

Edition 17-2
Periodical of S.A. Astatine

June
2023

ATTENTIE

Writing from Sweden

QWERTY
with Anton

Behind the
Kick-in

ASTATINE

Colophon

The "ATTentie" is the periodical of S.A. Astatine, which is issued three times a year. The ATTentie is distributed among members of Astatine, sponsors of Astatine and employees at the University of Twente connected to Advanced Technology.

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With thanks

Michiel Scholten, the 17th and 18th board,
and the KitKat.

If you want to contribute to the next ATTentie, you can send in articles via email: attencie@astatine.utwente.nl
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Editorial

Hello dear readers,

Here we are with the second edition of this year, who would have thought it possible! This attentie will update you on the going-ons of the board and staff, as well as a look into the inner workings of the Kitcat.

After the delay in production the lockdown had caused, we are finally getting back on schedule with our editions. Next year, we hope to produce the full 3 issues! Still, we could use a few more members, so if you have a passion for writing or designing, don't hesitate to hit us up.

Back to this edition. Brought to you all the way from Sweden (not really that was 2 years ago), an article about studying abroad in a very cold country by yours truly. Finally, our most recent addition to the roster, Anton, is here to enlighten you about all the sucks about current keyboard layouts and how to improve it. On top of that, he has also created a completely different type of puzzle from usual! Good luck solving it.

Since the end of the year is upon us;

Have a great holiday,
Annelies Klaassen
Editor in Chief



From the Staff

Michiel Scholten

Hi all,

I hope that you are enjoying your studies, that you are content and that everything is going smoothly. But let's be realistic: that's not always the way it goes. That is the point where I can help. I'm Michiel Scholten, one of your study advisors.

Before I came to AT, I was an English teacher at a secondary school. I mostly enjoyed working with pupils individually, so I made the decision to leave teaching for what it is and focus on a more personal level.

In my spare time, I enjoy woodworking and working with stone. As of last year, I have started taking a course in goldsmithing as well. On Fridays, I'm learning the basic skills of making jewellery. I am trying to combine these skills, but it will take some time for me to become skilful enough to do this. Maybe I can turn my hobby into something lucrative in the future.



All of this has become a bit less prominent in my life since just before summer. In June, my son Ferron was born. I'm a proud family man now, which is still quite strange to realise.

You're more than welcome to step in and have a chat. I'm always happy to show people what I've worked on. There are also about 493820 baby pictures, so I might slip some of those in as well.

From the 17th Board

Mark Schleidt

And the time is finally here... A new university year has started, our old first years have become integrated students, and we have a new cohort of "oude lullen" and "sjaarzen". We, the 17th board, have started the epic journey of fighting lab sessions and exams once again and a new legal aged board has risen to take care of our little, orange-colored association and its members.

Looking back at last year I can say it was very chaotic and unpredictable with corona measurements popping up and disappearing every time you look away. However, I am happy that we rounded off last year with a bizarre number of activities. We have finally gotten to the point that all the corona rules have been lifted, and more importantly: We got to open our beloved TAP. Clearly you guys did not hesitate to make use of this situation. We all organized and attended lots of drinks, BBQ's and classic student events such as the elfbierentocht and had wonderful traditions that got to continue. We could celebrate our dies, our lustrum gala

and got to thank our members with an AMA. It was amazing seeing student life so full of life again and it was an honor to participate in this as a board. I hope you enjoyed it as much as we have, we with the board made sure to try and attend this insane number of activities, because you know... if you need to sleep you just do it when there is another lockdown again right?

Now, this year we have a fresh start, and the challenge is up to our successors to bring a year full of student glory once again. I have faith they will do a wonderful job and we wish them the best of luck! Try not to forget to thank them or cheer them on every now and then ;).

Thanks to all our members that contributed to Astatine and helped to make our board year a wonderful time. It has been a great pleasure and we are sad to have to leave you as board, but we look forward to sharing a year in the lecture halls (or rather at the TAP) with you guys!



Mark Schleidt,

On behalf of the 17th Board of S.A. Astatine

Op de hoogste!

Meet the 18th Board

Maaïke Strik – Chairwoman

Hello everyone!

My name is Maaïke and I am the current chairwoman of Astatine. The past weeks have been very busy, but I enjoy it so much!! Two and a half years ago, I moved from my parents house in “het Westland” (near The Hague) to huize Le Paradou in Enschede. To be honest; I was a little afraid that I wasn't going to make any friends here at the other side of the country, but I couldn't have been more wrong. In my Kick-In, studies and committees, I have made some of my best friends here and Astatine has really become my home <3. Therefore, I am extra motivated to create this feeling for you as well!

Next to Astatine, I am a member of student association Taste, where I spend my Tuesdays with my year club Bermuda. On Wednesdays or Thursdays, I drink with my dispute 2P^2.

I think that was pretty much it for me, if you have any questions, you can almost always find me in the board room!!

Big kiss from me, and of course: Op de Hoogste!

Maaïke



Joschka Beck – Secretary

My name is Joschka Beck and I am your new secretary. A little about me: I am 21 years old and was born and raised in the beautiful city of Venlo in the most southern province of the Netherlands, Limburg. My dad was born close to Freiburg so I am half-Dutch and half-German. For the last year, I have been a sponsor for the baseball association and I really love football, especially when FC Freiburg is playing. Besides that, I am also a big fan of Formula 1 and I am always up for a discussion about cars.



I am looking forward to helping you and the rest of the association to improve your study time this year, together with my awesome board members. I hope I will be able to fulfill my function well and write the best brass letters the university has ever seen (although my handwriting will probably not be readable).

Haje,

Joschka

Lars van den Burg – Treasurer

Heey, everyone!

I am Lars van den Burg and this year I will be fulfilling the most beautiful role within the board as treasurer. I am really looking forward to my board year and together with my fellow board members this will be for sure a year at the University to never forget.

For the ones who do not know me I am a third year AT student, and I come from the western part of the Netherlands, Alphen aan den Rijn. In my spare time I really like to spend time with my friend or play sports. Over the years I became more involved and connected with the association and its members and for me this was really a place I felt connected with.

Hopefully, I will see every one of you at the members room or at the Astatine activities ;)

Op de hoogste!

Lars



Matthijs Sluijk – External Affairs

Hey everyone,

At the time of writing I have been board for a little over 4 weeks. Which for me means living in the Astatine rooms. However, this is not where it all started. I was born 21 years ago in a little farmer's village in "The Green heart" of the Netherlands, which partially resulted in growing up with a healthy diet of milk and cheese.

Which is probably the reason I really like (old) cheese and a glass of milk every now and then. The only thing I do which you could consider as a sport is SIM racing, which I do together with my fellow board member Joschka.

I'm not only part of the Astatine board, but also part of the board from my fraternity Luxovius as treasurer.

This is a short summary of myself, if you would like to know some more about me, the board or something related to companies/work, then don't worry and drop by in the board room. I will be here to help you out!

Op de bedrijven,
Op de hoogste!

Matthijs Sluijk



Mees van Deijl – Educational Affairs

Yo!,

My name is Mees van Deijl. I am originally from Haarlem, a city in the west of the Netherlands, about the size of Enschede. I am 20 years old and this is my third year studying Advanced Technology. I have done taekwondo for about seven years, back home and here with Arashi. Since this year I quit taekwondo and started basketball at the recreational level.



I absolutely love music and everything to do with it. I played in bands back home in which I played drums and mostly guitar.

I am your new commissioner of educational affairs. This means that whenever something is bothering you study wise you can talk to or mail me and then I, together with the EduCo, will try to fix it for you.

Op de hoogste!

Mees van Deijl

Joep Meussen – Internal Affairs

Hey hey,

I got asked by the ATtenCie to write a bit about myself so all of you know more about that guy that is yelling at you to make new coffee or to join an activity. So let's start with my background:

I was born and raised in Elst, a village in between Arnhem and Nijmegen. I went to high school in Nijmegen. After high school I wanted to take a break year and travel to New Zealand. However, I had to change my plans because of the pandemic.

I knew I wanted to study because I didn't like the idea of working for a whole year (at that time I was working at the GAMMA). That's when I decided I would go study here at Advanced Technology.

In the first year of the study, I already fell in love with Astatine. The activities of Astatine, even though they were online mostly, were the things that made studying worth it. I already knew I was interested in doing a board year after half a year.

And now I am board. I'm very proud that I can spend the coming year caring for my association and I will put all my efforts in to make sure you are able to feel the same about Astatine as I do and together make it an awesome year.

I will see you around!

Joep



Abroad

Annelies
Klaassen

in



"In August last year, I left the Netherlands and went on a 14 hour train journey to Linköping, Sweden. Through the European exchange programme Erasmus I would be staying there for half a year, studying a range of subjects. Currently, I'm nearing the end of my stay, so while I'm still here, I'm going to take this chance to share some of the Swedish experience with all of you..."

---- vinyl scratch ----

SO! As you can probably see, that intro was written two years ago. Yeah. Times flies when you are procrastinating. Or, well, have some motivation issues due to lockdown. Not all of it was our fault. But! It is here now! The article I wanted to write while I was in Sweden. On the bright side, time has made me a wiser person, and I have realized that what I had written over a year ago was boring. Consequently, I will summarize my experiences of daily life and hurry on to the fun part: rating food items and freezing to death in Lapland.

Honorary Swede

Living in Sweden is pretty similar to The Netherlands in many ways. The weather is cold and wet, most people speak English pretty well, they like coffee and there are a lot of bikes. My primary reason for being there was to study, so that took up a big part of my days. Contrary to at home, most classes were on campus. Sweden had been much better at handling the Covid outbreak and there were barely any restrictions left.

Since I am not much of a party person, most of my time was spent around the Linköping University (LiU) and my home. The living accommodations are only a 15 minute bike ride away and have a small shopping mall on the premise. In short, easy life. When I finished my work for the day I spent my time experimenting with exotic recipes or relaxing in my room.



There were some interesting differences from home that were a constant reminder I was in another country.

Most obviously was the weather, but less so the temperatures and more the amount of daylight. When November came around, the sun would already set around 3 pm in the afternoon which very much warped my perception of time. This got even worse on my trip to Lapland, but we will get to that. Another thing, there is the Swedish custom of 'fika' which is something like afternoon tea with sweets. Around four o'clock people will drink tea or (read: but mostly) coffee with some snacks like the traditional Prinsesstårter and Chokladbollar.



Finally there is, obviously, the language. During my time there, I took a beginners course in Swedish at the LiU which taught me the basics, but far too little to hold a meaningful conversation. Luckily, reading it is pretty easy due to its similarity to both Dutch and German. What they don't teach you are the swear words, but luckily I had some inside sources. If you ever want to curse at someone discretely, use any variation on the Swedish word for 'devil'.

Lapland

Now to the exciting part of my story, a four day vacation to the coldest reaches of the country, the Lapland trip. We stayed in some cabins in the town of Kiruna. At the site was also a sauna, ice fishing equipment and an enormous frozen lake, from which you could watch the northern lights. Since a step by step retelling isn't the most interesting thing to read (and I have forgotten much of it), I am just gonna show some pretty pictures and give the context.



Swedish

Caramel bun

7

PASTRY Rating



"Best after 12 hours in a train."

10

Raspberry pastry breakfast in Copenhagen

6



Chocolate Danish

Pecan-Syrup pastry



10

"Perfection."

2



"Too solid."

Vanilla Danish



7

"Too fluid."



5

On the morning of our arrival, the display at Kiruna airport showed -27 C. This was so much lower than I had ever witnessed that it is difficult to describe. The cold stung your skin, and with every breath could felt the frost turn your nose hairs into ice. Staying out for more than five minutes was... not fun.

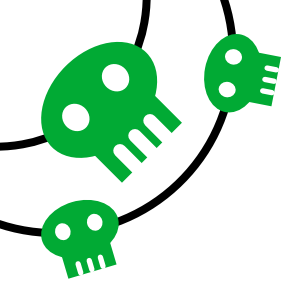


On our second day we went on a tour with a dog sledge. At the homebase must have been 80 or so huskies, all barking and running around. It was very cute, on top of very loud.



The third day we visited the nearby ICE hotel and Sami open air museum. To get there, we did a long drive through the forests and over the lakes on snowmobile. It was quite a rush, going over 100 km/h, when I wasn't freezing or trying not to fall off.





Behind the KITCAT

Lars Bonekamp

Hey! My name is Lars Bonekamp and last year I was the captain (chairman) of the Kitcat. The Kitcat is the kick-in committee of S.A. Astatine and is responsible for organising the faculty part of the kick-in as well as creating fun and fitting do-groups for all first-year students.

Together with Tanya, Lars van den Burg, Matthijs, Ilse and Joep we created a fun and interactive programme during the second half of the kick-in, the so-called faculty days. During the faculty days the goal is to get all new students familiarised with their study. This means getting

to know the teachers, the online environment and of course, most importantly, the study association ;).

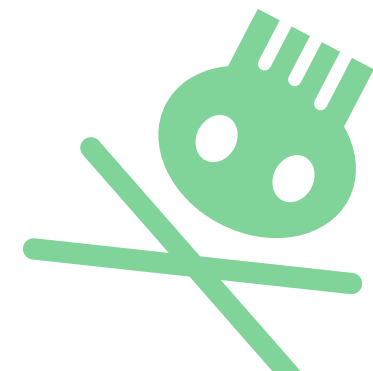
Each year the Kitcat gets formed around the Christmas break and it consists of a few second year or older students who are looking for a little bit of a challenge. The Kitcat is one of the most fun, but also one of the busier committees you can join. But you are definitely rewarded for your time investment, in both experience and fun. You learn a lot from being in the Kitcat, like having productive meetings, having clear and efficient communication and a lot more!

When the Kitcat 2022 was formed, we were all already pretty active within the association. We already knew each other a bit and were able to make a lot of progress quickly. However, during the meetings we got to know each other a lot better, and the closer the Kick-in came, the closer we became as a group.

Next to having meetings with our own committee, a separate sub-committee was formed, consisting of 2 people from all Kick-in committees of the Triple A. This sub-committee is called the SNACK and they were responsible for organising the SNACK activity and BBQ that are held each year.

During the year we were mostly busy with making the schedule for the faculty days of the Kick-in, searching for do-groups who would lead the kiddos through the kick-in and some general planning ahead of stuff that needed to be done before and during the Kick-in. Also, we decided that

we wanted to have a theme for the faculty days, so we decided on the theme “pirates”, and tried to implement that as much as possible, in both our outfits and the activities that we had planned. For example, we bought a flag for every do-group, with their logo on it. We did this partly because it fit the theme well, but also to encourage “brassen”. We were



One of the most fun tasks we did leading to the Kick-in was the shooting of the theme announcement video. We thought up an exciting story of us going on an adventure to find some treasure. We even arranged a rubber boat to cross some water in the park, where we could find the treasure we were looking for. Joep and Ilse got into the boat, which barely stayed afloat. Let's just say they didn't keep their pants dry, and they almost caught a cold afterwards.

A few days before and during the Kick-in, we claimed the members room as a base of operation. We practically lived there for a week. All kinds of personal belongings from all members of the committee could be found throughout the whole room. Having this base of operations made it possible to quickly go to activities, parties and other things, and when we had a little time left possibly a quick powernap on the couch.

It was super fun to see all the activities we arranged happen, and that the kiddos were actually enjoying them. Seeing happy kiddos and parents having fun together is the best experience. Hopefully we motivated a lot of the new first year students to become active at our study association, and if not, that they still enjoyed their time during the kick-in.

At the end of the week, we ended with a big hero's breakfast. 40 kiddos showed up, which lead to us almost not

having enough breakfast! It was nice to see a lot of drunk faces, eating as if it was their last meal. Somehow 20 litres of curry and mayo disappeared that morning, and we are still wondering where that went? After the breakfast we had 1 final fun experience, namely playing klonkiebal in front of the coop at 8:30 in the morning. End result: 9:30 bedtime.

With a not that well attended KitBrak the following morning, and a bad hangover, we ended the Kick-in. We really enjoyed organising it, and we hope some of the current twaazzen are excited to become the Kitcat for the coming year!

Ahoy matey!



Quotes

"The only 'her' you get in AT are 'herbert' and 'herman'."

- Tatiana Orlovskaja

01/04

04/11

"Coffee is weird. First I was tired, and now I'm tired with a high pulse."

- Ollie

"My craving for coffee is so big, I'm making the coffee myself"

- Herbert Wormeester

25/03

17/02

"That is not my-problem-based-learning"

- Mees
Reacting to someone complaining about PBL

"Actually, I just want to go on differential-equation-camp for a week!"

- Lennart

16/06

ASTATINY

Genderblender/ Anything-but-a-cup party

On the third of May the TipCie, Cupico and BOSS collaborated to organize the Genderblender/anything-but-a-cup party! Due to the unusual dress code and cup requirements, there were many wacky situations. There were people drinking from kitchen machines, plastic bags and toy cars, and by the end of the evening all the 'ladies' were walking around with balloons in their dresses. At the end of the evening awards were handed out to reward the most creative solutions to the theme. After drinking out of a hollowed-out apple, "" won the award for best cup. The award for best outfit went to Luc, who was dressed in a lovely dress and jewelry you'd expect on a wine aunt.



Dog days

'Sirius' is the brightest star in the night sky and familiar to all. It is part of the Canis Major (or Big Dog) constellation and actually consists of two stars, one similar to the sun and the other a white dwarf.

In ancient Greece, the rising of Sirius signaled the start of 'dog days of summer', which are named after the constellation the binary star is a part of.



Potassium-40 is a radioactive isotope with a half-life of 1.25 billion years, making up about 0.012% of the potassium in nature. This isotope is the largest source of radioactivity emitted by animals, and in a 70Kg human body, which contains about 140g of potassium, about 0.0164 grams of potassium-40 will be present.

Since bananas are rich in potassium, and hence also in potassium-40, you are exposed to about 10^{-7} Sv by eating one banana, or 1 BED (Banana Equivalent Dose). On average, you are exposed to 100 bananas a day. If you manage, through sheer willpower, to expose yourself to 35.000.000 bananas (and manage to keep them all contained within your body), congratulations, you just gave yourself a lethal dose of bananas. In radiation terms that is.



"Why is my Attentie late?" Edition 2

- We need new members
- ASML offered us jobs
- We used the wrong keyboard layout
- The magazine immigrated to Sweden
- Seriously we need more members
- "One edition keeps the quality up" you know, like the last two seasons of Game Of Thrones said about having less episodes. Or waiting till the new book comes out. Take your pick.



ASTATINY



True or false?

Test your knowledge about ASML

From chipmaking to EUV and from the number of employees globally to next generation machines, discover the most important facts about our fascinating tech company.

The name 'ASML' is an acronym.

FALSE. ASML isn't an abbreviation of anything anymore, though it used to stand for 'Advanced Semiconductor Materials Lithography'. ASML was founded in 1984 as a joint venture between Philips and ASM International, so a name was chosen to reflect the partners in the venture. Over time, this name has become simply 'ASML'.

ASML makes microchips.

FALSE. ASML does not make microchips – we make the machines that other companies use to make microchips. We also don't make the silicon wafers that form the cradle of the chip. Customers such as Intel, Samsung and TSMC use ASML's DUV and EUV lithography systems to print tiny patterns on silicon that has been treated with 'photoresist' chemicals. They also rely on our metrology and inspection systems, together with our computational lithography and patterning control software solutions, to achieve the highest yield and best performance in mass production.



Celebrating June!

Maaïke Strik

June is approaching, which means the first half year of 2023 has come nearly to an end. Oh boy, has that gone fast. This month we will have some traditional celebrations, like Father's Day and some religious holidays. However, there are a lot more days in June at which we celebrate something internationally or nationally.

June 3rd World Bicycle Day

One thing the Dutch are known for, is cycling. On this day, the importance of biking is celebrated worldwide!

**June 4th
National Grandfather's- and mothers' day**
Mothers' and Fathers' Day are very popular, but how about your grandparents? In the Netherlands, this day is dedicated to them. Do something nice today to show them how much you appreciate them. For example, visit them, write them a card or give them a phone call!

**June 9th
Donald Duck's Birthday**
There is a big chance that you have read the Donald Duck magazine at least once in your life. Today you have a good excuse to do it again, because Donald Duck turns 89 years old! Tip: there are old Donald Ducks in the Astatine member's room!

June 14th National Outdoor Play Day (Buitenspeeldag)

The Dutch probably remember this day from their childhood, as it was the day that the kid TV channels didn't stream their shows to motivate you to play outside. Maybe you have outgrown the old ways of playing outside, but that doesn't stop you from taking a nice walk!

June 18th World Picnic Day

When was the last time you went for a picnic? Well, today is the perfect day to do it again! Grab some sandwiches and drinks and go to the park. Coincidentally, Fathers' Day is on the same day, so you can invite your father and have some quality time.

June 21st World Yoga Day

In a world as fast as ours, it can be nice to slow down every once in a while. A great way to do this is to do some yoga! You can take a class, but there are also plenty of YouTube videos online.



ASML is the only company that makes EUV (extreme ultraviolet) lithography technology.

TRUE. Unlike in the DUV (deep ultraviolet) lithography market, where ASML competes with other top-notch suppliers, ASML is currently the only lithography equipment supplier capable of producing EUV technology. Chipmakers use these EUV systems to manufacture the world's most advanced microchips. In fact, if you own a relatively new smartphone, gaming console or smart watch, chances are you've benefited directly from EUV lithography technology. We spent 20 years developing EUV with our partners and suppliers, resulting in a machine that contains around 100,000 parts. To ship just one of these huge machines to customers requires 40 freight containers, three cargo planes and 20 trucks.

An ASML machine is all you need to make microchips.

FALSE. Making chips is a complex, long and expensive process. Our customers have spent years and invested billions building 'fabs' (fabrication plants), buying equipment and training employees to become experts in the complex field of semiconductor manufacturing. ASML's lithography machines form an important part of a chipmaker's production line, but they are not all that's required to produce microchips. Lithography – printing patterns on silicon wafers – is certainly a critical step in the chipmaking process, but it's just one of many!

ASML is building a new kind of EUV lithography machine.

TRUE. In the semiconductor industry, innovation never stops. That's why we're already developing a next-generation EUV platform that increases the numerical aperture (NA) from 0.33 to 0.55. This

means that the optics systems in the new machines will allow light with larger angles of incidence to hit the wafer, giving the system a higher resolution. The EUV 0.55 NA platform, called EXE, is well on its way to production – we're planning the first shipments of these machines to customers for R&D purposes by the end of 2023, and we expect them to be used in high-volume manufacturing by 2025.



ASML provides chipmakers with hardware, software and services to mass produce patterns on silicon. Our lithography machines are essential in the process of building the electronic devices that keep us informed, entertained, connected and safe.

We're a dynamic team of 38,000 people from 140 different nationalities and counting. Headquartered in Europe's tech hub, the Brainport Eindhoven region in the Netherlands, we have over 60 locations in 16 countries and annual net sales of €18.6 billion in 2020.

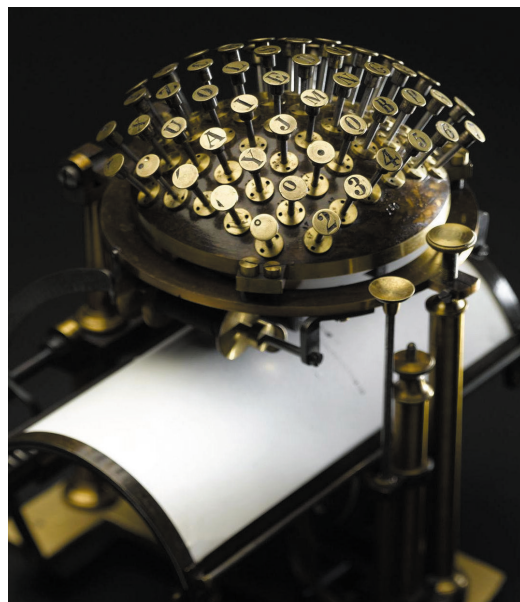
Curious to learn how you can be a part of progress? Contact our campus promoter Fleur Voortman at your university at fleur@workingatasml.com with all of your questions about ASML or visit www.asml.com/students.

Anton Vakhitov

Are you reading this text from a screen with a keyboard? Or, maybe, you prefer a paper version of the ATen-Cie, but have a phone in your pocket? In any case, I bet that letters on your keyboard are there in the specific order, in the QWERTY layout. Did you ever question why the layout is exactly that one? Why don't we have at least some variety of inbuilt layouts, like we do for the OS or USB connectors? Let's try to answer these questions and talk about keyboard layouts!

A little history lesson

People in the middle of the 19th century didn't really know how to put keys on typewriters and experimented a lot. My favorite example from that time is probably the Hansen Writing Ball. Just look at it, it is gorgeous! Moreover, now we would look like a fortune teller with a magic ball if smartphones had such keyboards.



Long story short, two guys, Sholes and Glidden, managed to design and create the first commercially successful typewriter. They used the QWERTY layout, which shortly became the "main option" for the future designs. That actually was a big deal, because, due to the layout's standardization, people now can learn how to type once and don't retrain for every different job. And this, in turn, made typing easier and printed text cheaper. But it is also the reason why we still use Qwerty to this day.

Is there anything wrong with qwerty? Should we even care?

Well, yes! There are plenty of things wrong with this layout. Try typing "stewardesses". Or the polish word "chrzqszcz". After a few times your left hand would ask for a break. These are not just some unusual examples. In the qwerty keyboard often used letters are not in the convenient positions. It results in letter combinations that require unnatural finger movement, which makes you get tired faster.

What is crazy, is that we have used the qwerty keyboard since the middle of the 19th century, when it was built for typewriters. And the thing with typewriters is that the most used keys must be as far apart as possible to prevent jamming. This keyboard is designed to move your fingers all over the place, instead of having the most used letters in the middle row.

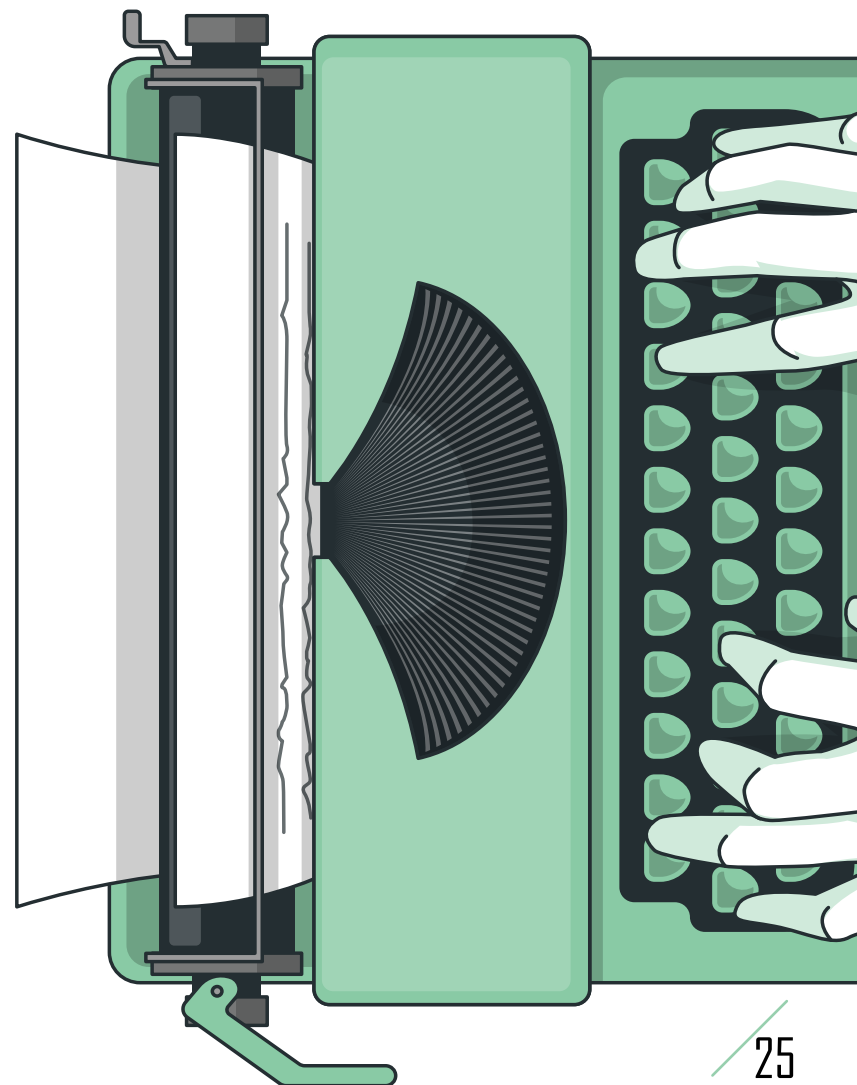
What about alternatives?

There are a whole bunch of noticeable problems with Qwerty. The logical question which arises is "Did anybody try to fix them?". Of course, people tried but, as we still use qwerty, nobody really succeeded in replacing this abomination of a layout.

Since qwerty became "industry standard" there were many more designs that tried to be more efficient. Two solutions which are worth talking about are Dvorak and Colemak.

"Dvorak" is the second most popular layout after "Qwerty". It was designed to address the main problems with Qwerty, namely:

- Awkward finger movement
- Letter combinations use the same finger, or at least the same hand
- The home row is underused



Are we doomed?

The heat map below shows how often each key is used. And Dvorak surely is better than Qwerty. However, learning a completely new layout is hard. Qwerty and Dvorak basically have nothing in common. So, if one already types pretty fast on the regular layout, it would be quite painful to transfer to something completely different. Colemak keyboard focuses on moving the most used keys while keeping the layout as similar to Qwerty as possible. While typing on the Colemak, you don't need to move your fingers that much and it is much easier to learn, as it is similar to the well-known Qwerty.

As we can see, there are some better alternatives to Qwerty. However, we still suffer the legacy of the first successful design. Once we started the production of Qwerty keyboards we have never really stopped.

I don't know if Qwerty will ever be gone from our devices, but **you** for sure can get rid of it. I personally recommend Colemak. It is doable to make the switch and it's a fun skill to have. I'm using it right now to write this very sentence! (Wow, it was pretty slow...). Of course, learning a new layout will take some time and typing is very slow in the beginning. But this is the only way one can influence the legacy. If more people start choosing non-qwerty layouts, keyboards with alternatives will appear on the market. And maybe, they will survive.



In this puzzle, you will need to find a hidden image using numbered hints (it's an actual pixel art, so try to solve it!). The rules are:

- 1) Each square can be either filled or not
- 2) The numbered squares show how many tiles are filled in the 3x3 area around it, including the middle tile.
- 3) Some numbers are missing. They are not revealed to make the puzzle more challenging.
- 4) There's a unique solution, which you can find without deep forward-thinking or guessing.

Tips:

- 1) The process of solving this puzzle is like the Minesweeper game.
- 2) Start with marking squares "empty" around zeros.
- 3) Don't be afraid to leave a part of the puzzle and focus on another corner.
- 4) The difference between two numbers in the adjacent cells can't be more than 3. Look for the places where the difference is exactly 3, you have a lot of information!

0		2	3	4	3	3	3	3	4	3		0	0	0
2	3	5		5		5	5	4	5	5	5	3	2	
3	4	5		4	3	5	4		3	4	5	4	3	2
4	5	5			4		6	3	3	4		5	4	3
	4	4	3	4		7	6		3	3	4	4		3
	5	6	4		3	6	6	3	3	4	6	5		2
3	5	7	5	3	3	6			3	5	7	5	3	1
1	3	6	5			7	7	4		5	6	3	1	0
0	1	3	4		4			4	4	4	3	2	1	1
1	1	1	2	4	5	6	6		4	2			4	3
3	3	1	1	2		5	5	4	2			4	5	4
4	4	1	1			8	8	6	3	1	1	3	4	3
	3	2			5	5	5	5		3	1	1	1	1
1	1	2	5	7	7	6	6	7		5	2		0	
0	0	2			4	3	3	4	5	4			0	0

This would've been an advertorial but
we were ghosted.

Here's some cats to still bring in
those bucks.

Boef

Zorro

Tommy (cute)

(less cute)

Cam

