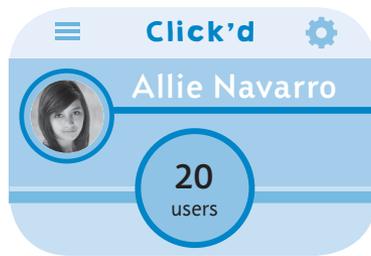


one



Allie tightened her grip on her phone as she stepped out from behind the curtain and walked to the center of the stage. She looked out into the Fuller University Auditorium. The room was packed with people, and all but three of them were complete strangers.

*Speak clearly,* she silently reminded herself. *Smile. Relax. Do it exactly the way you've practiced.*

Allie looked down and spotted her parents in the front row. Her mom waved. Her dad gave her a thumbs-up.

Sitting next to her mom was her middle school computer science teacher, Ms. Slade. She had helped Allie get into the highly selective CodeGirls summer camp by

working with her on her application, essay, and sample game. Allie smiled at her and mouthed the words *Thank you*. Ms. Slade smiled back as she brought her palms together.

Then the lights dimmed and a spotlight shined down, warm on Allie's skin, blinding her. She was relieved that she could no longer see Ms. Slade. It helped her keep her mind off the real reason her favorite teacher was sitting in the audience.

Allie realized she was fidgeting with her phone, so she tucked it into the back pocket of her jeans and forced herself to stand taller.

She took a deep breath.

And then she began.

“On the first morning here at CodeGirls Camp, our instructor told us we had a whole summer to create any kind of app or game we wanted. *Anything*. Something just for fun. Something that would solve a real-life problem. It was *entirely* up to us. I loved that.” Allie leaned forward and brought one hand to the side of her mouth, like she was telling them a big secret. “That hardly ever happens to seventh graders in real life, you know.”

The audience laughed.

“But I admit,” Allie continued, “on that first morning, I wasn't sure I was ready for that kind of challenge. I was *waaaay* too busy being terrified. Because I didn't know a single person.”

Allie began pacing the stage. Her legs were shaky and she hoped the audience couldn't tell.

“I kept looking around the room at these girls—nineteen total strangers I’d be spending my whole summer with—and wondering who they were. Did we like the same music? Did we read the same books? Did they have sisters or brothers? Where were they from? I knew we had one thing in common—we were coders—but everything beyond that was a total mystery.”

She glanced over to the side of the stage and relaxed a little when she saw her friend Courtney hiding behind the curtain, wearing a huge grin and nodding encouragingly.

Allie returned to the center of the stage. “And that’s when the idea hit me. Why not an app that could help you make new friends? You know, something to tell you who you clicked with.” As she said the word “clicked,” she snapped her fingers.

Allie pulled her phone from her pocket and waved it in the air. “For my summer project, I created a game called *Click’d*.” She loved the name. She thought it was a catchy way to describe what the app did.

The logo zoomed open on the huge projection screen behind her, and Allie glanced over her shoulder. She beamed every time she saw it; she couldn’t help herself. She loved the soft blue background and the white, pencil-thin swirls that formed two stick figures with their arms around each other.

“Let me demonstrate how it works. This auditorium seats two hundred and twenty people. I assume most of you don’t know each other,” she said jokingly, and beyond

the glare, she could see people looking around and shaking their heads.

“What if I told you there was one person in this room right now who had more in common with *you* than with anyone else?” Allie held her finger up in front of her. “One person who, statistically speaking, you have more in common with than anyone else. Of course, you could leave this room and never know who that person is, but . . .” Allie leaned forward, resting her hands on her knees, and crinkled her nose. “Wouldn’t it be more fun to find out?”

Allie waved her phone in the air. “We’re going to use that audience-polling app you installed, so, everyone, please pull out your phones and play along.”

That was the cue for the stage crew to raise the house-lights. Now she could see the audience much better, which meant she couldn’t help glancing down at Ms. Slade again. It looked like she was taking notes, but at least she was smiling.

For her nineteen fellow CodeGirls, the presentation was a celebration of all the hard work they’d done that summer—but for Allie, it was that and more. Ms. Slade was a mentor for Games for Good, an annual teen coding competition run by Spyglass Games. Allie hadn’t even considered applying for the contest at first, but once Click’d started getting attention at camp, she thought she might have a shot. She’d already sent Ms. Slade the code, but she had to nail this presentation if she was going to fill the last remaining spot in the competition.

Allie took a deep breath and looked back at the rest of

the audience, scanning the room. “Ready, everyone?” she asked as the screen behind her filled with four scenic photographs. “Which do you prefer: the ocean, the forest, the desert, or the mountains? Select A, B, C, or D.”

She advanced the slide.

“Now pick a favorite dessert.” The screen displayed four new images: a bowl of ice cream, a slice of cake, a candy bar, and a piece of apple pie.

Allie looked down at her screen. She could see the data collecting in the app she’d built specifically for this demonstration. It used the same algorithm as Click’d, taking all the information the audience entered and immediately matching people with overlapping interests.

“Let’s do some more so we have lots of information to work with,” Allie said, and she flipped through seven additional slides, asking the audience to pick a favorite superhero, car, breakfast cereal, word, sculpture, color, and houseplant.

“When you’re done with the quiz, Click’d figures out how you scored against each person, but it doesn’t immediately tell you who your top friends are, because that wouldn’t be as fun,” she said with a wink. “Instead, Click’d uses sounds, lights, and clues to help you find your top ten friends.”

As she walked across the stage, she noticed her legs weren’t shaking anymore. She pressed a few more buttons on her phone.

“I’m shortcutting things since this is a demo.”

Allie tapped on her screen, and one of the phones in the back of the room let out a sound that startled its owner. “Sir, would you please stand?” She tapped another button, and a phone in the front row on the opposite side of the theater sounded. A woman held her phone in the air and then stood and turned around.

“Congratulations! If you two were playing Click’d, you’d be in a spot on each other’s leaderboards.” They waved at each other from across the theater.

“That’s basically how my game works. You take a quiz, the algorithm figures out who you have the most in common with, and then it uses your smartphone’s geolocation capabilities to help you find each other.”

Everyone clapped as the man and woman took their seats.

Allie glanced over at Courtney again. She had a huge grin on her face. Allie looked back at the audience, feeling on top of the world.

“The leaderboard is dynamic, constantly changing as new people join.”

The screen behind Allie filled with a picture of the CodeGirls, running around the computer lab with their phones high in the air, trying to find their matches.

“As soon as Click’d identifies someone on your leaderboard who’s within three hundred feet, your phone flashes blue and it *bloops*.” Allie brought the microphone closer to her mouth and whispered, “That’s a technical term,” and



everyone laughed again. “When the two of you get within one hundred feet, it *bloops* twice and turns yellow, and then, when you get within thirty feet, it turns red and gives you a hint: a photo from that person’s Instagram feed.”

Allie rooted her feet in place. She was feeling good now. She didn’t look at Ms. Slade. She didn’t need to.

“When you find each other, you tap your phones together and see where you rank on each other’s leaderboards. Then you hear this sound.”

*Woo-boo!*

The audience laughed again, and Allie couldn’t help but smile. “That sound is telling you to take a selfie together. The

picture is sent to the whole user community to announce the newest click.”

She advanced the slide to a photograph of two CodeGirls with their arms around each other, and then another set of two, and another set of two.

Then she opened Courtney’s profile.

“This is Courtney. We landed in the number one spot on each other’s leaderboards.”

A photo of Allie and Courtney filled the monitor. Then Courtney walked out from behind the curtain and threaded her arm through Allie’s.

“Obviously, there’s more to friendship than overlapping answers on a quiz. But in our case . . .” Allie and Courtney looked at each other. “An app helped us see how much we had in common.” They both snapped their fingers at the same time. “And we clicked.”

The two of them bowed and the room exploded with applause. Allie and Courtney waved and ran offstage. Their CodeGirls instructor took their place, thanked Allie, and introduced the next presentation.

When they were behind the curtain and out of sight, Courtney hugged her. “You were amazing!” she said. When she pulled away, she gripped Allie’s arms with both hands and looked right into her eyes. “You have nothing to worry about. Your teacher is going to love it!”

“I hope so!” Allie said.

As soon as the presentations were over, Allie saw Ms.

Slade heading up the steps and onto the stage. She reached for Courtney's hand, squeezing it hard, like she could wring good luck out of it. Ms. Slade stopped in front of them and looked at Courtney. "Your game was fantastic!" she said, and Courtney thanked her. Then she looked at Allie.

Allie hadn't seen Ms. Slade since school got out. Now that she was standing so close, she could tell her hair was a lot shorter, and that made it even curlier than it usually was. But otherwise, she looked the same, with her rich brown skin, and her warm, friendly eyes, and as always . . . the earrings.

Allie beamed when she saw her little swirly stick-figure friends on the light blue background. "You made Click'd logo earrings!"

The earrings were Ms. Slade's trademark. She wore different ones every day—pizza slices, tiny power tools, lightbulbs—all made on the computer lab's 3-D printer.

"Of course I did," she said as she batted her fingers against them. "I made a pair for you, too. I thought you might want to wear them onstage next weekend when you present at the Games for Good competition."

Courtney gripped Allie's arm harder.

"Really?" Allie asked.

Ms. Slade nodded. "I've been digging into your code all week and trying to break it, just like the judges will. And I've gotta say, it seems to be rock solid."

Allie looked at Courtney. "The CodeGirls have been

helping me test it all summer. If they can't break it, no one can!"

Ms. Slade was beaming. "And your demo was perfect. The judges are going to love Click'd."

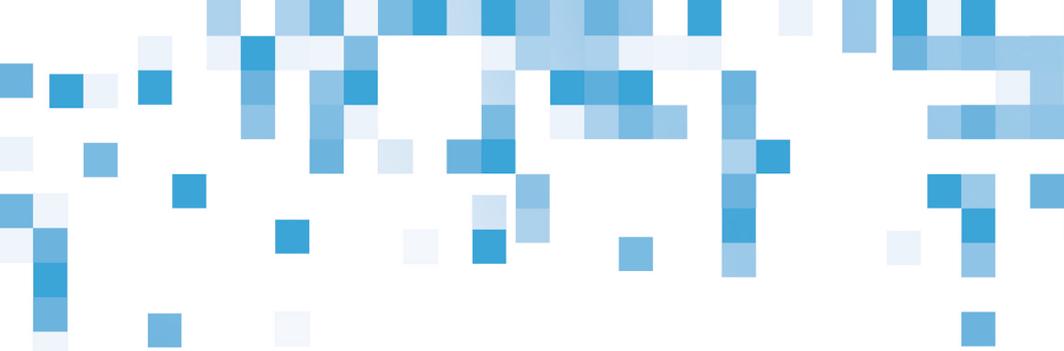
"I told you!" Courtney said.

Allie had built apps before—fun games for her friends and word puzzles for her parents, but she'd never made anything like Click'd. She felt like she was about to burst with pride.

"So let's make it official. What are you doing next Saturday, Ms. Navarro?" Ms. Slade asked.

Allie stood up taller, threw her shoulders back, and put on her game face. "I'll be presenting in front of a thousand people at the Games for Good competition." She tried to stay serious, but she couldn't seem to get her mouth to cooperate.

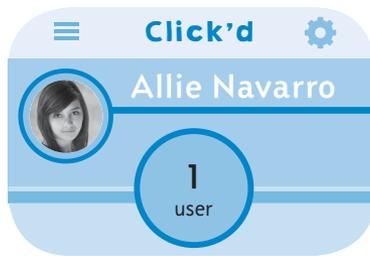
Ms. Slade gave Allie a fist bump. "Do exactly what you did up there today and you'll knock it out of the park." As she walked away, she called over her shoulder, "Don't change a thing."



**monday**



## two



Allie rested her lunch tray against her hip and took a deep breath. *Relax*, she told herself. *They're going to love it.*

Her friends were sitting at their usual table out by the big oak tree. When Zoe saw Allie coming, she jumped up from her seat, ran to meet her, and threw her arms around her.

“You weren’t on the bus,” Zoe said.

“My dad gave me a ride.” Before Allie could get the words out, Emma was pushing Zoe out of the way, and Maddie was on her other side, fighting for space, too.

“You’re back!” Maddie said.

“When did you get home?” Emma asked.

“Late last night,” Allie said. “It took me forever to pack up my dorm room and say good-bye to everyone, and then my parents insisted on taking me to dinner to celebrate.”

Her friends knew what that meant.

“You got into Games for Good?” Zoe asked, and Allie nodded fast.

“I knew you would!” Emma said.

“We never doubted it!” Maddie added.

They all walked back to the table together. Allie sat between Zoe and Emma, just like she had all last year, and Zoe gave her a playful bump with her shoulder. “Missed you, nerd.”

Allie smiled and bumped her back. “Missed you more.”

Then Allie rested her elbows on the table and looked at them. “I can’t believe I haven’t seen you guys all summer. What did I miss? Tell me everything. Like . . . what was the best soccer tournament?”

“Oregon!” Maddie shouted at the same time Zoe yelled, “Lake Tahoe!”

“No way!” Emma said as she slapped her hand hard on the table. “Are you kidding me? San Diego was the best! Highlight of the summer. No question.”

“What are you talking about?” Maddie asked. “It was *insanely* hot . . . like a hundred and two degrees the entire time. We were *melting* on that ridiculous black turf. How could that have been your favorite?”

“One word,” Emma said. “Pool.” She looked right at Allie. “When we got back to the hotel after the first day, the whole team ran straight for the pool. We kicked off our cleats and jumped into the deep end holding hands, in our uniforms and everything!”

Allie felt a little twinge of jealousy. She’d been so caught up in her own world all summer, she hadn’t thought much about what was happening back home. She hadn’t missed a soccer tournament since third grade. It was so weird to think that her best friends had more than two months of memories that didn’t include her.

“Wait. You’re all skipping the most important part,” Zoe said.

“What?” Maddie asked.

Zoe threw her arms up in the air. “Waffles?”

Emma let out a sigh. “Oh, brother. Here we go again.”

“The breakfast buffet had one of those waffle makers that flips over and cooks two waffles at once.” Zoe pulled her hands away from the sides of her head, like it was exploding.

Allie laughed. “What is it with you and those waffle makers?”

“Crispy on the outside, fluffy on the inside. They’re magical. Like unicorns. Or . . . Pegasuses,” Zoe said.

“Pegasuses?” Emma wondered. “Or Pegasi?”

“I don’t know.” Zoe tossed a Cheeto at Emma’s head and she batted it away. It landed on the table, so she picked it up and chucked it back at Zoe, laughing.

“Anyway,” Maddie said. “The point is that we missed you.”

“Every day,” Zoe said.

Everyone was quiet for a few seconds. Until Emma looked at Zoe and whispered, “But our summer was pretty epic,” and she winked at her and said, “It seriously was.”

“Come on, don’t make her feel bad, you guys,” Maddie said. Then she turned to Allie. “Besides, I’m sure coding camp was just as *epic*.”

Allie heard the sarcastic emphasis on the last word, but she ignored it. Her summer may not have been filled with hotel pools and tournaments, but it had been its own kind of epic. Plus, the college’s cafeteria had one of those waffle makers, too.

“Actually, I had an amazing summer,” she said as she unwrapped her sandwich.

Zoe looked at the others, then took the lead and said what Allie figured they were all thinking. “Really?” she asked, drawing out the word. “Computer camp was ‘amazing?’”

“Yeah,” Allie said. “I mean, I missed you guys every day, but it was even more fun than I expected it to be.”

No one said anything, so Allie launched right in.

“We lived on campus, right in the dorms,” she began. “It felt like being away at college. And my roommate, Courtney, was super nice. . . . All the other girls were, too.” She was talking fast, but she couldn’t help it.

“Oh, and I thought the computer lab would be dark and

depressing, but it wasn't at all! It had these massive floor-to-ceiling windows on three sides, so everyone called it the Fishbowl. It was incredible. Superfast machines with giant monitors and a bunch of stations for big animation projects."

Allie thought she might lose their attention completely when she started talking about the Fishbowl, but they still seemed to be listening.

"This is interesting and all," Emma said, "but you've been texting us all summer about this thing you were building." She waved her hand toward her chest in this well-let's-see-it kind of way.

Allie scanned the quad to make sure Mr. Mohr wasn't nearby, then reached into her back pocket for her phone. "I've been dying to show you—"

"No!" Maddie shrieked. She covered her mouth as her eyes grew wide, fixed on something in the distance.

"What?" Zoe asked.

"Hair," Maddie whined from behind her hand as she stared at Chris Kemmerman and his friends, sitting three tables away. "It's . . . it's . . . gone."

Toward the end of sixth grade, Chris Kemmerman seemed to be the only subject that kept Maddie's attention for more than two minutes. Allie had been hoping the novelty had worn off over the summer. Apparently, it hadn't.

"County was two weeks ago," Zoe said matter-of-factly. But she could tell from their blank stares that they weren't making the connection. "All the swimmers shave

their heads before the final County meet. It cuts down on drag. Improves their race times.” She gestured toward the eighth-grade section on the opposite side of the courtyard. “My brother shaves his arms, his chest. Even his legs.”

“He does?” Emma asked, crinkling her nose. They all turned to look at Chris and his friends again, trying to get a better view of their legs.

“Actually,” Allie said, “I think he looks even cuter without hair. You can see his eyes now.”

“I agree,” Zoe said, resting one hand on Maddie’s back. “Besides, who needs hair when you have those shoulders? I mean, look at them.”

“I guess . . .” Maddie pouted. She let out a loud sigh and said, “But I loved his hair.”

Allie scooted her lunch to one side, sat on top of the table, and waved her phone in front of her. “Well, maybe he’ll be on your leaderboard.”

Maddie’s eyebrows pinched together. “What are you talking about?”

Cell phones were strictly prohibited during the school day, so Allie gestured for the three of them to come in closer. They clustered together, knees touching, and leaned in, blocking her phone from view.

She lowered her fingertip to the glass and tapped on the Click’d icon. Her app launched and the words *Ready to click?* appeared in narrow, loopy letters. She felt her chest swell with pride.

“You start by creating a profile with all the typical stuff. Here’s mine.” Allie tilted the screen toward her friends.

“When you open Click’d for the first time, it asks you about your favorite school subjects, what sports you play, what video games you like, what you look for in a friend . . . that kind of thing. Once it has all the basic data, it goes through fifty items and asks you to pick a favorite. It’s like those online quizzes you’re always taking, Emma.”

“I love those quizzes!”

“I know! I got the idea from you,” Allie said, and Emma grinned and tipped her head to one side. “When you’re done, it ranks how compatible you are with other people in the system. But here’s the fun part—it doesn’t show you who they are. You have to find them based on clues.”

“Like a scavenger hunt?” Zoe asked.

“Exactly,” Allie said.

“So wait,” Maddie said, straining over Emma’s shoulder to get a better view. “How does it know who’s most compatible?”

“It’s all about the questions.” Allie didn’t want to talk in jargon about fields and algorithms, so she answered as simply as she could. “I even made up a fake name and joined a few online dating sites so I could see how they worked. Click’d looks for things two people have in common. That’s it, really. The more you overlap, the higher your score. The higher the score, the higher your spot on the leaderboard.”

Allie went back to the main screen, tapped on the LEADERBOARD tab, and ran her fingertip slowly down the glass, scrolling through the list of photos. “This is how my fellow CodeGirls and I ranked,” she said proudly.

“What’s going on here?” Allie looked up in time to see Mr. Mohr standing right behind Emma, trying to see over her shoulder and into the circle. Allie pocketed her phone as quickly as she could.

“Nothing,” Zoe said. “Allie was telling us a joke.”

The girls scrambled into their seats and reached for their food.

“I didn’t see a phone, did I?”

Before Allie could answer, Maddie spun around and looked him right in the eye. “Did you have a nice summer, Mr. Mohr?” she asked sweetly.

Allie could tell he wasn’t buying the diversion tactic, but he must have been feeling generous. It was the first day of school, after all.

“It was very nice, thank you,” he replied. “My kids and I went to Washington, DC, and New York.”

“That sounds so fun!” Maddie said, smiling and nodding, but his face remained completely expressionless.

“It was. I highly recommend it.” He locked his hands behind his back. “Welcome back to Mercer,” he said, and then he walked away, scanning the quad, looking for his next stop.

Allie waited until he was over by the sixth-grade section, and then she pulled her phone out again. “Wanna try it?”

Zoe, Emma, and Maddie smiled at each other. “Um, yeah!” Zoe said, speaking on behalf of all three of them.

The night before, Allie created a new group called “Mercer Middle” so she could keep her school friends separate from the CodeGirls. She tapped on the pull-down menu and opened it. Allie was the only member, but she wouldn’t be for long.

She curled her body over her phone again and navigated to the LET’S CLICK button. It opened her contacts and she selected the boxes next to Zoe, Maddie, and Emma’s names. And then she looked at each of them in turn. “Ready?” she asked.

They all nodded.

Allie pressed INVITE.