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ZUTO
THE ADVENTURES OF
A COMPUTER

VIRUS

(Sample)

Dedicated with love to my parents, my brother, and his family.

All software programs appearing in this work are fictitious. Any resemblance to real software is purely coincidental. The Zutopedia appendix explains the truth behind the story.

Chapter 1

The story you are about to read is extraordinary: it is only one minute long, and it takes place in an area no larger than several square millimeters. This may be a world record, and the author certainly means to look into it. Anyway, the reason that an entire story is compressed into such limited measures of space and time is because it takes place inside a computer, and in a computer, one square millimeter is an entire world, and one minute is almost eternity.

The story takes place during one perfectly normal and hot summer afternoon, and the computer in question is owned by a boy named Tom. If you asked Tom what happened during that hot afternoon, he'd probably frown in confusion and say that nothing happened. His computer did act a little weird at the time, and Tom noticed it and was surprised, but, as we just said, it was only for one minute, after which the computer went back to its normal behavior.

It all started because a computer virus had infiltrated Tom's computer, a virus quite similar to the type known as "Zutrog-33." His friends called him Zuto.

Let's now dive into Tom's computer, twenty-seven seconds after five past three on a hot summer afternoon. This is precisely when our one-minute story begins, and we land in the center of the Mathematical Co-Processor.

The Mathematical Co-Processor was a moderately-sized city, and at the time, it was bustling as usual. Numbers streamed into the city, gracefully sliding on shiny cables, one bit after the other. (A bit is the numeral zero or one. Numerals 2-9 aren't used in the computer. You can read more in the Zutopedia at the end of the book.) Its thousands of residents filled the streets and factories, going about their business at a leisurely pace (don't be surprised that things occur slowly within the computer; we've slowed down the passage of time so that we can observe what was happening, but in fact, a worker can cross the entire city before you have time to blink), pushing wheelbarrows full of bits around and operating all sorts of devices.

The anti-virus, Silver Shield, a silver metal robot, glided on a motorcycle as shiny as himself into the city's main street. That wasn't an ominous sign, just a routine patrol. Suddenly, Silver Shield noticed graffiti painted in black letters on the wall of one of the houses. "HELP," it read. Silver Shield parked his bike, got off, and walked towards the suspicious inscription in order to examine it closely.

He was a tall and strong anti-virus, with a huge sword hanging diagonally across his back covered by a silver shield. Workers who walked down the street, pushing their wheelbarrows, gazed at him curiously but kept a safe distance.

While studying the graffiti on the wall, Silver Shield noticed a second inscription out of the corner of his eye, down a nearby alley. "Help! Over here!" read the second inscription painted in the same black letters. *Is there some sort of danger that requires my attention?* the anti-virus wondered as he entered the alley, his heavy metal feet pounding. The graffiti went on along the wall: "Help! I'm further down!" "Just a bit more . . ." "You're almost there . . ." Silver Shield continued walking and reading. At the end of the alley he read the last inscription out loud: "I am now stealing your motorcycle."

He turned his head towards the main road and indeed, on his motorcycle sat a small green figure: Zuto.

Zuto perched on the silver motorcycle and tried, unsuccessfully, to start the engine. He turned his eyes towards the alley and saw Silver Shield looking right back at him. The little virus realized that the chase had begun and that he should quickly find the right handle and take off.

Silver Shield recovered and started running back toward the road. While he ran, he drew his sword from the sheath hanging across his back, moving with tremendous speed for such a large anti-virus. Zuto had already caused him many problems in the past, and seeing him sitting now in bewildered confusion on his motorcycle, Silver Shield thought that this was a perfect opportunity to exterminate the little pest, once and for all.

He increased his speed, raised his sword high in the air with both hands, and prepared for a crushing blow. Then he leapt and forcefully swung down the sword.

A clang of metal disturbed the peaceful city. The sharp sword barely missed Zuto's head and hit the ground because just then, the virus found the accelerator grip and took off with a roar. He sped away as fast as he could, which was pretty fast, considering he had never ridden a motorcycle before, and tried to navigate among the workers and their wheelbarrows. The heavy pounding of Silver Shield's pursuing feet echoed in his ears, but steadily grew fainter and fainter, and Zuto started to taste victory.

Just then, the road curved sharply into another street that led out of the city. Zuto, smiling triumphantly, suddenly found himself face to face with a worker hauling a wheelbarrow laden with bits. The startled worker abandoned his wheelbarrow and jumped for cover between two

houses on the side of the road, while Zuto sharply wrenched the handlebar to the other side. The motorcycle slid into the wheelbarrow, and Zuto, the motorcycle, the wheelbarrow, and the bits in it flew in all directions and scattered on the street.

"Are you crazy?" yelled the worker, who quickly regained his senses and returned to the middle of the road. "Don't you know how to drive?!"

"I apologize," said Zuto. "I don't have much experience riding a motorcycle."

He got back on to his feet and wiped the dust off his body. "Here, let me help you put those bits back in the wheelbarrow," he added, and started gathering the scattered bits.

The two quickly completed the task, and the wheelbarrow was full again and ready to go. (Because of the commotion, the bits were now piled in the wrong order, which caused a calculation error. The city's workers were busy dividing the number 4195835 by the number 3145727, and the mess on the wheelbarrow caused the result to be 1.333739068902037589 instead of 1.333820449136241002.) Only then did the worker lift his eyes and got a good look at Zuto.

"Virus!" he shrieked and leapt to hide by the side of the road again. From the direction of the main road, Silver Shield's pounding footsteps could be heard again, drawing closer. Zuto didn't hesitate. He jumped on the motorcycle and fled the scene. The worker waited in his hiding place until the virus disappeared over the horizon, and only then did he venture out, pick up the handles of his wheelbarrow, and start marching, mumbling, "Really, how can one get any work done this way?"

Just then, Silver Shield appeared around the corner and ran straight towards the wheelbarrow. He crashed into it, overturned it, and fell down, taking the poor worker with him.

Chapter 2

Tom was completely unaware of Zuto's presence, since Silver Shield still had not informed him of Zuto's existence. The damages caused by the little virus weren't significant, and so far hadn't disrupted the computer's normal function. (Take, for example, the error caused by the accident in the Mathematical Co-Processor. It merely caused a button in one of the windows on the screen to move one millimeter to the left from its original location.)

While the events in the Mathematical Co-Processor took place, Tom finished downloading and installing a new movie player, Super Media 3.0. He wasn't happy with his previous movie player, Super Media 2.0, which stalled, skipped, and stuttered when playing movies due to what the manufacturer's site called a "known bug in this version."

Meanwhile, inside the computer, Zuto rode away smugly on the shiny motorcycle to his hiding place: the Recycle Bin. The Recycle Bin was a distant open area in which mountains and mountains of garbage had accumulated with time. There were huge piles of boxes and paper files and books and old pictures and all sorts of odd items, as well as several old and defective software applications that shared their residence with Zuto and knew him well.

Zuto rode into the center of the Recycle Bin. There, among the mountains of garbage, stretched a small field full of wild weeds. When he arrived, he was surprised to see a small, unfamiliar figure sitting on a ramshackle brown wooden box on the edge of the field, crying. The figure was so absorbed in its tears that it didn't even notice the motorcycle that stopped beside it. Zuto waited, embarrassed, hoping it would notice him, stop crying, and raise its head. When that didn't happen, he faintly cleared his throat. The figure lifted its head and looked at him.

"Virus!" she screamed, jumping up and standing on the box. Now Zuto could see her clearly. She was tall and pretty. A black celluloid ribbon wound its way around her body like a dress. An abundance of long, thin celluloid ribbons flowed from her head to her shoulders and back. Her green eyes looked at him fearfully.

"Allow me to assure you, lady," said Zuto, "that I have no intention of harming you. Please don't be afraid."

"H-h-how can I trust you?" she asked, "after all . . . you are a v-virus. Although I must admit that I've never met a virus before, and I cer-certainly wouldn't expect him to be so p-polite."

Even though she was afraid, she spoke with a serenity and confidence that surprised Zuto.

"I've never met a virus before, either," he said thoughtfully, "other than myself, of course, so I don't really know how they normally behave. For my part, I try not to harm anyone."

"Isn't that Silver Shield's motorcycle?" she asked suddenly. Everyone knew Silver Shield and his famous motorcycle.

"Uhhh . . . yeah." Zuto shrugged.

"There you go!" she said, "you s-stole his motorcycle. From which I can conclude that you are ha-ha-harmful and not nice at all."

"Well," replied Zuto, "of course I'm not nice to Silver Shield. He's been trying to eliminate me for some time now, so why should I be nice to him?"

The figure thought to herself that Zuto had a point and pondered whether it was enough to justify his actions.

"That aside," Zuto added, "surely you know that standing on a box does not give you any kind of immunity against viruses."

"I'm afraid I must agree with you on that matter," she said, and climbed off the box. "I'm used to people climbing up on an elevated object when they are alarmed by something. That's how it is in the movies."

"So who are you really?" he asked now that she was standing closer to him.

"I'm Super Media 2.0," she said and lowered her gaze. "I was just cast aside because of Su- because of Su-" she took a deep breath, "because of Super Media 3.0."

"Oh, right," said Zuto, "you've been replaced with a newer version."

"Yes, because I stut-stut-stutter," she confessed. Tears gathered in her eyes again.

Zuto didn't know what to say, so he just let her cry quietly.

Super Media 2.0 took a deep breath and asked, "So why did you steal the mo-motorcycle? Apart from your general intention to irritate Silver Shield?"

Zuto had never stopped to think about it, until now. Of course, in his opinion, any deed that could annoy Silver Shield was a worthy one, yet he had many other easier and simpler ways to irritate the anti-virus. So why did he choose to put himself at risk by stealing the motorcycle?

"I kept seeing Silver Shield ride this motorcycle," he finally said, "and I saw everyone looking at him with respect and clearing the way for him. I envied him. I thought that if I borrowed the motorcycle and rode it, I would feel big and important too. Anyway, I intend to return it soon."

Super Media 2.0 was impressed by his honest answer. "Well," she asked, "Did you feel big and important when you rode over here?"

"Yes," admitted Zuto, "I felt different. The wind on my face . . . the rumble of the engine beneath me . . . just for a moment I forgot that I'm nothing but a small, green creature and I felt as though I was . . . someone!"

While he spoke, Super Media 2.0 kept drawing closer to the motorcycle. Red and blue buttons protruded from the dashboard.

"I wonder what this button is for," said Zuto and pressed the blue button. A small light up front started flickering blue, and the loud sound of a siren sliced the air. Zuto jumped off the motorcycle in alarm and landed upside down in one of the garbage piles.

Super Media 2.0 laughed. "It's only a siren," she said, turning it off by pushing the blue button again. "What startled you so?"

Embarrassed, Zuto got up and stood by her again. "I'm used to running away when I hear that sound," he explained. "It's instinctive."

They looked at each other and suddenly both of them burst out laughing.

"Now let's check what the red button is for," said Zuto and reached out.

"Are you crazy?" cried Super Media 2.0. She stopped his hand before he could press the button.

"What?" Zuto asked in wonder.

"Red buttons are dangerous. That's how it is in the movies."

"Come on," said Zuto, "don't be such a scaredy-cat."

"I *am* a scaredy-cat," confessed Super Media 2.0 proudly. "That's how I protect myself from danger."

"You don't . . ." Zuto tried to continue arguing, but just then, Newton, an old friend of his, stepped into the field.

Full version is available from Amazon
(Paperback & kindle editions)
and other vendors.

More details in zutopedia.com