



CASE STUDY

BEAUTY & FITNESS



Event coordinator helps track mountain bike racers during COVID-19 with AppSheet

Using Google Cloud's AppSheet, event coordinator Hennie Scheepers created a no-code app to register and time racers in the Nissan Trailseeker Series, South Africa



Faces Advendurance

Pretoria, South Africa

<https://advendurance.com>

About: Faces Advendurance, a major South African endurance event organizer

An avid cyclist and mountain biker who studied industrial engineering, Hennie Scheepers found his dream job as Information Systems Manager at [Faces Advendurance](https://advendurance.com). The South African company organizes a wide range of adventure endurance sporting events including cycling, mountain biking, obstacle course racing, and trail running.

The Nissan Trailseeker Series is one such event, known for its outstanding trails, scenic locations, family-friendly experience, and competitive field. Held in the outskirts of the capital city Pretoria, the race is open to both novice and professional mountain bikers and runners of all ages. For

months, Hennie prepared for this highly anticipated event, scheduled for September 4–6, 2020.

Since 2017, Hennie had been using Google Sheets to manage the Faces Advendurance registration process. “An events company’s biggest asset is its database,” he explains. He says it became costly and time consuming to outsource registration to a third-party vendor. So Faces Advendurance took the function in-house.

“I built our registration system onto Google Sheets, which I liked very much, so we could do registration on our own,” he says. The solution worked, though he had to teach numerous volunteers, including many students, how to use the system on race mornings. Sometimes, mistakes were made. He knew he had to find an easier way to track race participants and update data on the fly.

Then, COVID-19 made everything even more challenging.

The challenge: Rethinking race registration

Hennie admits he’s not a programmer, though he enjoys keeping up with technology trends. As an info systems manager, it’s his job to find software and apps that keep his company’s services up and running smoothly. Bringing the digital and physical worlds together can be a logistical challenge, especially for events in remote locations.

When the coronavirus pandemic put new restrictions on sporting events—including how many participants could enter a race course at one time—Hennie started brainstorming easier ways to manage registration and participant activity. He needed to find something that could quickly and accurately pull in database records; track participants’ start, checkpoint, and finish times; and be easy for multiple event volunteers to update data in the field from their mobile phones.

“We started printing QR codes on timing boards in January 2019, but could never find a way to efficiently scan the codes and submit the number to a database,” he explains. “When we went into lockdown, I was searching for QR code scanner apps, and somehow, I stumbled across [AppSheet’s](#) no-code development platform. At the time, I didn’t even know no-code existed. I liked that AppSheet could pull in data from Google Sheets. I’m such a nerd, I stayed up in bed at night watching [AppSheet YouTube tutorials](#) to learn what it could do. I thought, ‘I can do this. Let’s give it a try.’”

Choosing AppSheet: Making course corrections

“The Nissan Trailseeker is [the biggest mountain bike series in the world](#), with six events per year attracting 3,000 riders per event,” Hennie explains. Some events, such as the Pretoria mountain bike race in September, span three days and conclude with a trial run attracting between 400 and 1,000 runners

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per event. That's a lot of mountain bikers and runners, trail courses of varying distances, and time slots to manage and track.

"Now, our COVID regulation stipulates that we're only allowed 300 people at an event," Hennie continues, "and we must start them in batches of less than 50." To foster social distancing and limit the number of people on the course, they broke the big race down into six smaller events, totalling 1,800 participants to register and time.

Google Cloud's AppSheet enabled Hennie to build a quick-and-easy app that imports data into Google Sheets from race participants who have pre-registered online through their entry platform. He then installed his custom app onto 20 race phones and distributed them to students and other volunteers.

Volunteers can use the app to register new participants as they arrive at the event, assign them race numbers, and plug them into available time slots. Faces Advendurance uses an RFID (Radio-Frequency Identification) timing system, where race participants get a tag with a tracking code that is automatically scanned by RFID readers as participants cross the finish line. Participants' results automatically update in Google Sheets and are then made available in the app in real time for race organizers. When mountain bikers and runners cross the finish line, the RFID system enters their race number and a timestamp is added to Google Sheets and Hennie's app.

"I built the app in such a way that anyone can register at any time," Hennie says. "I know when they start, I know which batch they start in—and compared to what we were doing before, no one can make a mistake now. So I can literally give the phone to a student and show them in one minute what to do."

The app has also improved handling of event logistics. "In the past, everything had to be done on laptops," Hennie says. "The challenge with that is we have to set up tables with generators and electricity and WiFi. When there are 3,000 people on the venue the [cellular] tower struggles to handle it. When I read that AppSheet apps can go offline, it was a colossal plus. So I bought phones with dual SIM cards and two providers. Now, there's no problem at all if there's no connectivity."

Hennie's new AppSheet race registration app was put to the test at the September 2020 event.

"It could hardly have gone better!" he says. "We received so many compliments from participants about the new registration system." Thanks to the app, the company created a much faster registration process, a neater registration area ("no laptops, cables, or power supply units!"), improved timing accuracy, and offered greater convenience for racers in the

"AppSheet is great for making apps to manage our races. I can literally give the phone to a student volunteer and show them in one minute what to do."

—Hennie Scheepers, Information Systems Manager, Faces Advendurance

field (no need to return to the registration table to make changes). Limited Internet access did not slow things down. Hennie also combined COVID-19 screening into the app's registration process, cutting out an extra step.

And when the timing scanners hiccuped at the mountain biking finish line, Hennie “quickly built a backup timing solution in AppSheet, enabling our staff to scan each finisher's race number using the QR code we printed in the number board.” The app has also enabled event organizers to more quickly handle race participant queries after the event.

The results: Getting out in front of the race

With Hennie's custom-built AppSheet-powered app, he and Faces Advendurance can now focus on running sporting events—often in remote areas—and on timing race participants, without worrying about connectivity issues and other technical difficulties.

“[The results](#) are fed directly from Google Sheets to WordPress,” Hennie says. “So when someone crosses the finish line, their result is posted online immediately. Our admin staff is incredibly impressed by this new functionality. It made their lives much easier. They are able to provide quicker and more accurate service to our participants.”

Hennie says the sky's the limit with AppSheet-powered apps. He's now experimenting with breaking down different types of relational databases into subsets (e.g., batches of participants, course lengths) and specific disciplines (mountain biking, trail running, and road racing), for even more precise event management and better customer service for participants. He's even built a COVID-19 compliance app for his children's school to allow administrators to take students' temperatures and enter them into a [Google Data Studio](#) dashboard.

“In our world, this is a game changer,” Hennie says. “No one in South Africa is doing it this way because there are too many variations for a standard [off-the-shelf] app. Now I'm building an AppSheet app for our obstacle races. Our two biggest events are a cycling event (Ride Joburg) of 20,000 cyclists and a running event (Cape Town Marathon) with 25,000 runners. And both of those have registration challenges. I think our AppSheet apps are going to answer all of that.”

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About Google Cloud's AppSheet

Our data-driven, no-code development platform empowers everyone to build apps and transform their workplace. We hope you've enjoyed reading this story and that you're ready to become an app creator, too. Sign up for free to start building apps with your data. [Sign up](#)

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