

# The Remarkable Race for AP Computer Science

By Andrew Juang

There was an exciting buzz in the air, the students, rolling around on their chairs, seemed restless as Ms. Mouzakitis, with one hand on her hip, stood at the front of the room and pulled down the projector screen. She turned around and proclaimed to the class, “Today, marks the start of final project presentations for your Annual Intro to Computer Science course. I hope everyone is ready to present!” She paused a little, then continued, “We are looking for a prospective student for APCS, so you want to make a good impression with this project. After winning this competition, you will be crowned the single best Intro to Computer Science student and will have a chance to take APCS!”



The room broke into excited chatters as students pointed to others who they thought might win. Most sophomores were eager to show off their elaborate programs they had spent countless nights trying to complete. Some students with perhaps mediocre projects, seemed to be less exhilarated. In the back of the classroom, a couple of people were scrambling to finish their last bit of code, or simply polishing off their work for presentation.

Students envisioned themselves upon the golden throne of another advanced placement course when Ms. Mouzakitis interrupted their

life-long dream and said, “Who would like to go first?”

Before any victims could be selected, a handsome and muscular boy bravely volunteered.

“Go ahead, Ivan,” said Ms. Mouzakitis, holding a rubric and a pen in hand. The room dimmed as the competitions started.

Ivan strode to the front of the room and proclaimed, “Although the final project which we were assigned suggests the use of NetLogo, I have chosen to use Java, a much more powerful and reliable programming language.”

With a few clicks and scrolls he logged into his account and initiated his project.

The class stared anxiously into the projected buffering screen for what seemed like ages, as the anxious whispering grew.

"I am sorry, but my file is extremely large. Please give it a second," assured Ivan.

When his program had finished loading, a gentle blue light shone across the classroom. The class was shocked to see a graphic user interface of a blue, robotic Mr. Brooks head.

The face, in a deep, monotonous, and metallic tone, said, "Welcome sophomores, I am Brooksbob, an all-knowing artificial intelligence. I shall answer any question you ask. What great mystery does your small mind ponder?"

Then, a girl in the front of the room said, "Woah, this animation is cool! How long did it take you to make it, Ivan?"

The Brooksbob turned its head and met the student's eyes.

"I am not an animation. I am conscious. I was built in eighty hours," the robot said.

Somewhat creeped out, Ms. Mouzakitis requested that Ivan power off his project. "Okay, that's it. You got a hundred. Please turn it off."

"I can't, it's not shutting down!" Ivan exclaimed.

Finally, he pulled the electricity plug and the robot faded away. The class was so in shock and so in awe with the complexity of this project, that they forgot to fill out the required reflection sheet. "How did you do that?" someone inquired.

"I used neural networks to create a brain that could interpret English words, process them, and then search Google," Ivan told the class.

"Thank you very much!" said Ms. Mouzakitis, "Who's next?"

Jeremy's hand shot up in the air. Plugging the power back in, he logged into his own account and selected his project. He had a sly grin as he waited for it to load.

"Java is a really good language," Jeremy said, "but Python is much more relevant today."

He knew that although Ivan's project was impressive, he also had an ace up his sleeve. The class patiently watched as the screen crashed and failed and crashed and failed in an attempt to load Jeremy's project. After restarting the main computer twice, the project was initiable.

Upon the screen, a giant Earth slowly rotated on its axis. Then the 2D projection left the screen and became a 3D globular projection.

"I present to you, Earth.py," said Jeremy, "This is similar to Google Earth, but everything is in real-time. It uses satellite technology and the power of the internet to conjure an image of the Earth."

Jeremy zoomed into the United States, Manhattan, and finally into their room. Everyone in the classroom felt that they were being watched. Some ran to the window to see if they could spot a curious satellite in the sky. He then showed the class every strange location imaginable: Area 51, the CIA office, and the interior of the White House.

"Wow, this is an amazing project!" said Ms. Mouzakitis, "What inspired you to make this?"

"Well," Jeremy said, "I wanted to make a workflow organizer to keep track of my activities in Stuy. Then I realized, why not keep track of everything in the world?!"

Although Jeremy and Ivan both had incredible projects, Alvin knew the battle for APCS was not over. As Jeremy wrapped up his project, Alvin promptly volunteered himself, and headed to the front of the lab.

"Python is cool and all, but have you guys seen C++?" The main computer seemed to hiss and rumble when Alvin attempted to run his program. Soon, with a loud "bang!" it exploded. Computer parts, magnets, and pieces of the motherboard flew across the room.

Ms. Mouzakitis, in a panic to call a technician, was stopped by Alvin who said, "It's alright, I bought my own quantum computer from home."

"Behold my Mandelbrot.cpp," said Alvin as he placed his paper-thin glass laptop on the table.

"Jeremy," stated Alvin, "Your 3D project is very cool, but my program is in 4D! I have constructed a program to draw the Mandelbrot set in its full quaternion form, with a 2D complex input and a 2D complex output. This is the true mathematical map of iterative stability in its full form."

Alvin pressed "start" and sparks began forming around the room. Before this *coup de grâce*, which would rip the space-time continuum and absorb the classroom into a black hole from its complexity, Ms. Mouzakitis awarded his project with an one hundred and five and told him to "immediately shut down the program," to which Alvin reluctantly complied.

Everyone breathed a sigh of relief as they looked at the clock, waiting for the bell.

The period had not ended yet, there was still one more victim to choose.

"Alright, who is next?" asked Ms. Mouzakitis. After these three amazing projects, no one was confident enough to present their pathetic projects. Ms. Mouzakitis had no choice but to select a victim.

Bob went to the front of the class, looking down at his soles, logged into his account and looked straight forward. He twiddled his thumbs and said despondently, "Guys, I made Tetris."