

Orange Jobs

2020-2021 edition

Get a buzz

Do you feel
useful at work?

Feeling useful in your job

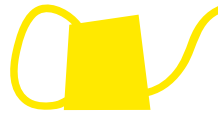
is still one of the easiest ways to find out what makes you tick and gives you a buzz day after day, like...

03 Being a role model for young women

that is what Sandrine is, a committed developer

10 Helping one another to grow

as Fatima and Rémi will tell you!



06 Helping colleagues

like Sarah, a volunteer on the LetMeHelp project

11 Hiring, even at a distance

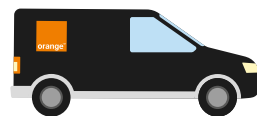
... hear how it works with Eva and Axel :-)

07 Innovating in healthcare

to create the operating theatre of the future with Icham's teams

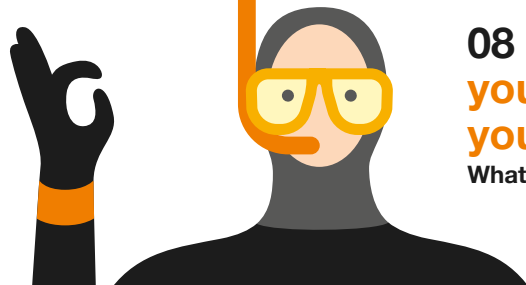
12 Providing your internet connection

is Adam's job, one of our shadow heroes



14 Making a contribution to a major project

like Sarah, former apprentice in cybersecurity



08 What's more, you'll be spoilt for choice to find your field

What would you choose to feel useful?



“Yes, I’m a woman, and yes, women can be successful in tech”

Hi, I'm Sandrine.



I'm the manager of a team of eight developers, and part of the software community, gathering all the champions in this field 😊

she wants without having the weight of her family's expectations, her teachers, or her friends (I know that some young girls are under tremendous pressure in that respect), then I'm being helpful.”

The company facilitates this type of commitment: the time she spends going to high schools and universities or meetings with the girls she mentors is done during working hours.

Today, Sandrine regrets the lack of female applicants when she hires employees for her teams.

“If I were to give young girls advice, I would say to them:

Don't be afraid. Apply even if you don't meet all the criteria!

What drives her forward? Perhaps the model passed down from her mother who showed her what you can accomplish in work as a woman. And probably her own children. “I have daughters and I tell myself that everything I do, I do in part for them too, to pave the way for them for later, so that they can really do what they want.”

With her soft-spoken but firm temperament, Sandrine works with her teams on telecom network data. Her work helps to reduce the energy consumption of mobile network antennas, to perform predictive maintenance on networks, and to fight against router hacking.

Sandrine always wanted to work in technical fields. “I wanted to work in IT, and that's what guided me forward.”

She owes her commitment to gender equality to a particular event. **While discussing students' grades, a teacher said,**

That girl doesn't work, let her go, it doesn't matter, she'll find a good husband.



And no other teachers reacted.

“It occurred to me that the best way to fight against that sort of prejudice was to go into schools and say, “I studied science and yes, I'm a woman and yes, women can be successful.”

Sandrine works with an association called Elles Bougent (Women on the Move), which goes into schools to promote technical careers for women. She also works with a second association called Capital Filles (Girls Capital), which provides career guidance for young women. She mentors two young women every year.

What guides her forward and makes her feel useful is actually quite humble.

“I tell myself that if I can help even just one young girl to do exactly what

Discover the associations that Sandrine works for: **Elles Bougent:** www.ellesbougent.com and **Capital Filles:** www.capitalfilles.fr

Quiz

Are you a geek*?

* or a geekette?

“Someone who knows a lot about a particular field such as IT, new technology, science fiction, or video games. Such enthusiasm, often misunderstood, is even more extreme among nerds and people with “no life”. This is why the term geek is often used pejoratively.”
Source: L’Internaute.

Here, we love geeks!

So, test your knowledge in these three key areas for the Orange group: artificial intelligence, development and the cloud. Less geeky but no less essential for us (and for you!), test your network knowledge.

AI

- 1 Which of these paintings by Rembrandt was actually painted using AI?



A B C

- 2 How can you correct AI development bias?

- A By promoting diversity among developers
- B By promoting diversity in learning databases
- C By making algorithms more transparent, to understand what rules they obey

- 3 What do you call a software robot that can discuss on social media?

- A A chatbot
- B A hatbox
- C A hotdog
- D A smart dog

- 4 Contrary to popular belief, what % of recruitments should be possible using AI by 2022?

- A 1%
- B 3%
- C 5%
- D 10%

- 5 In what direction will AI develop?

- A Understanding and answering voice commands
- B Understanding mistakes and improving
- C Understanding the behaviour and principles of cause and effect

Answers: 1 C - 2 A, B and C - 3 A - 4 D - 5 A, B and C

Network

- 1 What are the different telephone and internet network technologies?

- A Copper, gold, silver
- B Copper, ADSL, fibre, 4G
- C Copper, fibre optic, microwave, coaxial, 4G and soon 5G

- 2 What does MVNO mean?

- A Mobile Virtual Network Operator
- B Multiple Virtual Network Operator
- C Multiple Very Nice Operator
- D Mobile Virtual Native Operator

- 3 For the same usage, 5G will be more energy efficient than other mobile networks... yes, but how much?

- A Twice as efficient
- B Four times more efficient
- C Ten times more efficient
- D A thousand times more efficient

- 4 In what country did Orange deploy 5G for the first time in 2019?

- A Spain
- B Poland
- C Romania
- D Slovakia

- 5 The networks of the future will be ...

- A virtual
- B sedentary
- C equipment-related
- D no different from today's networks

Answers: 1 C - 2 A - 3 C - 4 C - 5 A

Development

- 1 True or false?

Three quarters of developers learn a new language or a new framework every year?

- 2 What OS do developers prefer?

- A Linux
- B macOS
- C Windows
- D iOS

- 3 What language did developers prefer in 2020?

- A TypeScript
- B Rust
- C Python
- D Kotlin

- 4 According to the 2018 Stackoverflow survey, how many developers feel obliged to consider the ethical implications of their code?

- A 10%
- B 30%
- C 50%
- D 80%

- 5 What is a developer's most important skill?

- A Roll-out experience
- B Knowledge of algorithms and data structure
- C Communication capacity
- D Experience with tools and frameworks

Answers: 1 True - 2 A - 3 B - 4 D - 5 C

Cloud

- 1 What does CNA stand for in software development?

- A CoNtainer Application
- B Customer No code Application
- C Cloud Native Application
- D Custom Network Application

- 2 What is a cloud native technology?

- A The development of applications built with services packed in containers
- B The development of applications specifically designed from the beginning for the cloud
- C The development of automated applications in the Cloud
- D The development of applications on the Orange Cloud network

- 3 What does SaaS stand for?

- A Storage as a Service
- B Simple as a Smile
- C Software as a Service

- 4 Where is one of Orange data centres located ?

- A Douarnenez
- B Limoges
- C Val-de-Reuil
- D Giverny

- 5 What is edge computing?

- A Optimisation of exchanged data
- B Hypercentralised processing
- C The use of experimental technology

Answers: 1 C - 2 B - 3 C - 4 C - 5 A

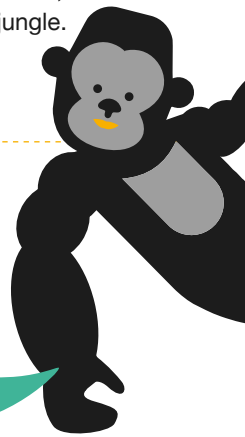
The other law of the jungle

Popular belief claims that competition is the only law of the jungle. Yet science shows that it is not the strongest that survive, but the most cooperative groups. As with prehistoric hunters, who could never have hunted a mammoth alone... Our ancestors survived, above all, because they knew how to work together!



A good example is LetMeHelp, a mobile app created during lockdown

In spring 2020, some Orange employees who found themselves with less work to do volunteered to support the customer service teams that were overwhelmed. An application was created within 15 days to connect those who wanted to help and those who needed it. Help, cooperation and selflessness, those are the real laws of the jungle.



During the lockdown, I volunteered half a day a week to answer customer calls. My motivation was really to lend a hand, I found it natural to give up my time and lighten the burden on the advisors.

When taking a call, we had to introduce ourselves to the client and make it clear that we were not "really" advisers. In the end, the people who called were happy that we took the time to talk to them. They wanted to talk to someone other than the loved ones with whom they were confined 😊 We took time to maintain a link with people. It also encouraged the members of the volunteer team to help one another. We helped each other out with instant messaging, and got the answers we needed in seconds. There were back-up colleagues who were helping everywhere, all over France. In my department, just over six people participated. And even then, we talked to each other to get information, and we congratulated each other when we managed to answer questions. It brought us closer together too!

Hi, I'm Icham, director of healthcare innovation 🏠💡



I'm going to tell you about this innovative project my teams are working on.

Designing the operating theatre of the future

Integrating research at Orange means contributing to useful projects like this one to improve liver transplants. There is no such thing as zero risk, but it is possible to minimise the risk and that is the whole objective of this Augmented Operating Theatre project (BOPA). We are working with AP-HP*, Institut Mines-Télécom and other sponsors on this state-of-the-art project. Orange Healthcare is contributing to this through a sponsorship project, technical advice and the arrival of 5G. Three innovations form part of this futuristic operating theatre.



Our ambition is to help healthcare professionals to provide better patient care, which is in the public interest.

The Chatbot

The chatbot will assist the surgeon, first by reading the patient's file on the day of the operation, then by assisting the doctor with a step-by-step checklist through the transplant procedure.

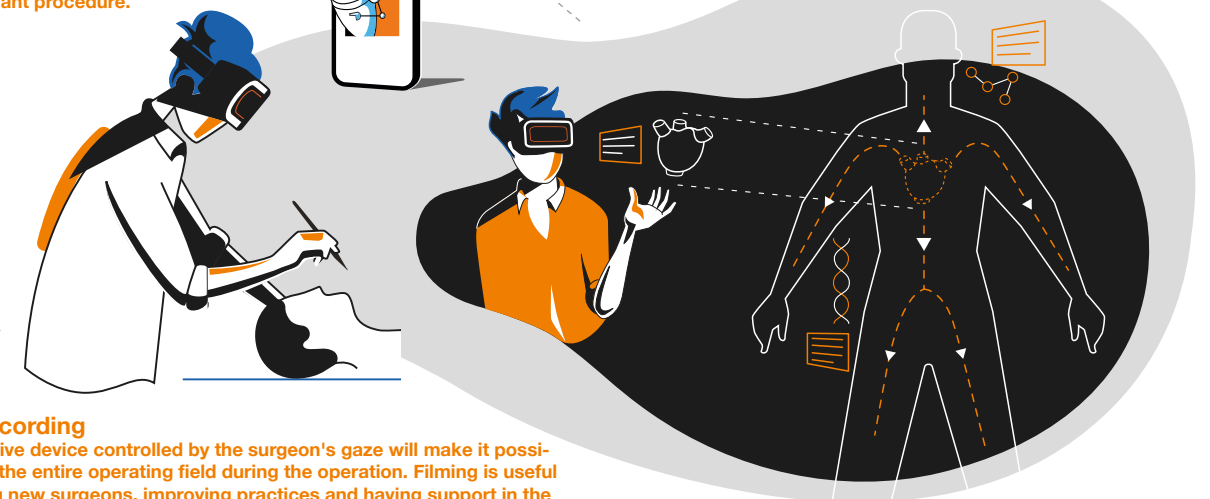


Augmented Reality

When the surgeon opens the abdomen, they can view the organ's digital twin in real time and see the anatomy in colour-coded 3D to practice, secure and facilitate surgical procedures.

Video recording

An innovative device controlled by the surgeon's gaze will make it possible to film the entire operating field during the operation. Filming is useful for training new surgeons, improving practices and having support in the event of a dispute.



All of these devices require (and produce) large amounts of healthcare data that must be captured, securely transported, and stored for different purposes. This is also where Orange Healthcare can contribute all its knowledge on interoperability, healthcare data hosting,** cybersecurity, blockchain and 5G. Because of its low latency, 5G will notably allow the surgeon to operate on a patient using remote surgery!

* Assistance publique – Hôpitaux de Paris. ** HDS in French.

Orange worlds

Cybersecurity

"The tool we use most often is our brain."
M. X, pentester (aka the person who tracks security loopholes)

5G

"The next multimillionaire will be the person who discovers the system best suited to making the most of 5G."
Christian, 5G deployment team manager

Cloud

"There's always a new challenge to meet the needs of very different customers, and therefore to keep innovating."
Etienne, director of Orange Cloud for Business France

Consultancy

"It's very stimulating, a wide range of tasks and people."
Marie-Cécile, customer relations consultant

Startup

1,000 startups supported since 2013.
16 Orange Fab accelerators across 4 continents.

Content

"It's a magical world seen from the outside and I'm able to go behind the scenes."
Sophie, international video acquisition manager

AI

"Beyond technological prowess, I ask myself what we are going to be able to provide to people, and ultimately the responsibility we have in terms of what we are going to do."
Catherine, UX designer

Network

"There's a significant amount of technological innovation. It moves fast. We are investing a lot in innovation to always stay ahead."
Yes, network strategy director

Customer relations

"Customer relations are evolving, things are completely changing dimension. Now is the time to make it happen."
Pierre, customer relations manager

Healthcare

"We have lots of discussions with healthcare professionals - everything comes from them, their needs."
Icham, healthcare innovation director

Development

"We make significant contributions to Open Source projects used worldwide."
Cédric, software job training manager

Data

"We haven't even scratched the surface of what AI and Big Data technology can do."
Maroua, data scientist

Mobile financial services

"AI is our biggest current and future project with Djingo, our first customer advisor using artificial intelligence!"
Dimitri, Orange Bank distribution director

Software Defined network (SDN)

"We have virtualised data centres with the cloud, and with SDN we are going to virtualise the networks."
Yann, services architect

IoT

"In the jobs market, there is significant and growing demand for people who understand this market ;-)"
Luc, marketing director

Future of work

Orange is inventing the ways of working of the future.

Submarine cables

"Orange Marine operates 6 cable-laying vessels and 1 survey vessel from its marine bases or foreign ports."
Bénédicte, Orange Marine

What field will you contribute to?



(Helping you) grow

Fatima is on a "professional" contract to become a developer in AI and big data. Rémi has been her tutor for the past nine months. Together, they discuss what the apprentice/tutor relationship gives them and the sense of usefulness they get from their mission.

Tell us about your background.

Fatima - I've always enjoyed working with data. So, after studying economics and gaining experience in banking, here I am retraining to work in the field of AI and big data.

What did you like most about her profile?

Rémi - Fatima is curious, driven and motivated. So obviously that's what I liked. We got along well together, and she felt the same way so she agreed to come.

So what do you do now?

Fatima - I program voicebots like Djingo. Now that I'm on the technical side, I really feel like I'm building something, it's like something you make yourself and it works. It's very rewarding.

In what areas have you seen her grow since the start of her apprenticeship?

Rémi - On a technical level, she was able to appropriate the technology behind the bots and their ecosystem, in development and design. She has learned so much already.

What is the most valuable thing Rémi has passed on to you?

Fatima - Rémi is an architect. He taught me the design, organisation, and construction method of a project as a whole.

And you Rémi, what have you learned from Fatima?



Fatima studied and got to grips with voicebot technology. She provides us with her knowledge and vision of their development and potential.

And together, we thought about afterwards... how we could take the use of voicebots even further.



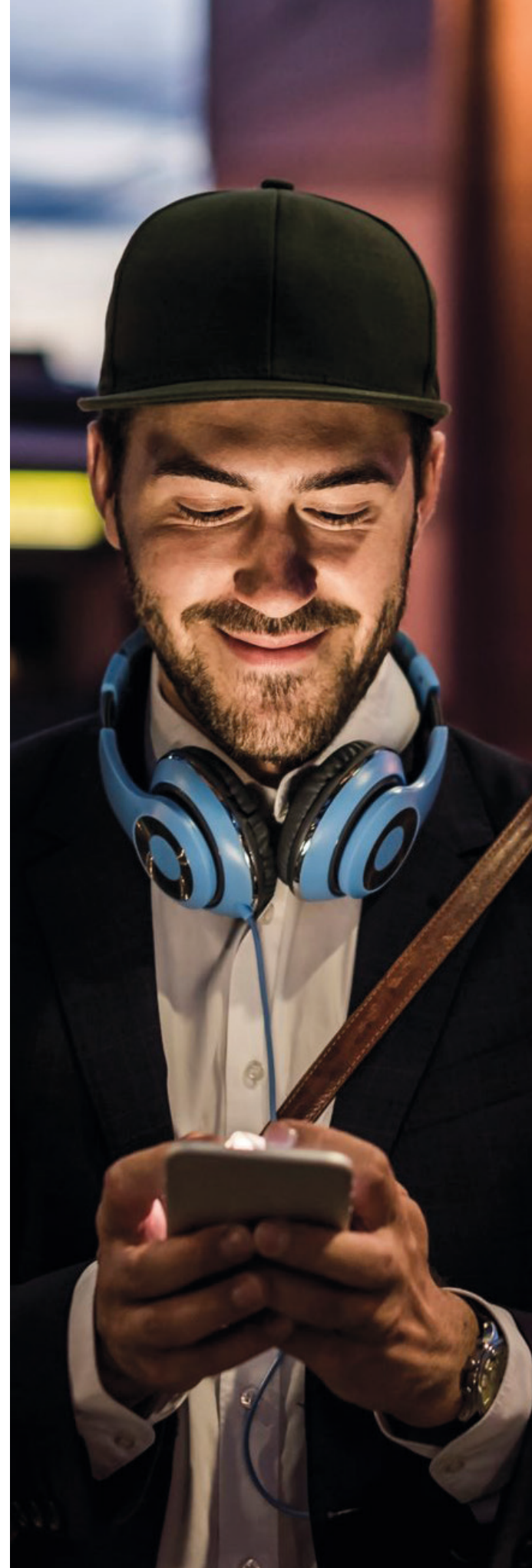
How do you feel useful today in your job?

Fatima - I am involved in research and innovation at Orange on the subject of bots. And these initiatives may one day be used for use cases in social areas, healthcare, or education.

Fatima completed her apprenticeship within the framework of the "Microsoft AI School - Orange Class", in partnership with Simplon.

- 7 months of intensive training
- 1 year work-study programme at Orange

[orange.jobs](#) > [Learning](#) > [CFA Orange](#)



Hired remotely?

Eva works as a client advisor in Dijon. Her hiring and induction process was digital.

Axel takes care of the Hello app, to welcome new arrivals. They're here to tell us all about it.

February I apply online!

March I go for a job interview remotely.

Eva "It was less stressful to do the interviews in my living room, I was much more comfortable and safe, and the conversations were less formal."

How does that work?

- a webinar to present Orange and the position
- a quiz to check that you were paying attention ;-)
- an individual video interview
- a group escape game online

April I am hired for my work-study programme.

June One month prior to my arrival, I receive a notification in the Hello app.

Axel "We want all candidates to feel welcome. With the Hello app, we are in contact with them even before their arrival."

July The first day at Orange :-).

Axel "Once they arrive, the app allows them to get their bearings, and gives them all the practical information to feel at home."

What is in the mobile app?

Videos, information on the strategy, key figures, all the useful contacts when you arrive, the possibility of giving your feedback, quizzes to test your knowledge, online training.

Interested?

Apply on [orange.jobs](#)

24 hours with a maintenance technician

8:00

Hello, I've got a problem.



I'm sending over a technician!



Coffee before starting the day

8:05



Hello, I'm Adam. I've been a business maintenance technician for 5 years in the Seine-Saint-Denis department.



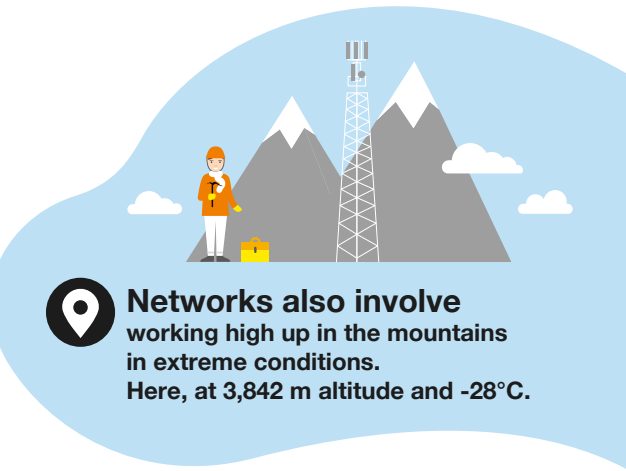
8:45

I migrate a system from copper to fibre.



11:00

I set up three tills in a small shop.



Networks also involve working high up in the mountains in extreme conditions. Here, at 3,842 m altitude and -28°C.

12:30

Lunch break!



Timechatting with my trainee

8:30

I meet my trainee. We are working together so he can learn skills on the job.



I go to the warehouse to pick up the equipment need



16:00

Another emergency!



I rush to the hospital to install a back-up router and restart the broadband.



Helloooo??!



13:45

An emergency!



I quickly replace the faulty telephones and set them up.



17:00

Home sweet home. A well-deserved rest!



Networks also include the Tour de France with its 350 technicians making 6,300 hours of broadcasting in 190 countries possible.



Networks also involve working at the bottom of the ocean using a robot to repair a cable.



Blackjack

Hello, I'm Sarah, and in my first life I was a casino dealer.



I went back to school on a work-study programme in cybersecurity. It was during this experience that I had the opportunity to lead a great project which led to me being hired as a cyber analyst. Let me tell you how I dived in at the deep end 📖👩

12 May 2018 Cyberattacks

Significant attacks took place via a ransomware called Wannacry.

13 May Poker face

During a customer meeting, a sales representative was asked about the Wannacry attacks, "What do you recommend we do?" No answer...

14 May The idea

Eric, my boss, picked up on this mishap and launched the idea of developing a much more effective crisis information tool.



Cyberattacks will continue to develop. We need to invent a useful app to improve crisis communication!

July Card!

I went to see Eric and I told him, "I've studied development. I'd like to do security and development, combine them actually." That's how I took on the project.

August - November Prototyping

I'm working on the design and prototyping phase. Every two weeks, I present my work to the boss to obtain a proof of concept.

December The dealer's turn

I explain the specifications. Another important job is the architecture to secure the servers in the event of an attack. It was crazy, and complex.



The technical challenge

Typically, applications communicate through APIs. These are popular targets for hackers. To reduce the attack surface, we had to come up with a different way of doing things.

I draw on my experience as a croupier. It's like blackjack: stay focused, don't let go and get to know who you're dealing with 😊



5 March Client requirement

The customer surprises us with a technical requirement out of nowhere :-). It's quite complex. We test several approaches, going back to find the right way to do it.

April - June 5-player challenge


The team is growing, which allows us to meet many technical challenges this month. We are starting to develop on the back end and the front end. The definitive architecture is ready.

July - August Ace of hearts

This is the home stretch because I get hired at the end of my work-study programme in September. We have to get it done... and we did! With Gwenole, who is definitely an asset, we finalise a version that works.

September 2020 The game isn't over!

We were able to pass on our beloved project to a new team who will be responsible for deploying it. I was really happy to be in charge!



**Individual
challenges**

orange™

Enjoy challenges
in your day-to-day activities.

At Orange, you can.

#LifeAtOrange

**Team
challenges**



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