality, Sharp like Sherlock Holmes, Virtual Martial Arts Skills, Hardcore Gamer

Other Powers:

Can make learning fun for kids



Real Name:

Jake Spiteri

Character traits:

Intelligent, passionate, loyal

Personality Traits:

Shy, reserved

Other Dimension nickname:

Jake Spark

Nickname Meaning:

Jake + bright mind+ small but fiery

Nationality:

Maltese

Age:

18 1/2

Occupation:

Student / Software Developer

Main Allies:

Bella Bit, the police, responsible citizens, trusted computing devices

Main Foes:

Phishers, Hackers, Spammers etc.

Special Abilities:

Tech whisperer - somehow inanimate technologies seem to understand what he needs and wants

Special Powers:

None (at the moment)

Other Powers:

Effortlessly produces software like a piece of cake



HOLA, BELLA!

**I'M WORKING
ON A PROJECT!
I'M IN A HURRY!**



HI, JAKE!



**WILL SEND IT TO YOU LATER
FOR YOUR COMMENTS!**

YEAH, SURE!







WHAT HAPPENED,
CARL?

YOU LOOK
CONFUSED.

MY FATHER OWNS A HOTEL.
LAST NIGHT HE HAD HIS
DIGITAL IDENTITY STOLEN!

ONE OF HIS EMPLOYEES
COULDN'T LOG INTO THE DATABASE.
ALL USERNAMES AND PASSWORDS
WERE REJECTED...

... THEY COULD NOT EVEN
LOG INTO EMAILS.

IT WAS THEN
THAT MY FATHER REALISED
ALL ACCOUNTS WERE
BLOCKED FOR HIM...

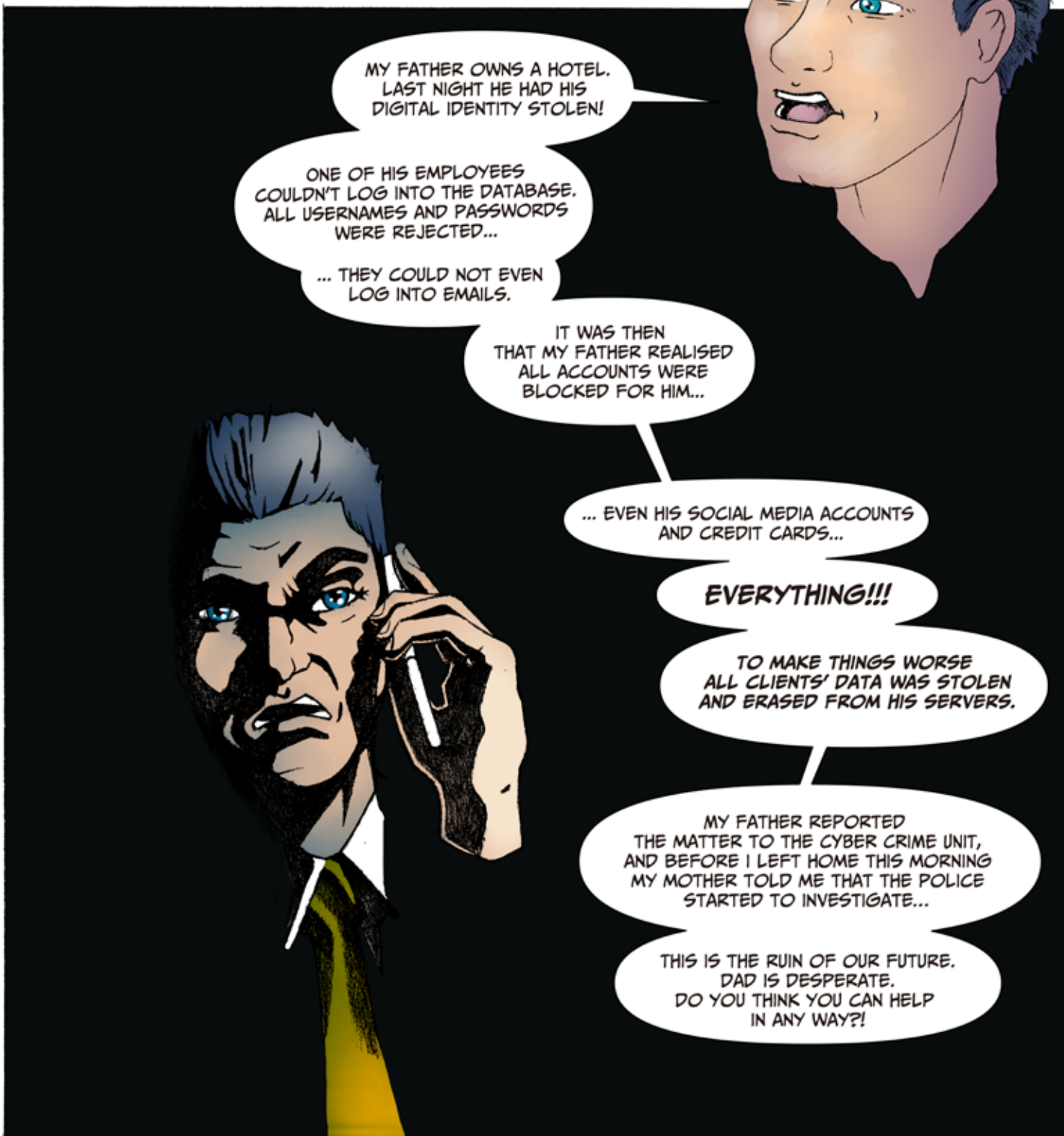
... EVEN HIS SOCIAL MEDIA ACCOUNTS
AND CREDIT CARDS...

EVERYTHING!!!

TO MAKE THINGS WORSE
ALL CLIENTS' DATA WAS STOLEN
AND ERASED FROM HIS SERVERS.

MY FATHER REPORTED
THE MATTER TO THE CYBER CRIME UNIT,
AND BEFORE I LEFT HOME THIS MORNING
MY MOTHER TOLD ME THAT THE POLICE
STARTED TO INVESTIGATE...

THIS IS THE RUIN OF OUR FUTURE.
DAD IS DESPERATE.
DO YOU THINK YOU CAN HELP
IN ANY WAY?!





hi J yr software is so cool, never seen anything like it! 😊

it has nothing to do with my assignments at UNI, its an idea I'm working on 🤔

I will try it with my VR headset on!



JAKE, I'M LOGGED IN. CAN YOU HEAR ME?



HELLO, CYBER GIRL!!
HAHAHA!



HEY! WHAT'S THIS PLACE?



WELCOME TO THE REAL CYBER SPACE. YOU ARE OUTSIDE YOUR COMPUTER FIREWALL, AND I WEEEBLLLLLCOOMMEEE YOUUU TO THE INTERNET AS YOU HAVE NEVER EXPERIENCED IT BEFORE.



I'M VERY SORRY FOR A KID IN CLASS. HIS FATHER HAD HIS ONLINE IDENTITY STOLEN, AND THE FRAUDSTERS HAVE USED THAT TO HACK INTO HIS FATHER'S HOTEL IT SYSTEMS.

THEY ARE DEVASTATED! I HATE TO SEE THEM LIKE THIS. HOW CAN WE HELP?

I HATE THEM WHEN THEY DO THIS... WHEN THEY STEAL MONEY FROM DECENT PEOPLE.

DO YOU THINK WE CAN HELP? DO YOU KNOW IF I CAN FIND SOMETHING HERE THAT CAN GIVE US A CLUE TO FIND THE CRIMINALS?

OK... WHERE TO START...

AHHHH YESSSSS!!!

I NEED TO TALK TO HIS FATHER URGENTLY.

GREAT, JAKE!
I WILL SEND CARL A MESSAGE AND PUT YOU THROUGH TO HIS FATHER MR LANNY KLEIN.

THE SOONER WE START THE BETTER!



IS THERE ANY HOPE TO GET THE MONEY BACK?

AAARRRGHHH!!!

LET ME CHECK... WE NEED TO LOOK INSIDE HERE... WAIT...

CAN I HAVE ACCESS TO YOUR MOBILE PHONE?



AH YES... SO HMMM...

HERE...

YOU SEE?!

GOSH!!

NO!

WAIT!

JUST THESE!!!



OK... CAN I TAKE A PHOTO OF THESE?



DINNER IS READY...

LATER, MOM!!



BELLA, WHERE ARE YOU? I HAVE NEWS!

BEEELLEE?



I AM SENDING YOU THE **TIMESTAMP** OF THE FIRST ATTEMPT MADE ON LANNY'S FIREWALL... AND THIS IS THE **TIMESTAMP** WHEN THEY MANAGED TO GET IN!

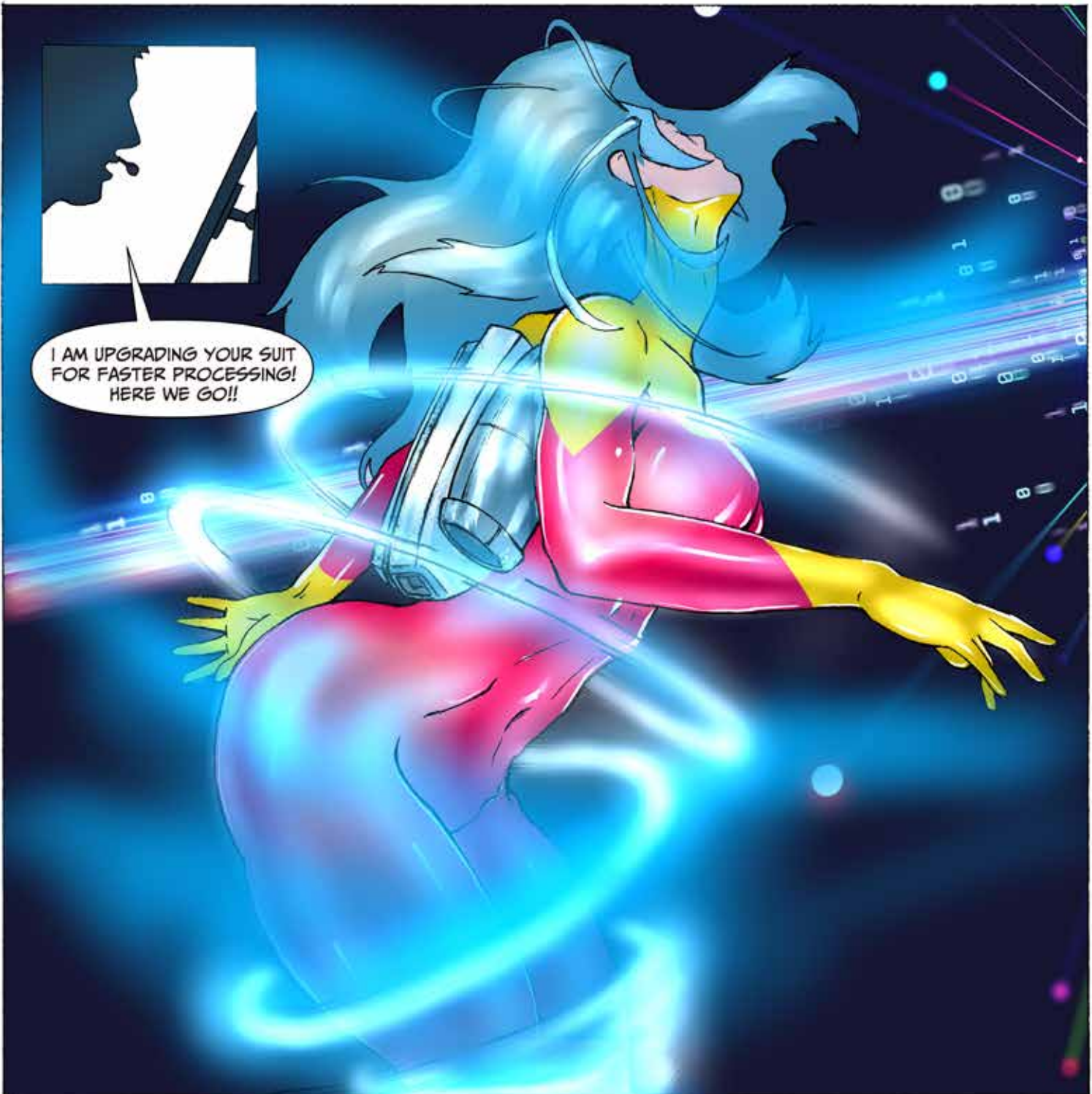
DO I LOOK LIKE A TIME MACHINE OR WHAT?! WHERE SHOULD I START?

THEY ARE CLEVER! THEY CAN HIDE FROM THE GREAT BELLA AND JAKE!

TAKE IT EASY, JAKE! EYES ON THE BALL! I'LL HAVE A LOOK AROUND.



THERE IS SOMETHING I WANT TO CHECK, BUT THE DATA PACKETS ARE TOO MANY AND TOO FAST TO FOLLOW. I CAN JUST GRAB A FEW DATA HEADERS, JAKE. IS THERE A WAY I CAN GO FASTER? I FOUND SOMETHING BUT IT'S SLIPPING AWAY FROM ME!



I AM UPGRADING YOUR SUIT FOR FASTER PROCESSING! HERE WE GO!!



I NEED TO GO THROUGH THIS!!
JAKE, WHERE DOES THIS LEAD?



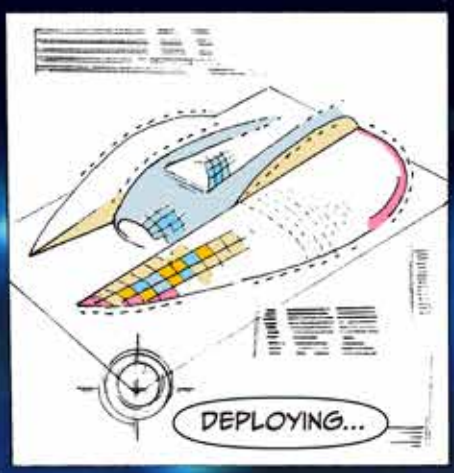
OUT OF THE
LOCAL SUBNETS!

LET'S GO
HUNTING, THEN!



THIS IS TERRIFIC!
IT'S LIKE MY FAVOURITE
ARCADE GAME! BUT I NEED
SOMETHING BETTER
THAN THE JETPACK.

918cd904530b4af553ed7fec0d2f2987831258d772f3baa01b987619481b1075





BELLA? BELL?
IS EVERYTHING ALL-RIGHT?
HAVEN'T HEARD ANYTHING
FROM YOU FOR A WHILE!
I CAN STILL TRACK YOU BUT
I NEED YOU TO SHARE
WHAT YOU SEE.

I THOUGHT
THEY WOULD EXAGGERATE
WHEN THEY SAY THAT MILLIONS
OF MEGABYTES OF DATA ARE
TRANSFERRED EVERY MINUTE BUT
NOW CAN SEE THEM WITH
MY OWN VIRTUAL EYES!

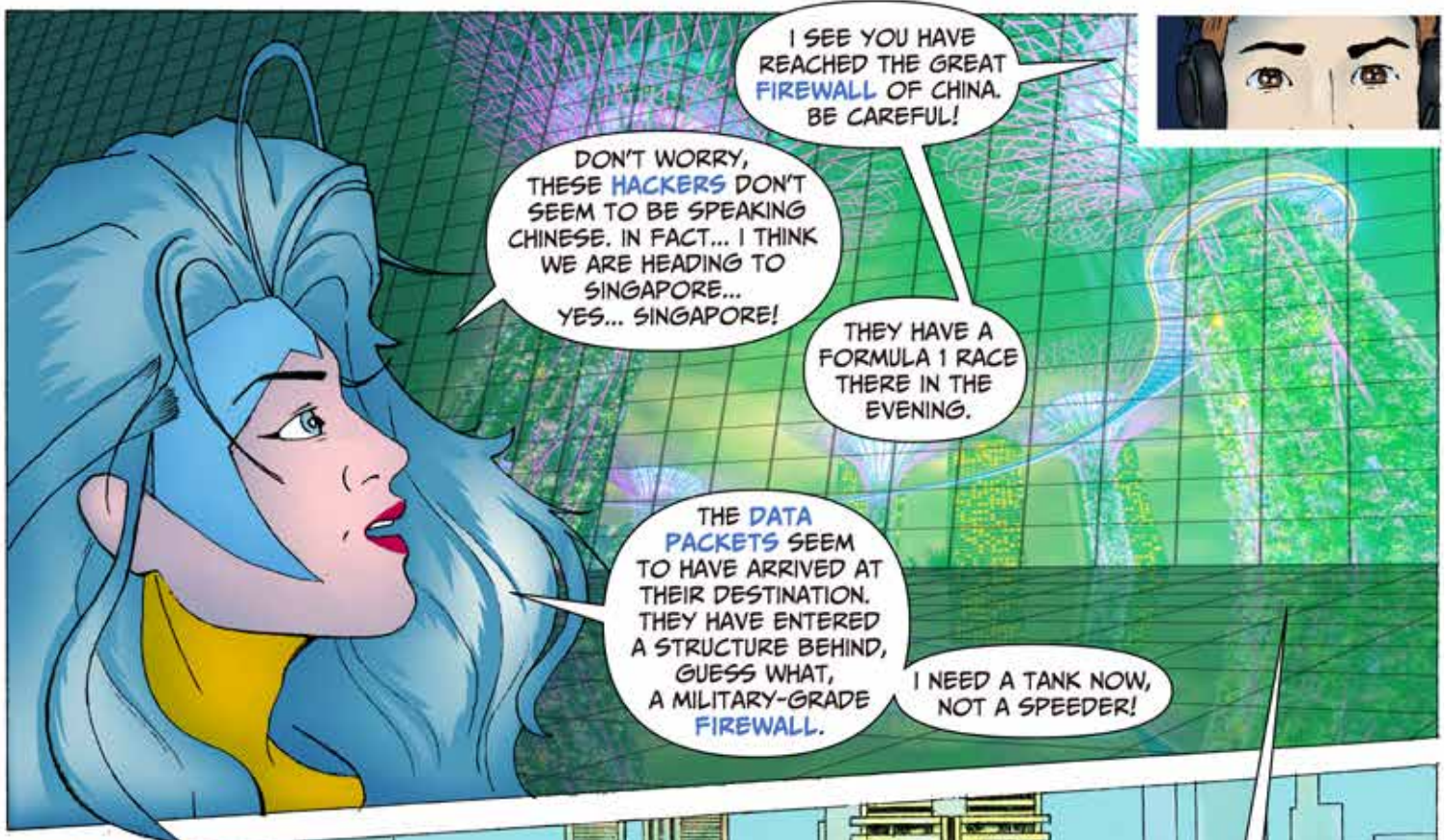
THE NEXT UPGRADE WILL
DEFINITELY INCLUDE A REMOTE
VIEWER FOR ME TO SEE WHAT
YOU SEE! IT MUST BE A...



SHHH... I HAVE SOMETHING...
THE PACKETS I AM FOLLOWING ARE
HEADING EAST. OH NO, IT'S SERVER HOPPING,
GOING FROM ONE SERVER TO ANOTHER IN
DIFFERENT COUNTRIES TO
HIDE THEIR TRACKS.

THIS SMELLS OF
THE TOR NETWORK.

COULD BE, BUT TOR
IS ALSO USED BY JOURNALISTS
AND ACTIVISTS WHO NEED TO
HIDE THEIR COMMUNICATION FROM
OPPRESSIVE GOVERNMENTS.



I SEE YOU HAVE REACHED THE GREAT FIREWALL OF CHINA. BE CAREFUL!

DON'T WORRY, THESE HACKERS DON'T SEEM TO BE SPEAKING CHINESE. IN FACT... I THINK WE ARE HEADING TO SINGAPORE... YES... SINGAPORE!

THEY HAVE A FORMULA 1 RACE THERE IN THE EVENING.

THE DATA PACKETS SEEM TO HAVE ARRIVED AT THEIR DESTINATION. THEY HAVE ENTERED A STRUCTURE BEHIND, GUESS WHAT, A MILITARY-GRADE FIREWALL.

I NEED A TANK NOW, NOT A SPEEDER!



KEEP COOL, LET ME CHECK IT OUT... IT LOOKS LIKE A NICE SUBURBAN SPOT IN SINGAPORE.

LOOKS NICE IN GOOGLE STREET VIEW... ANYWAY... WE NEED TO FIND SO-CALLED 'CRACKS' OR SOFTWARE VULNERABILITIES IN THE FIREWALL, EXPLOIT ANY MISCONFIGURED SETTINGS, OR FIND WEAK PASSWORDS. DON'T BE TRIGGER HAPPY!



YOU KNOW I LIKE TO JUMP WALLS AND KILL MONSTERS IN THE ARCADE GAMES. BUT LET'S DO AS YOU SUGGEST.

I AM SENDING YOU MY SUPER NETWORK VULNERABILITY SCANNER NOW!

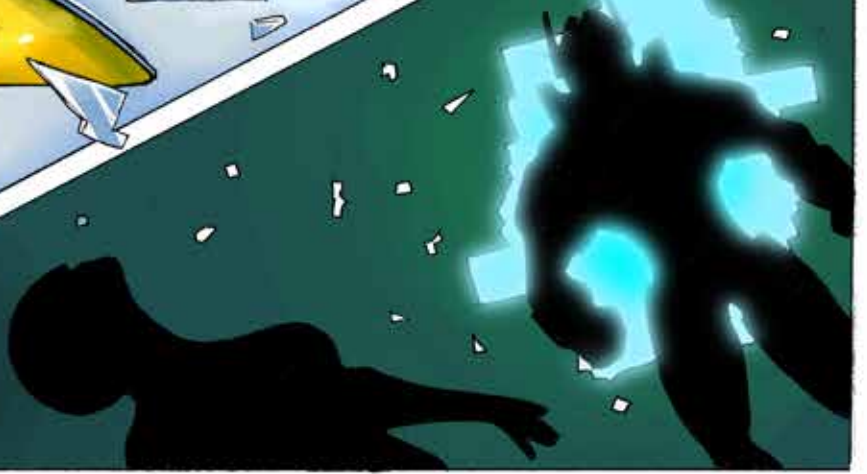


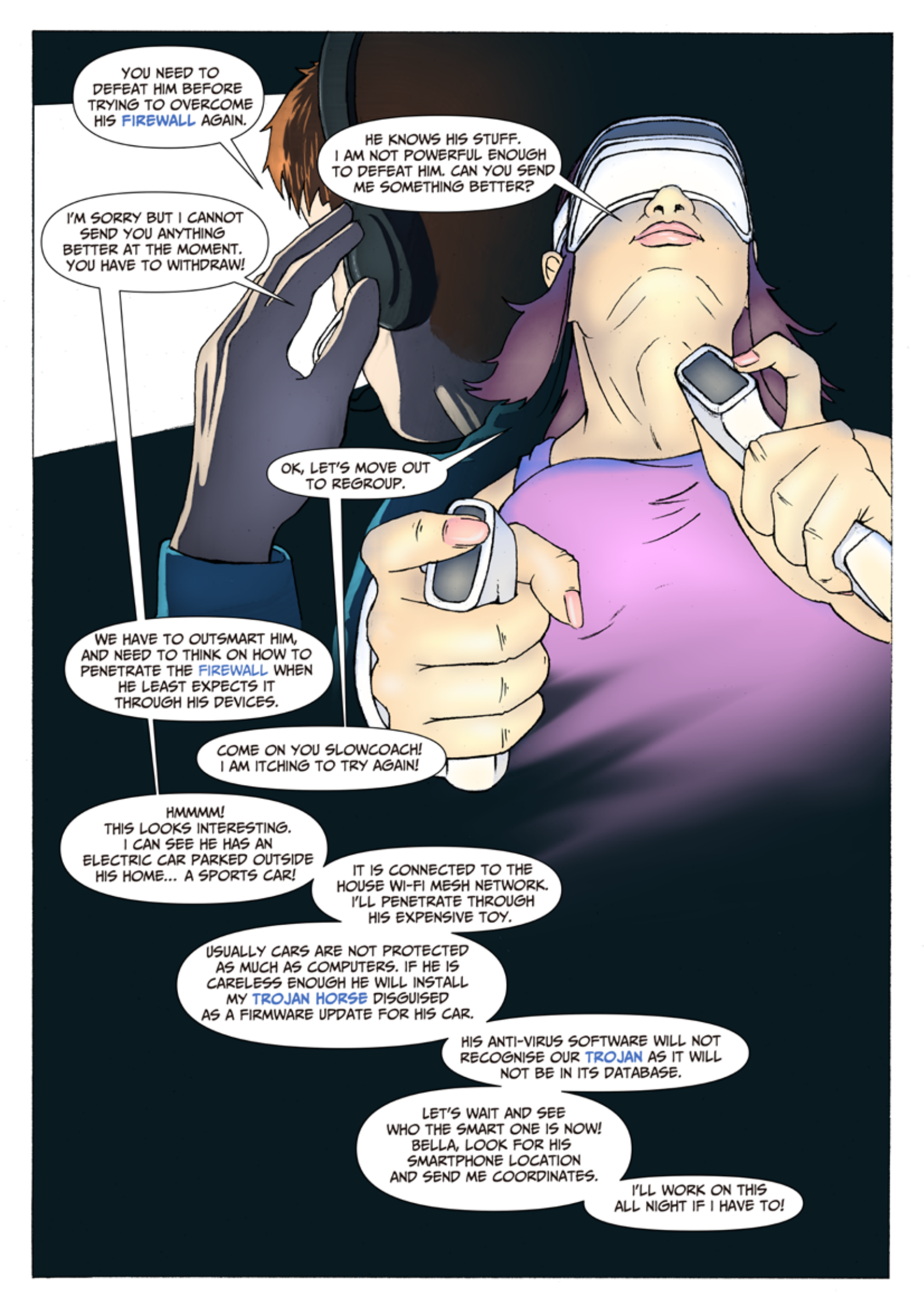
AAAAAAA!!



HERE HE IS!
OUR TARGET!

HE HAS COME OUT
OF HIS HIDE.





YOU NEED TO DEFEAT HIM BEFORE TRYING TO OVERCOME HIS **FIREWALL** AGAIN.

HE KNOWS HIS STUFF. I AM NOT POWERFUL ENOUGH TO DEFEAT HIM. CAN YOU SEND ME SOMETHING BETTER?

I'M SORRY BUT I CANNOT SEND YOU ANYTHING BETTER AT THE MOMENT. YOU HAVE TO WITHDRAW!

OK, LET'S MOVE OUT TO REGROUP.

WE HAVE TO OUTSMART HIM, AND NEED TO THINK ON HOW TO PENETRATE THE **FIREWALL** WHEN HE LEAST EXPECTS IT THROUGH HIS DEVICES.

COME ON YOU SLOWCOACH! I AM ITCHING TO TRY AGAIN!

HMMMM!
THIS LOOKS INTERESTING. I CAN SEE HE HAS AN ELECTRIC CAR PARKED OUTSIDE HIS HOME... A SPORTS CAR!

IT IS CONNECTED TO THE HOUSE WI-FI MESH NETWORK. I'LL PENETRATE THROUGH HIS EXPENSIVE TOY.

USUALLY CARS ARE NOT PROTECTED AS MUCH AS COMPUTERS. IF HE IS CARELESS ENOUGH HE WILL INSTALL MY **TROJAN HORSE** DISGUISED AS A FIRMWARE UPDATE FOR HIS CAR.

HIS ANTI-VIRUS SOFTWARE WILL NOT RECOGNISE OUR **TROJAN** AS IT WILL NOT BE IN ITS DATABASE.

LET'S WAIT AND SEE WHO THE SMART ONE IS NOW! BELLA, LOOK FOR HIS SMARTPHONE LOCATION AND SEND ME COORDINATES.

I'LL WORK ON THIS ALL NIGHT IF I HAVE TO!

GOTCHA!!

DEPLOYING PAYLOAD!





READY TO
INSTALL!!



68%



INSTALLING



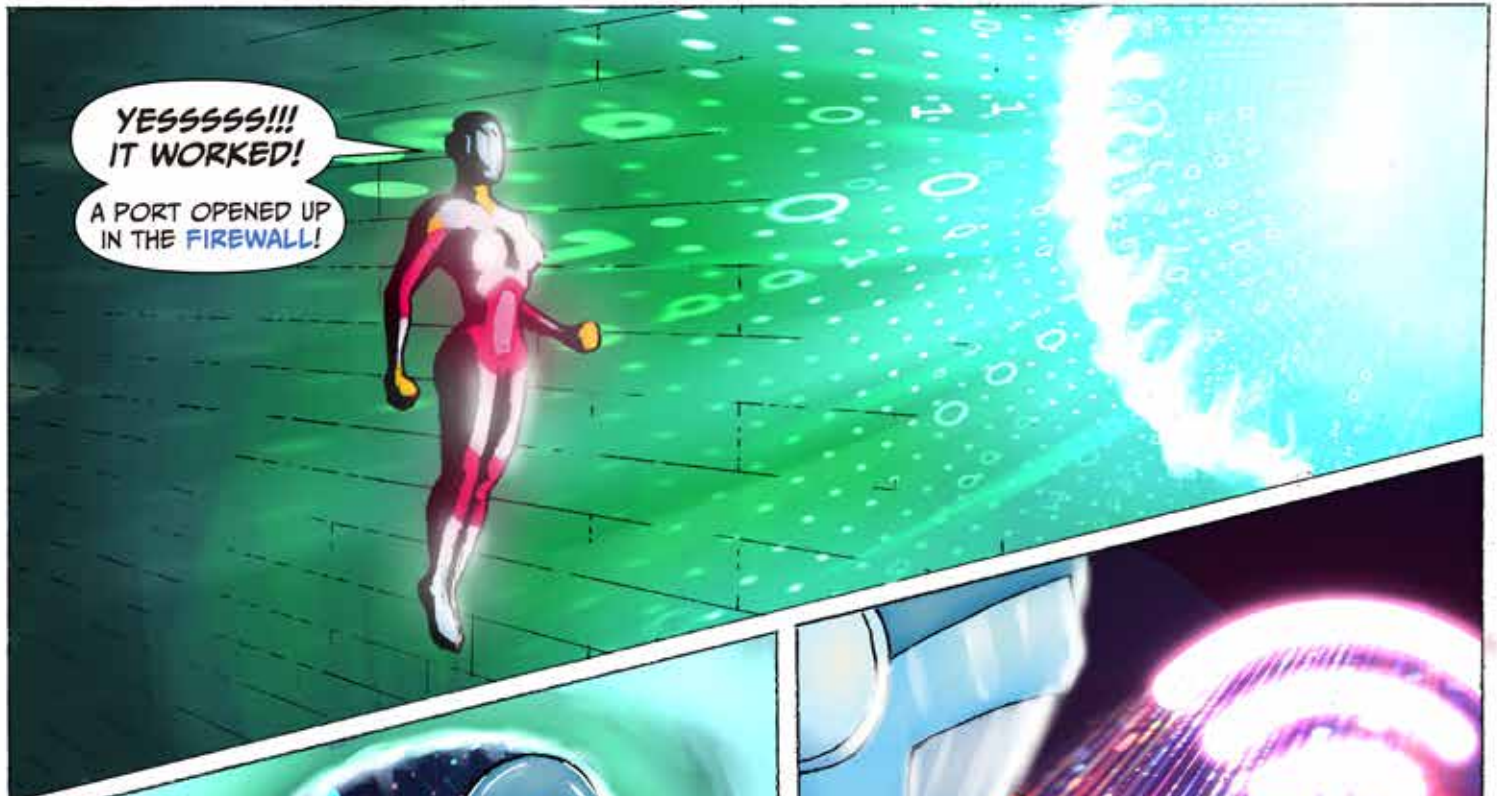
WHAT'S GOING ON, JAKE?
ARE WE THERE YET?
DID IT WORK?



100%



READY



**YESSSSS!!!
IT WORKED!**

A PORT OPENED UP
IN THE **FIREWALL!**



**I'M IN! I'M IN!
NOW LET'S ROCK!**



**WHAT'S GOING ON, JAKE?
I FOUND THE WIFI CONNECTION TO HIS HOUSE...
I'M GOING THROUGH IT!**



**THIS IS A SMART HOME INDEED!
LOOK HOW MANY DEVICES!!
FOUND IT...**

HIS COMPUTER!!



LOOK WHAT WE HAVE HERE!



REMOVE MY ARMOR JAKE!, I NEED TO START SCANNING THESE FOLDERS.



SCANNING!!



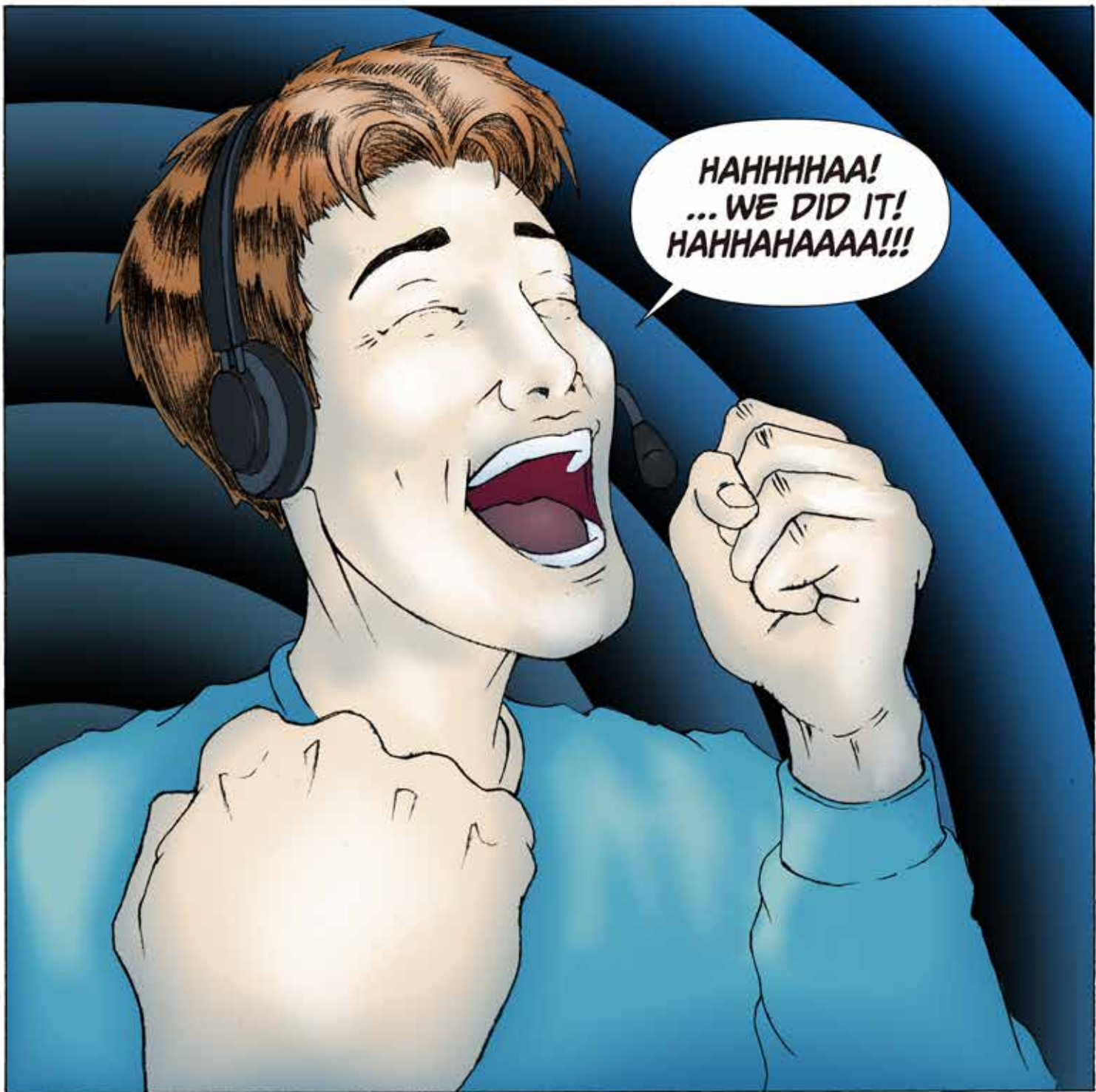
NOTHING SO FAR.



Victim No. 317
Location: Malta
Name: Lanny Klein
Identification Number:
009990091
Bank Account Number:
1982-209929-10202002-229
Social Media Passwords:
L@nny(lf1n!!!
Client's Database Passwo
LC23/Sep/76m!!
Com: : 1234

STILL
SEARCHING

WAIT!!!
WE GOT HIM!
WE HAVE FOUND
WHAT WE WANTED.



HAHHHAAA!
... WE DID IT!
HAHHAHAHA!!!



WE HAVE THE EVIDENCE. NOW WHAT?



LEAVE THAT TO ME, I HAVE AN IDEA.

WE NEED TO DISTRACT HIM TO GIVE TIME TO THE POLICE TO TAKE ACTION.

NOW, BELLA, LURE THE GUY OUT OF THE FIREWALL. THIS WILL GIVE ME TIME TO ALERT THE POLICE TO START THE OPERATION.

FIRST I'LL SEND THIS EVIDENCE TO THE MALTESE CYBER CRIME UNIT... AND... I WILL PING AI-HEK YU SO THAT HE COMES OUT OF THE FIREWALL TO INVESTIGATE. GO MEET HIM THERE!"



JAKE!!! HE'S ALREADY HERE!! JAKE!!!



KEEP HIM BUSY, BELLA!



**GEETT OOOOUT
OF MY COMPUTER!!!!**





HE'S
AFTER ME!

FIGHT BACK
BELLA!
FIGHT!

USE YOUR
WEAPON!





SIR, SOMEBODY SENT US EVIDENCE ON MR KLEIN'S CASE.

GREAT! SEND EVERYTHING TO INTERPOL AND FILE A REPORT.



HE IS RETURNING WITH HIS BOT ARMY!



SIR, INTERPOL REQUESTED TO CAPTURE A HACKER IDENTIFIED AS AI-HEK-YU!

SEND A SQUAD NOW!! I WANT HIM ARRESTED!



GO... GO GO GO GO !!!



OPEN UP!!! POLICE!! OPEN UP!





MAJOR CYBER CRIMINAL ARRESTED AT HOME
His victims are from all over the world

Ai-Hek Yu arrested and expected to be taken to court with cyber crime accusations.

Victim is expected to recover all the money.

MAJOR CYBER CRIMINAL ARRESTED AT HOME
His victims are from all over the world

The central panel features a dark blue background with a circular light effect. On the left is a newspaper clipping with the headline 'MAJOR CYBER CRIMINAL ARRESTED AT HOME' and sub-headline 'His victims are from all over the world'. On the right is a photograph of a person in a green shirt being escorted by police officers, with the same headline and sub-headline. In the center, there is text stating 'Ai-Hek Yu arrested and expected to be taken to court with cyber crime accusations.' and 'Victim is expected to recover all the money.'

WHAT HAPPENED, JAKE? HE STOPPED FIGHTING!

I DON'T KNOW. I HOPE HE'S CAPTURED.

The bottom panel shows a character in a red and blue suit with a large, glowing orange visor. The character is looking towards a silhouette of a person's head and shoulders. Two speech bubbles are present: one from the silhouette saying 'WHAT HAPPENED, JAKE? HE STOPPED FIGHTING!' and one from the character in the suit saying 'I DON'T KNOW. I HOPE HE'S CAPTURED.'



WELL DONE TO BOTH OF YOU!
HOW WILL I EVER REPAY YOU?

JAKE, I AM OFFERING YOU TO LEAD THE NEW ICT DEPARTMENT OF MY COMPANY.

WHAT DO YOU SAY?
I WILL GIVE YOU A GOOD SALARY TO PROTECT MY BUSINESS AND LET IT GROW!

WHAT DO YOU SAY?

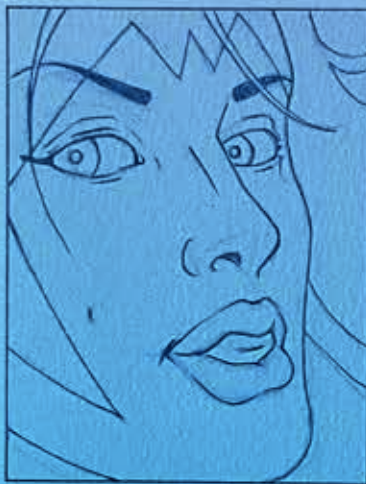
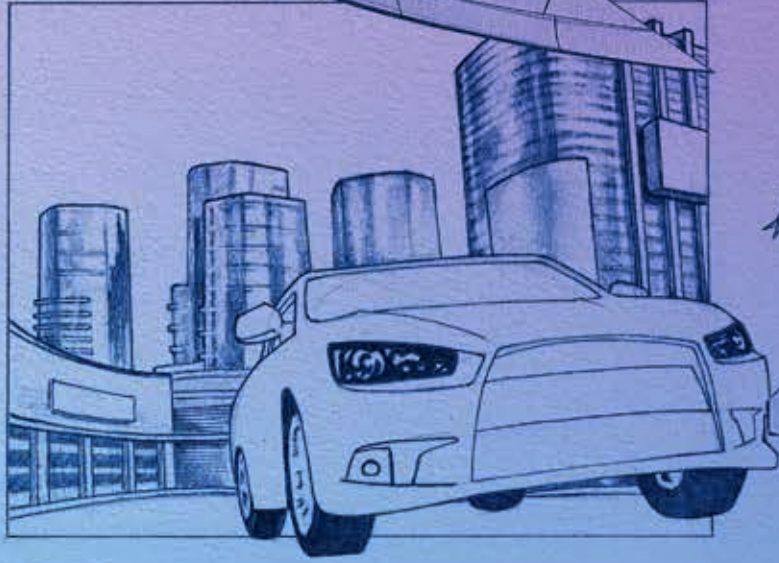
ERRRRMMM, SURE!

I WOULD BE HAPPY, BUT I NEED SOME TIME TO FINISH MY COURSE AND TO PURSUE MY OWN TECH PROJECTS, YOU KNOW!!



GLOSSARY OF TECHNICAL TERMS

TERM	DEFINITION
Anti-virus software	A type of software designed to protect computers from malicious software, such as viruses, worms and Trojan horses.
Data headers	Information at the beginning of a data packet that identifies the source and destination of the packet.
Data packets	A unit of data that is transmitted over a network. It contains the data being transmitted, as well as data headers.
Digital literacy	The ability to use digital technology, communication tools and networks effectively and responsibly.
Firewall	A security system that monitors and controls incoming and outgoing network traffic based on predetermined rules.
Hacker	A person who uses computer systems and networks to gain unauthorized access to data or to cause disruption.
IP address	A unique numerical identifier assigned to every device connected to the internet.
Malware	Software designed to cause harm to a computer system, such as viruses, worms and Trojan horses.
Mesh network	A mesh network is a type of computer network where multiple devices are interconnected in a decentralized way, without relying on a central hub or server. Each device in a mesh network can communicate with every other device, and data can travel through multiple paths to reach its destination with the added benefit of increased redundancy the more nodes connect. Overall, a mesh network provides a flexible, resilient and self-healing network infrastructure that can adapt to changing conditions and provide reliable connectivity in challenging environments.
Metaverse	A virtual reality space where users can interact with a computer-generated environment and other users.
SHA256	A cryptographic hash function used to secure digital information, commonly used to verify the authenticity of files.
Subnet	A network subnet, or subnetwork, is a division of a larger network into smaller interconnected networks, each with its own unique IP address range. The purpose of subnetting is to create smaller, more manageable networks within a larger network, which can help to reduce network congestion, increase security, and improve network performance.
Timestamp	A sequence of characters or encoded information that represents the date and time when a particular event occurred.
Trojan horse	A type of malware that appears to be a legitimate program but actually contains malicious code.
VPN	A virtual private network that allows users to securely access a private network over a public network.
Virtual reality	A computer-generated environment that simulates a real-world environment, allowing users to interact with it.
Virus	A type of malware that can self-replicate and spread to other computers, often causing damage or data loss.
Vulnerabilities	Weaknesses in a computer system or network that can be exploited by attackers to gain unauthorized access or control.
Worm	A type of malware that can self-replicate and spread to other computers without the need for human intervention.



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