BUSINESS SCHOOL
INFORMATION TECHNOLOGY BUSINESS SCHOOL

LESSON 01
TOPIC: JOBS IN TECH

Course for First-Year Computer Science Students Week 2 Sept 22-27

READING

EXERCISE 1A

Read the introduction paragraph of the article. What is the meaning of "from scratch"?

EXERCISE 1B

Skim the rest of the article and match the jobs with their description. Then, read the article more deeply and check your answers.

1. **UX Writer**
2. **Data Scientist**
3. **Web developer**
4. **DevOps engineer**
5. **Blockchain developer**

a) A person who creates the texts that appear in the interface of websites and apps.

b) A person who designs and develops websites and website applications.

c) An IT professional who oversees code releases and deployments and optimizes development process.

d) A person who builds applications based on blockchain architecture or protocols.

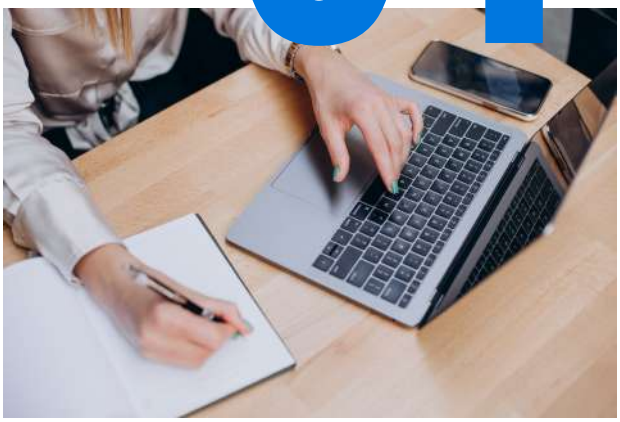
e) A person who is responsible for collecting and analysing large data sets.

POPULAR JOBS IN TECH

INTRODUCTION

The software industry is one of the fastest growing industries in the entire world, with new jobs appearing every year. Not only that, but a lot of the software jobs also don't require a university degree. Here are 5 popular new tech jobs you can learn to do from scratch.

01



UX WRITER

A UX Writer helps create a great user experience through text. They are the ones responsible for any text you read or hear on landing pages, in contact forms, on buttons etc . Their texts must be clear, concise, and useful.

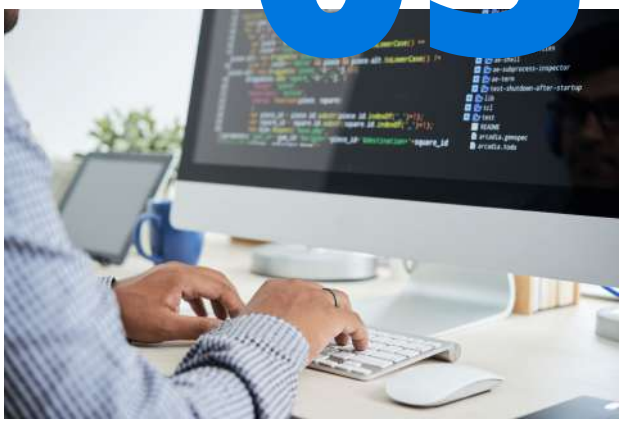
You encounter the works of a UX writer every time you use an app or the internet. When they are doing their job well, you don't even notice it.

DATA SCIENTIST

Many people say that data science is the most attractive career path of the 21st century. Data Scientists work directly with business stakeholders to help them understand and use data for strategic needs. They collect, store and analyze data and later create algorithms and predictive models.

Then other experts such as Machine Learning engineers use those models and handle the creation of all kinds of smart technology. In order to qualify for a data scientist role you need to have expertise in data modeling and be proficient in a range of programming languages.

03



WEB DEVELOPER

Despite what some people might think, the demand for qualified web developers keeps growing with each year. There is so much more to this field than just knowing the core web technologies (HTML, CSS and JavaScript). Because web development is evolving so quickly, web developers have to keep up with the industry changes and learn how to compete on the job market. Some choose to learn certain skill sets that will increase their professional value such as UI/UX design. Others specialize in a specific niche where competition is less tough such as platform development.

DEVOPS ENGINEER

If you're a beginner, it will definitely be challenging for you to get into DevOps engineering, although this is still possible. You will have to learn a broad range of technologies from scratch including programming languages, operating systems, cloud computing, networking, continuous delivery and continuous Integration etc.

The reason why so many companies are looking for DevOps engineers is that they are the people that help shorten the development time, produce more high-quality software and optimize communication between developers, testers and system administrators.

soft skills

A degree is not necessary to get a job in tech.

05

BLOCKCHAIN DEVELOPER

Blockchain technology is still hugely popular these days and there are more and more career opportunities to enter this field that are opening up for tech professionals. In a nutshell, a blockchain is a decentralized distributed ledger that helps perform various transactions.

There is a variety of duties and projects you can take on if you work with blockchains. Businesses are excited to incorporate blockchain into their processes because it's a very cost-efficient, transparent way of managing transactions. As a blockchain developer, you will need to have a solid knowledge of data structures and blockchain architecture.

Listen to the audio recording of the test and check your pronunciation (track 1.1.)

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EXERCISE 2A

Complete the phrases with the verbs below.

Collect • Handle • Keep up with
Compete • Specialize in
Qualify • Shorten • Take on

1. collect user data.
2. qualify for a job.
3. compete with other people.
4. handle/take on a difficult task.
5. keep up with web development.
6. shorten development time.
7. specialize in customer requests.
8. take on customer requests.

manage (v)

EXERCISE 2B

Match the adjectives from the article to their opposites.

1. Cost-efficient	a) secretive
2. Transparent	b) unclear
3. Solid	c) lengthy
4. Clear	d) wasteful
5. Concise	e) shaky

EXERCISE 2C

Match the words from the article with their definitions.

1. Encounter	a) come across or experience something
2. Career path	b) expert knowledge and skills
3. Stakeholders	c) from the very beginning
4. Expertise	d) make something more effective
5. Despite	e) a wide variety
6. Core	f) nowadays
7. Broad range	g) in a few words
8. From scratch	h) the way you progress in your work
9. Optimize	i) in spite of
10. These days	j) people who have an interest in a certain business
11. In a nutshell	k) fundamental

EXERCISE 3A

Answer the questions with a partner or record yourself answering the questions if you're learning by yourself.

Which of these 5 jobs is the hardest to do? Which is the easiest? Why do you think so?

EXERCISE 3B

Answer the questions with a partner or record yourself answering the questions if you're learning by yourself.

1. How do you keep up with what's going on in the world?
2. How much time do you think it takes to learn a new skill from scratch?
3. Are you normally concise when you speak?
4. What are some things you have a solid understanding of?

LESSON 03

TOPIC: TRENDING TECHNOLOGY

EXERCISE 1A

GLOSSARY OF TECHNICAL TERMS

Encryption — a method of securing data by scrambling it so that only authorized parties can understand the data by decrypting (unscrambling) it.

Supercomputer — extremely powerful computer with superior computing power.

Virtual Reality — a computer-generated simulation in which a person can interact within an artificial three-dimensional environment using electronic devices, such as special goggles with a screen or gloves fitted with sensors.

Augmented reality — a technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view.

Artificial intelligence — computer systems that are able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. + writing + coding

The Internet of things

Early adopter — an individual or business who uses a new product, innovation, or technology before others.

Primary — in UI design, a "primary" color is a color that makes most of the design as opposed to the "accent" color which is used to accentuate buttons and other call-to-actions.

foretell- foresay - foresee

2100 12-13m

Business forecasting — the process of predicting future developments in business based on analysis of trends in past and present data.

Gaming (the gaming industry) — the industry involved with development, marketing, and monetization of video games.

+70

EXERCISE 1B

Match the words below (1-4) with the field they relate to (a-d). Explain your choice.

1. Supercomputers	a) Quantum Computing
2. Self-driving cars	b) Artificial Intelligence
3. Gaming	c) Virtual Reality
4. Instagram filters	d) Augmented Reality

Startup — a newly established business. A software startup that's valued at more than a billion dollars is called a "unicorn", implying that such cases are extremely rare.

Shareholder — an owner of shares in a company. stockholder

Incubator — an organization engaged in the business of fostering early-stage companies.

Accelerator — an organization that offers a range of support services and funding opportunities for startups.

Pitch deck — a presentation deck that is used to pitch your idea or company to any number of audiences, generally investors.

API (Application Programming Interface) — a set of programming code that enables data transmission between one software product and another.

CEO (Chief Executive Officer) — the highest-ranking person in a company or other institution, ultimately responsible for taking managerial decisions. MD managing director

EXERCISE 1C

Read the first paragraph and match the words to their definitions.

QUANTUM COMPUTING

Quantum computing has got to be the most glamorous sounding area of computer science. It promises to deliver tremendous breakthroughs in the fields of scientific research, medicine and complex simulations and it is teeming with fancy terms such as "qubits", "quantum entanglement" and superposition. The variety of issues that can be tackled with this technology is fascinating.

love is a feeling you feel when you are about to feel a feeling you have never felt before

1. Breakthrough	a) a word or phrase used to describe a thing or to express a concept
2. Term	b) the opposite of "underestimate"
3. Tackle (an issue)	c) to attempt to deal with something
4. Fascinating	d) a sudden important discovery or development
5. Render something obsolete	c) very interesting
6. Overestimate	d) make something useless and old-fashioned

Pascal .. Floppy disk

EXERCISE 1D

Answer the question.

Do you think quantum computers will soon render the traditional ones and zeros obsolete or maybe their power is largely overestimated?

EXERCISE 1E

Read the second paragraph and complete the gaps in the text with the words below.

leveraged • downside • point out
taking over • high-skilled • drive
low-skilled

ARTIFICIAL INTELLIGENCE

In popular culture AI is often shown destroying humans and 1) taking over the world but in reality this technology has a vast number of useful applications.In marketing and social media AI is used to gather user data and track user behavior and later convert that data into predictions that businesses can use to 2) drive their strategy. AI is even 3) leveraged for lie detection and emotional recognition. Some people 4) point out that one big 5) downside of AI is that it replaces a lot of jobs such as truck drivers and factory workers. However, it is worth noting that while AI is going to remove some 6) low-skilled jobs it is probably going to create more 7) high-skilled jobs.

automation

EXERCISE 1F

Answer the question.

What other ways to leverage AI technology can you think of?

EXERCISE 1G

Read the remaining two paragraphs and use the highlighted words to complete the sentences.

1. John always comes up with brilliant creative ideas.
2. I think AR is going to gain traction in the next couple of years.
3. He knows how to capitalize-on market trends, that's why he is so successful.
4. Our company was an early adopte of VR technology. We've been using it since the late 2000s!
5. Our primary objective is to gain more users.
6. If you hover your mouse over this button, it will change its color.

My primary objective in life is settle down, have kids, and plenty of money

AUGMENTED REALITY (AR)

Just like VR, AR is also used for a variety of purposes other than gaming. Overlaying virtual objects over reality offers a ton of opportunities businesses can capitalize on. Companies are implementing AR technologies to increase interaction with their brand by offering try-on programs where you can place a virtual object in a real environment such as a virtual couch in your living room or virtual shoes on your feet. Not to mention special apps where you can hover your phone over a real-life object and learn more information about it. AR events such as AR meetups and concerts is another trend that seems to be gaining traction.

VIRTUAL REALITY (VR)

We're used to seeing virtual reality in gaming but does it exist outside it? Yes, it does. There are many fields in which VR technology can be used these days, the primary ones are education and healthcare. The healthcare industry, in particular, has been a major early adopter of VR. On top of that, VR has applications in business forecasting allowing businesses to come up with new creative products and collect user feedback without needing a finished MVP.

Listen to the recording of the text (track 3.1) and check your pronunciation.

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EXERCISE 1H

deepseek

Answer the question.

Have you ever tried either VR or AI in real life? What has that experience been like?

How do you do? = hi/hello/good morning

EXERCISE 2

Answer the question.

Here's what people say about trending technologies. Do you agree or disagree with them?

You may want to use some of the **useful expressions** in your answers.

- *"A quantum computer couldn't quite hold all the information in the world, but it could certainly break currently used encryption."*
- *"Mark my words, AI is far more dangerous than nukes" (Elon Musk)*
- *"When virtual reality gets cheaper than dating, society is doomed"*
- *"Augmented reality promises to be as influential to our society as the smart-phone" (Tim Cook)*

USEFUL PHRASES

Strong agreement	Mild agreement	Mild disagreement	Strong disagreement
Absolutely! / Totally!	I agree up to the point	I wouldn't say that myself	Not by a long shot!
100 percent!	I guess so	I don't know about that	I don't think that's true
I couldn't agree more!	That might be true in a way	I'm not so sure to be honest	That doesn't make sense to me
That's exactly correct!	That could be true / That could happen	We'll have to see about that	I have to disagree with this

I partially agree

You said a mouthful

Strong Disagreement — Neutral to Polite

I completely disagree.

I strongly disagree with that.

I can't accept that argument.

I see it quite differently.

That's not how I see it at all.

I'm afraid that's simply not th case.

I have to disagree with you there.

I don't share that view.

That's not supported by the evidence.

I'm sorry, but that's not true.

Common Mild Agreement Phrases

I suppose so.

I guess you're right.

That's true, to some extent.

I can see your point.

I'd agree with that, to a poir

You might be right about th

That makes sense.

Fair enough.

I think you have a point the

I tend to agree.

That's a good point.

There's some truth in that.

I wouldn't disagree.

I'm inclined to agree.

In a way, yes.

Common Mild Disagreement Phra

I'm not sure I'd go that far.

I see what you mean, but...

That's one way to look at it, thougl

I'm not entirely convinced.

I'm afraid I don't quite agree.

That's partly true, but...

I take your point, but...

Perhaps, though I'd see it different

That may be the case, but...

I'm not so sure about that.

I'd see it another way.

You could be right, but I think...

That's debatable.

Not necessarily.

I tend to disagree.

1 INFO GROUPS: A, B, C, D, & E
Week 5

knowledgeable

LESSON 05

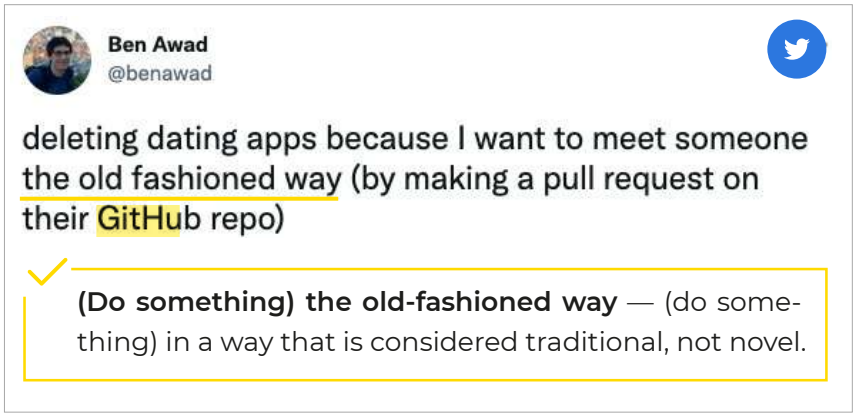
TOPIC: VERSION CONTROL AND HOSTING PLATFORMS

Host

EXERCISE 1A

Read the tweet. Can you explain the terminology used in it ("pull request", "repo")?

repository (repo): storage location



I don't use ChatGPT to code; I do my coding the old fashioned way.

it is doable

EXERCISE 1B

Read the text and find words that mean:

facilitate

1. Be informed about
2. Ability to be hired — hireable/employable
3. Make a process faster or more efficient — optimize- streamline
4. Go through a complex procedure — jump through hoops
5. Achieve or obtain through work — earn
6. Make (something) easier
7. Improve to its maximum potential
8. Display — show- showcase
9. Study / explore something in-depth
10. Divide into smaller parts — split - break down

nurses

delve into
dive into

novel (adj): new

apprentice

deadly sins

If you've ever worked on a huge project or contributed to an open-source project you've most likely used Git. As you may know, Git is a version control system that facilitates code revisions and streamlines development processes. Novices sometimes confuse Git with GitHub but they're not the same thing. While Git is a tool to manage your source code, GitHub is a hosting service that helps you store your repositories (or repos) and show off your projects to other developers. With Git you can also keep track of all the changes you've made to your code and push commits when you're done working on a particular feature.

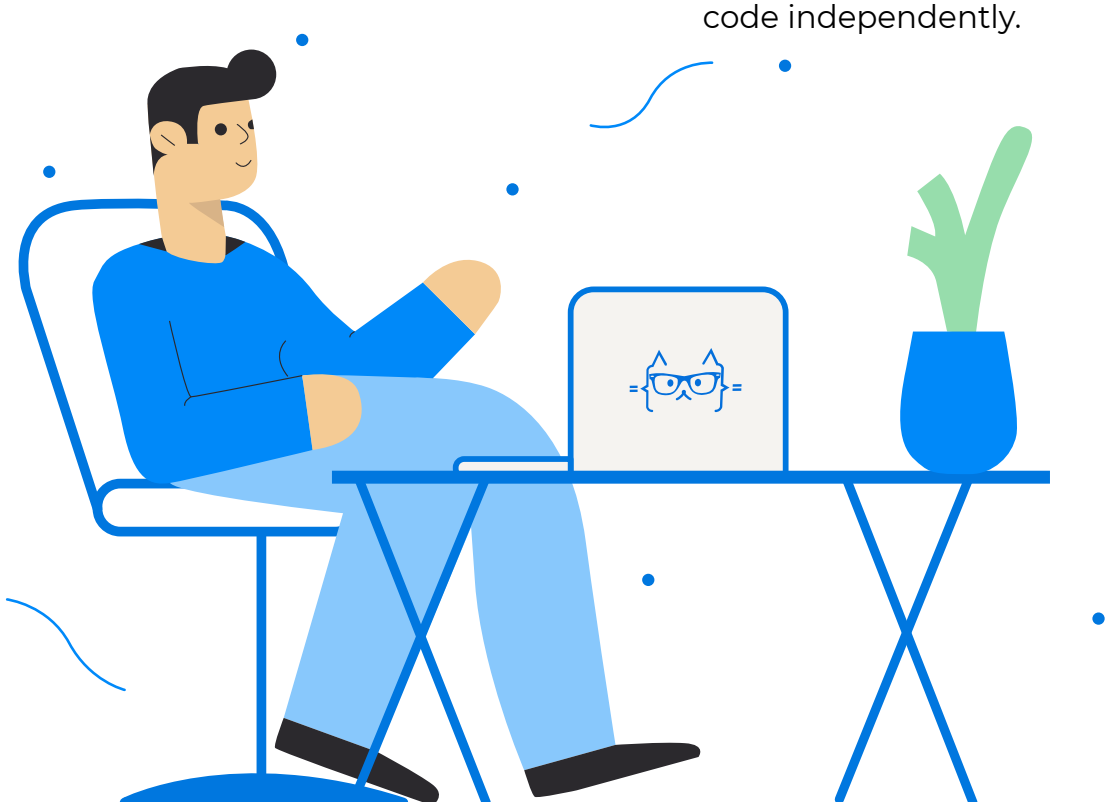
Let's dive into the advantages of Git and GitHub and what it allows you to do:

1. GitHub brings you closer to the community. Having a GitHub profile and actively contributing to open source projects improves your hireability and lets you showcase your work to your fellow developers and get feedback from them.
2. Git optimizes development time. When working on a big project you can break it down into several branches and then fold the branch you're done working on into the master branch. This way you can start deploying new features and making them immediately accessible to the consumer without having to finish the whole project.

fellow coder

3. Git facilitates collaboration. Before Git was created developers had to jump through hoops to earn the right to contribute to an open-source project. This typically meant they had to contact the author of the project in person and prove to them they were qualified enough to make contributions. Now, developers can simply fork an existing repo and as soon as they feel like sharing the results of their work, create a pull request and let the authors of the original repo know that they've just made an improvement to their project. Developers can also easily pull from each other and merge their code independently.

hard times



What feedback do you have on EDUCATED ITBS app?
cumbersome

EXERCISE 2A

Read the text about alternatives to Github and complete it with the words from the box.

built-in · suited · suite · in fact · pricing · up to

GitHub is a popular tool that developers flock to to host their open source projects. But is it the only player in the space? _____ , there are a few GitHub alternatives out there that have their own strong advantages. Here are a few of them:

1. BITBUCKET

Advantages over GitHub:

- More _____ flexibility.
- Better_____. BitBucket is absolutely free for_____ 5 users.
- Better integration with the Atlassian _____ of products including Jira and Trello.

2. GITLAB

Advantages over GitHub:

- GitLab has in-built functionality to track bugs and fix them online.
- Better_____for DevOps purposes and handling Continuous delivery and integration.
- Has a CLI user experience.

Listen to the recording of the text **(track 5.1)** and check your pronunciation.

Open in Google Drive

EXERCISE 2B

Come up with your own 6 sentences for each phrase from the box in exercise 2A.

SPEAKING & SOFT SKILLS

EXERCISE 1

Role-play the following scenarios with a partner (or record your speech as a monologue).

1. You're going to suggest an improvement to an existing work process and ask for feedback.
2. You're going to give feedback to a colleague on the idea they have. Point out things that your colleague might have missed or failed to take into account.

EXERCISE 2

Research the 4 software products below and describe what they are.

Do you use them at work? What sort of tasks are they suited for? Do you know any other famous open source projects? What are they?

There is a lot of open source software (software projects that anyone can freely contribute to) that is widely used by professionals. Here are a few examples of such software products:

Flutter

TensorFlow

Gimp

django

Whether it comes to open source development or learning English, community is very important. English For IT has its own **Telegram community** of English language learners and tech professionals that you can join for free! **Drop by and say hello!**

JOIN COMMUNITY >>

WRITING & SOFT SKILLS

EXERCISE 1A

Read the dialogues (1-3) and create your own sentences with the useful expressions from each one.

DIALOGUE 1.

Talking about current and recent tasks

— Hi Alan! I'm just checking in with you regarding the status of the backend bug your team started to work on yesterday

— Hi John! It seems that the bug is a lot more serious than we originally thought. We've tracked it down to a data architecture issue that we're not yet sure how to tackle. I was thinking of setting up an all-hands meeting between tech teams and trying to work out a solution. What are your thoughts on that?

— Can you set it up today? We have to make sure this bug is fixed by our next sprint.

— Absolutely. I will keep you posted on the progress.

— Sounds good. Please be sure to get back to me by the end of the day.

DIALOGUE 2.

Saying what you think & clarifying

— I have an idea. I think it would be better if we applied Flexbox globally.

— I'm not sure I got your point. Could you elaborate?

— Sure. My point is that we should consider using CSS Flexbox for the entire project because that will make positioning elements a lot easier and save us time on rewrites.

— I see now. I have no objections to this but I think you should check with Elaine first and see what she thinks.

— Do you mean our head of UX?

— Yes, she's also an expert on CSS so she might have some insights or questions.

— I'll do that, thanks!

DIALOGUE 3.

Handling negotiations

— I'd like to implement another weekly meeting on Wednesday. What are your thoughts?

— I don't see the relevance of that to be honest. I know that check-ins are important but I'd like to point out that they don't have to be done in-person. They could just be sent via email. Plus, we also need to take into account the fact that most of us are located in different time zones so it's going to be hard to find a time that would work for everyone.

— Thanks for the feedback, I appreciate it. Can we circle back to this topic at our next team meeting? Would you be ok with sharing your thoughts there?

— I would, absolutely.

EXERCISE 1B

Use the useful expressions from the dialogues in the sentences of your own. Write one sentence for each phrase.

USEFUL PHRASES

- I'm just **checking in with** you regarding....
- I'll **get back to** you as soon as I can
- I'd love to know **your thoughts on**...
- **It seems that** / it appears (for bad news or issues)
- **Keep me in the loop** / Keep me posted
- **My point is**.../ The point I'm trying to make...
- I think **it would be better if** ...(we did Xyz) because...
- Here's why I think we should do... (Xyz)
- I think we should **consider...**.(doing something)
- **Do you mean...?**
- I'm not sure I **got your point. Could you elaborate?**
- **I'd like to point out** that (an important fact)
- I'll consider it / **I'll take it into account**
- I don't **see the relevance / importance of** (something)
- Can we **circle back to** that?
- **Would you be ok with...?**

Repository (repo) — a location in which data is stored and managed.

Fork — split (a process) into two or more independent processes.

Pull request — a method of submitting contributions to an open development project

Suite — a set of programs with a uniform design and the ability to share data

CLI (command line interface) — a text-based user interface (UI) used to view and manage computer files (as opposed to Graphic User Interface which is icon-based)

Version control (or source control) — the practice of tracking and managing changes to software code.

Atlassian — an Australian enterprise software company that develops products for software developers, project managers, and content management.

Jira — a software application developed by Atlassian used for issue tracking and project management.

Trello — a collaboration tool that organizes your projects into boards, also managed by Atlassian.

BUSINESS SCHOOL
INFORMATION TECHNOLOGY BUSINESS SCHOOL

LESSON 02

TOPIC: HOW TO BUILD A STARTUP?

1 info Groups: A, B, C, D, & E

READING

EXERCISE 1A

Read the first three paragraphs of the text and find the words that mean:

a) Able to be seen through clearly

b) Adjusting

c) Start developing something successfully

d) Desire to take active part in something

e) With an optimal balance of value to price

f) Giving good results

g) Business founder

Did you ever dream of building your own startup? Even if you didn't, startup mentality and startup culture are very popular topics in the tech world. Steve Jobs even once said that Apple is the biggest startup on the planet. Today we'll talk about why startup culture is so influential and what it takes to build your own successful startup.

Many startups have values that even big businesses are trying to adopt such as:

- Quickly adapting to change
- Demanding high levels of involvement and engagement from all co-workers
- Having open, honest and transparent relationships between teams and management
- Thinking outside the box and finding innovative, cost-effective solutions to customers' problems.

Even if you're planning on creating your own business, thinking like an entrepreneur can be very beneficial for your personal development and career growth. So what qualities do you need to have to get your business off the ground?

EXERCISE 1B

Complete the text below with the right headline for each paragraph.

Can you think of any other steps that you'll have to plan when building a startup (in addition to these 4)?

- Prepare you pitch
- Develop a vision for your product
- Put together a great team
- Think about the logistics

1. _____

It all starts with a good idea. Ask yourself: What customer pain point can I solve? Which gaps in the market can our business fill? Is our solution elegant and scalable? Can we pivot if we have to?

2. _____

As a leader, you need to be in charge of people to hire. Very often new businesses are formed by a couple of friends who have known each other for years and share the same mindset. However, as your company grows you will have to bring new people on board. It is important that your new employees are the right match for the company. That means they not only have the right skill set for the job but also share the same motivation and passion for your common vision and goals.

3.

Where will you be located as a business? What expenses will you have to take into account? What annual budget will you need? A CEO is a bit of a jack-of-all-trades at least during the early stages of the startup. What can help you though is an incubator. Incubators are non-profit organizations or individuals which provide new businesses with a range of possibilities such as access to low-cost equipment, mentorship, help with marketing, PR and pitching, living accommodation, networking opportunities and helping the startup find prospective investors.

4. _____

If you ever come across someone important (say, a potential mentor or shareholder) you want to be able to deliver a concise informative speech about yourself / your product or your company. That's what pitching is all about. By getting your idea out there to people who can fund you and mentor you in the future can be scary because there's a lot at stake. However, it is important to pitch as many people as possible. Even if you don't get a partnership or a contract, every pitch can be a source of valuable learning for the future and the people you give it to may even suggest useful tips or make you see things from a different perspective.

In short, having an entrepreneurial spirit is beneficial for everyone and the 4 tips we've just discussed can be applied in other areas such as your job or personal life. In future segments, we will focus more on how to create and deliver your own pitch.

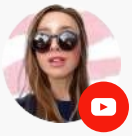
Listen to the audio recording (track 2.1.) of the text and check your pronunciation.

Open in Google Drive

EXERCISE 1C

Match the highlighted words with their definitions.

1. Pain point	a) Having an ability to grow bigger
2. Scalable	b) Ask someone to join the team
3. Pivot	c) Change the course of the existing strategy
4. To be in charge	d) A problem that a business / service can solve
5. Bring (someone) on board	e) Encounter
6. Expenses	f) Likely to happen
7. Take into account	g) Short and informative
8. Annual	h) At risk
9. Jack of all trades	i) Yearly
10. Prospective	j) Consider
11. Come across	k) Someone who can handle many different responsibilities
12. Concise	i) Costs
13. At stake	m) To be the main person responsible for something



ANNGLISH TIP
English For IT

Who can I get help from?

*You're gonna need help from people that have industry experience and skills.That's where **incubators** and **accelerators** come in. Incubators help startups discover an idea and create a business plan for executing that idea. Accelerators, on the other hand, help startups with already existing MVPs to grow and develop quicker.*

Where can I get money from?

*You can choose to either raise **VC** funding (this will involve preparing lots of **pitch decks** for venture capitalists and trying to convince them to invest into your business) or **bootstrap** your startups (if you have enough startup capital)*

**Check the glossary of terms for a detailed explanation of the highlighted words*

EXERCISE 2A

Answer the questions.

1. Are you currently in the market for anything? What is it?
2. Can you explain in your own words what marketers do?
3. Can you give examples of companies that managed to corner the market? How did they do it?

EXERCISE 2B

Complete the sentences with the following expressions.

Expressions with the word market.

Corner the market · On the market
Break into a market · Marketer
Beat (someone) to market
Market economy · In the market for
Go-to-market strategy

1. The United States is a _____ where the prices are determined by the rules of supply and demand.
2. They were planning to release their app next month but their competitors _____ them _____.
3. This is the best solution _____ right now.
4. A company always takes a risk when it tries to _____ a new _____.
5. We need to create a strong _____ if we want our product to be successful from the first day of the launch.
6. That company has _____ and become the leading desktop manufacturer in the industry.
7. I'm _____ for a new pair of headphones.
8. Have you considered hiring a _____ _____ to help you with promoting your services?

@english_for_it

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LEARN NOW >>

PRONUNCIATION

EXERCISE 1A

Read about the rules of English intonation.

Using proper intonation can make the biggest difference in how well your speech is perceived.

Correct information makes you sound more confident, professional and clear.

There are two types of intonation is English: rising (↗) and falling (↘).

We use rising intonation in the following cases:

Yes/No Question:

↗ Did you HEAR this?

↗ Can you speak LOUDER?

↗ Are you tired?

↗ Do YOU work here?

We use falling intonation in:

Wh- Question:

↘ WHEN did you start working here?

↘ HOW MUCH time do you spend in meeting?

↘ WHERE did you go to school?

In longer sentences, we'll need a mix of rising and falling intonation.

For example, when we have questions with several answer options:

Choice Questions?

Can you code in Python ↗ or C++ ↘ ?

Can you code in Python ↗, Java ↗ or C++ ↘ ?

You should also use rising information after each break in a long sentence and use falling intonation to indicate the end of the sentence.

When I just started working on that project ↗, I wasn't sure where to start ↗ but, luckily ↗, my friends were able to help ↘.

I read a lot of articles ↗, booked sessions with industry experts ↗ and finally managed to come up with a solid business plan ↘.

EXERCISE 1B

Look at the sentences below. Use arrows (↗ and ↘) to indicate the types of intonation that should be used in each sentence. Listen to the recording (track 2.2) and check your answers.

- Can you make it to my birthday dinner?
- Do you wanna see a movie tonight?
- Did you have time to watch the final episode?
- Is it true that you lost your phone?
- Should we ask her to join us?
- What did you think of the project?
- Why are you so busy lately?
- Where should we go for lunch?
- Can you help me now or later?
- Is the best time to meet on Monday, Tuesday or Wednesday?
- Would you like vanilla, caramel, strawberry or chocolate?
- Actually, we still have some time.
- In fact, I tried calling him the other day but he didn't pick up.
- A few years ago, I got a chance to work with a great graphic designer.

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WRITING & SOFT SKILLS

Presenting your company or product.

EXERCISE 1A

Read the text and note down the key elements that make a good pitch.

"I have an idea I want to pitch". This is a sentence every English speaker says at least once in their career. Every time you have to introduce yourself, talk about what your company does or suggest a new idea, you are delivering a sales pitch.

Here's how you can go about it:

1. Who are you?
2. What does your company do?
3. What's the value proposition?
4. Attention-grabbing call to action statement.
5. Read and edit the pitch.

Also, remember about the 3 big Don'ts of a sales pitch:

- Don't use jargon (use simple words that people from outside of your professional sphere can understand).
- Don't make the pitch too long (1 minute is ideal. Remember that the end goal of such pitch is to earn you a second conversation where you can have a more in-depth discussion).
- Don't freestyle too much (make your pitch concise and to the point. Preparing your pitch helps you make a better impression than if you were just improvising it off the top of your head).

LESSON 04

The more, the merrier

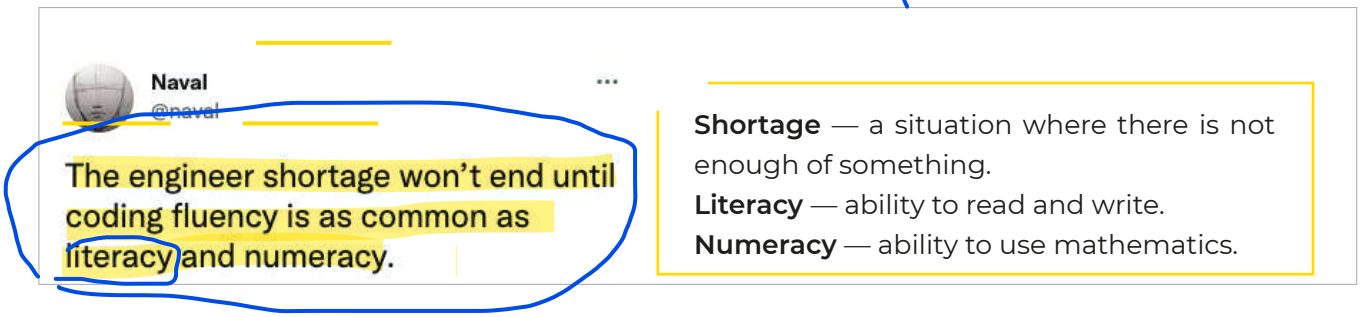
TOPIC: PROGRAMMING LANGUAGES

EXERCISE 1A READING

Tunisia

Read the tweet. Do you think there is a shortage of software engineers in ~~the modern world~~? Why / why not?

lack of ≠ abundance



EXERCISE 1B

Before you read the text, try to complete the sentences with the prepositions below. Read the text in Exercise 1C and check your answers.

Backing up your data goes without saying.

up • for • on • out • at • of • to • into • in • by

1. I'm looking FOR a new job in technical recruiting. KICK resume
2. You need to back up your opinions with facts. backup Plan B
3. The number of programming jobs is growing by the day.
4. You will need to change your work routine at some point.
5. I've heard that PHP is going out of use. obsolete
6. You have a natural talent for logical thinking that you can tap into . capitalize on
7. It is up to you ~~what you~~ decide (what to do). awkward
8. She can easily take advantage of this situation. /ɔv/
9. He's an amazing coder, on top of being a great guy. manhood
10. He coded the entire application in C++.

EXERCISE 1C

Mark the statements True (T) or False (F).

1. The majority of web browsers are programmed in C++. T
2. The number of C# jobs is 75% higher than C++ jobs. T
3. PHP is famous for its elegance. F
4. Python's syntax is a little complicated. F
5. Java remains a viable programming language. T
6. JavaScript can be used for a wide range of projects. T

There are 6 programming languages that are far above the rest and there is data to back it up.

To give you a detailed understanding, we are going to look at 4 major dimensions:

1. Number of jobs.
2. Number of learning resources.
3. How many people use it at work.
4. Popularity (is the language trending up or down?).

Then, we're going to give each language a score and rank them relative to each other.

Let's jump into it!

#6 C++

C++ is the fastest performing language. If you're going to write software where every millisecond counts, then C++ is the language you're looking for. Fun fact: most browsers (such as Chrome, for instance) are programmed in C++. Overall, there are only 10,000 remote C++ dev jobs on Indeed (popular job search site). It also has the lowest use at 24 % of developers reporting that they code in C++ on a daily basis. But this doesn't mean that it's going to go out of use in the near future. It just means that this language is used for very specific low-level tasks.

#7 Go (Golang)

FRONTEND

Go is one of the fastest-growing modern programming languages. It was created by Google to solve problems with scalability and performance in large systems. Go has a very simple syntax, even simpler than Python, which makes it easy to learn. It's extremely fast and efficient, which is why so many companies use it to build cloud services and backend applications. Over 10% of professional developers already use Go at work, and its popularity keeps growing. If you're interested in a career in DevOps or Cloud Engineering, Go is definitely worth learning.

hash

question tags

Tunisia is safe, isn't it?
Stop using the phione in class, will you?
He cooks well, doesn't he?

#5 C#

If you want to work with the Microsoft .NET framework, you're going to need C#. You can also use C# for Unity game development and a variety of other different things. C# has doubledthe amount of jobs of C++ at 20,000. There's also some demand for this language on the freelance market which you can take advantage of. About 30% of the development community use it at work. The trend line for this language is kind of flat.

#3 Python

Many people say that Python is the best language for beginners to learn because of its straightforward syntax. It's also very popular for trendy Machine Learning and Artificial Intelligence. 44% of people use Python at work which is really high, it's almost half of all developers. Chances are, you're going to have to learn Python at some point in your career no matter what so it's not a waste of time to learn it.

Tunisia is infamous for pollution.

infamous

#4 PHP

The language most developers hate. PHP is notorious for being a cumbersome language but honestly, it's not THAT bad. PHP is the traditional language of the web. These days, it has two big competitors, namely Python and JavaScript which are becoming more popular by the day. This is the major reason why PHP is declining in popularity. That said, this is the exact reason to learn it. Because so many people want to program in any other language other than PHP, there is a demand for PHP developers that you can tap into if you're a PHP expert.

However,

#2 Java

Java is the number one choice for big enterprise projects. It has pretty good performance and can be effective in writing large backend applications. The main concern about Java is that some people say it is a dying language and there are other languages that can replace it such as Go, for example. However, so many big companies have their code written in Java, it is still worth learning today.

we eat what we can and we can what we cannot eat.
Aux FV

#1 JavaScript

No surprise there. JS is the go-to language for front-end which runs in the browser. You can also use it on the backend with runtimes such as Node and Deno. Knowing JavaScript and being familiar with its ecosystem definitely opens a huge door of opportunity for you. Over 65% of developers use JS at work and the market share for this language keeps growing. On top of that, JavaScript is an extremely versatile language that can be used to program many things: from dynamic web pages to apps and video games.

Now that you have this basic overview, it is up to you to decide which language you want to learn this year.

Listen to the recording of the text (track 4.1) and check your pronunciation.

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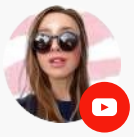
EXERCISE 1D

Answer the question.

Which of these 6 languages would you be most interested in learning? Which do you already know?



ANNGLISH TIP
English For IT

*One thing that can really elevate your communication skills is using **connective phrases**. If you pay attention to great public speakers, you'll notice that they use a lot of such phrases to link their ideas together.*

connectors
connective devices

EXERCISE 1F

Complete the speech with connective phrases from the text.

on top of that	•	chances are	
that said	•	overall	

— Can you tell me about the most interesting course you've ever taken?

— Sure. It was a web development course that I took last October. Overall, I was very happy with how the course was structured. That said, there were certain parts that were very difficult and not explained in enough detail. What made this course stand out to me were the useful and practical project sections. On top of that, there were also plenty of quizzes and gamification features. Chances are, if you've ever googled "web development course", you've seen on the first page, that's how popular it is.

📄 Look at the glossary from the text and make sure you understand the meaning of each phrase.

1. Back (something) up	Support something or someone. backup
2. Dimension	An aspect or feature of a situation.
3. Rank (verb)	Give (someone or something) a rank or place within a grading system (rank high, rank low, rank first etc.)
4. Relative	Considered in relation or in proportion to something else.
5. Look for (something)	Try to find someone or something.
6. Overall	Taken as a whole; in all.
7. Code / program in (a certain language)	Write code in (a certain language).
8. Go out of use	obsolete Stop being used (the opposite of "to be in use").
9. Take advantage of	Use something for your own benefit. capitalize on
10. Notorious infamous	Famous or well known, typically for some bad quality.
11. Cumbersome	Slow or complicated and therefore inefficient.
12. Competitors	Business rivals. compete with
13. By the day	With each day.
14. That said	Despite what one just said. Having said that
15. Demand	The desire of consumers, clients, employers, etc. for a particular commodity, service, or other item.
15. Straightforward	Uncomplicated and easy to do or understand.
16. Trendy	Very fashionable or up to date.
17. Chances are	It is very likely that.
18. At some point	At an unspecified time in the future.
19. A waste of time	Something inefficient or unproductive.
20. Enterprise	A for-profit business or company.
21. Concern	A matter of interest or importance to someone.
22. Go-to	Regularly or repeatedly chosen or employed for reliably good results.
23. Market share part du marché	The portion of a market controlled by a particular company or product.
24. Keep (growing)	Continue (to grow) constantly.
25. On top of that	In addition to that.
26. Versatile	Having many applications. The shot is yours
27. It is up to you	It depends on ~~what~~ you decide.

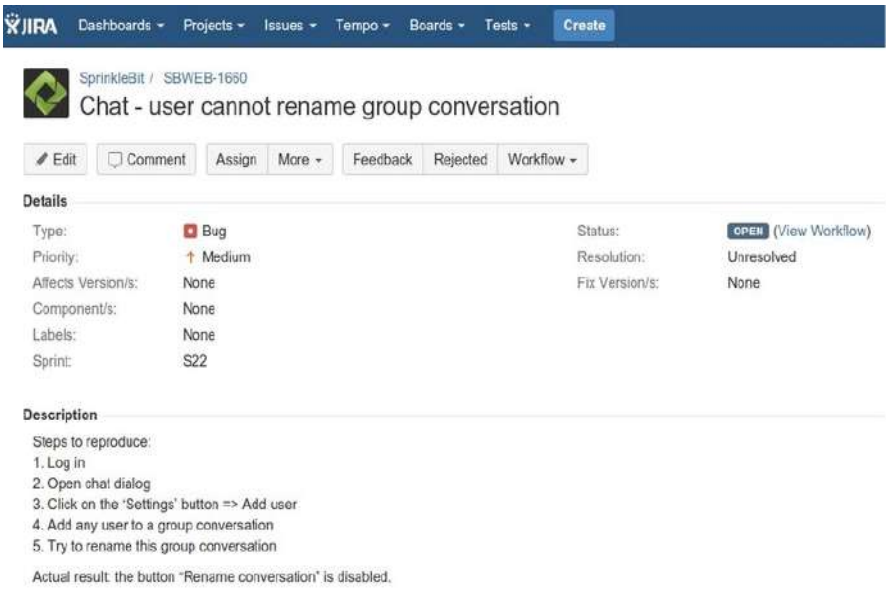
1 Info Groups: A, B, C, D, & F

LESSON 06

TOPIC: *QA TESTING*

WARM-UP

Describe what you see in the image. What is it? What elements does it consist of?



EXERCISE 1A

Read the tweet. What do you think of this "new hire"? Do you think it's worth doing something like that?

EXERCISE 1B

Read the first paragraph and answer the questions from it.

EXERCISE 1C

Read the rest of the text and select the topics that the text mentions.

1. How to become a QA engineer.
2. How to write a bug ticket.
3. The difference between different types of testing.
4. The importance of clear communication and prioritization.

Think about the last time you were testing a product before the final release. Did everything go smoothly? Did you manage to fix all the bugs before the deadline? Was the release date postponed?

The funny thing about the testing process is that a lot of setbacks that happen during it can be attributed to nontechnical reasons. Today we're gonna talk about software testing pitfalls that can be avoided with the help of effective communication.

The first problem is writing unclear tickets that do not adequately describe the problem you are facing.

The best tickets include:

- a very clear problem statement
- steps to reproduce the problem, as well as a description of the hardware used to replicate the problem
- a screenshot (if applicable)
- clickable URLs, and not just a screenshot

A good example of a well-formed ticket looks something like this:

"Users running Firefox report that the webpage appears garbled. We have managed to replicate the problem running Firefox version 70.0 and have attached a screenshot as well as the relevant URL to this ticket"

The second issue might be that you don't really know what to test for. Typically you just don't have time to test your product on all Operating Systems in all browsers with all of its functionality and UI standards so you need to be good at compromising and setting up the right expectations upfront. To make things easier for you, consider outlining the key categories which you should test, for instance, configuration, performance etc. Apart from the scope of testing it is also helpful to define your key deliverables, testing objectives and time constraints. This will help you write clearer test cases. Speaking of test cases, a good rule of thumb to keep in mind is not to include too many steps in them. Having over 8 steps in your test case makes things confusing and is more likely to cause someone to fail to execute a task.

snowed-uner//overwhelmed

Keep all of your communication lines organized. If you are swamped with requests and bug reports, keeping a strategy that can help you store and prioritize all the incoming messages is essential. Ideally, you want to keep all of your important communication in one place to not allow any messages to slip through the cracks.

fail to be noticed

Listen to the recording of the text (track 6.1) and check your pronunciation.

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EXERCISE 1D

Complete the sentences with the highlighted phrases from the text.

1. I'm _____ a very difficult problem.
2. I haven't managed to _____ this issue in my browser.
3. We had to _____ the project release date because there were a few critical bugs we needed to fix.
4. Everything went _____ and we didn't experience any unexpected _____.
5. The client is experiencing an issue where text appears _____ on some of the slides. Does anyone know how to fix this?
6. Is this a link? It's not _____ .
7. We got _____ with tasks and a couple things _____ unfortunately.
8. We can start working on the project upon receipt of full _____ payment.
9. We got _____ 200 requests: 208 to be exact.
10. I have _____ to mention something very important when we started the meeting so I'm going to mention it now.
11. Despite our time and budget _____, we have managed to clarify our _____ and create all _____ features.
12. A classic _____ for effective meetings is to _____ the agenda before diving into the details.

Review the glossary from the text and make sure you understand the meaning of each phrase.

1. Go smoothly	Go easily, without any problems.
2. Postpone	Delay, set to a later time.
3. Pitfall	Hidden danger
4. Face (something)	Deal with (something).
5. Reproduce	Repeat or replicate.
6. Clickable	Able to be clicked.
7. Garbled	Distorted, not working properly.
8. Upfront	In advance, without waiting for anything else to happen.
9. Outline	Describe the most important details.
10. Key	Crucial, very important.
11. Constraints	Limitations.
12. Deliverables	Results you need to provide.
13. Rule of thumb	Practical advice that works in all cases.
14. Over	More than.
15. Fail to	Not manage (to do something).
16. Swamped with	Overloaded/overwhelmed with something.
17. Slip through the cracks	Overlook, miss something important.

EXERCISE 2A

Match the QA terms to their definitions.

1. Smoke testing	a) A bug that is uncommon for users to encounter
2. Acceptance criteria	b) A set of predefined requirements that must be met in order to mark a user story complete (Agile concept)
3. Regression testing	c) A part of a test scenario which describes an action performed on a system to determine if it satisfies software requirements and functions correctly
4. Test case	d) A type of software testing to confirm that a recent program or code change has not adversely affected existing features
5. Edge case	e) A type of software testing that determines whether the deployed build is stable or not

data datum

EXERCISE 2B

Match the QA terms from 2A to the situations.

a) You run a test to see if all the buttons on a webpage are working.

b) A UI issue occurs when the user checks all available checkboxes while viewing the web page in the Safari browser.

c) When the user is on the pricing page, they should be able to choose between three different pricing options or click the “book a free consultation” button which will take them to a contact form.

d) Check customer login with invalid password.

e) You run tests to determine if a reported login bug has been fixed.

PRONUNCIATION

Commonly mispronounced tech words

Listen to the audio recording (track 6.2) and practice saying the following words.

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- Technology
- Algorithm
- Argument
- Assignment
- Comment
- Crash
- Launch
- Execute
- Merge
- Interpreter
- Iteration
- Procedure
- Server
- Variable

Here is an example. Software developer Sally explains how she overcame an obstacle during one of her recent projects:

SITUATION

During my last project we had to find a way to streamline our process to meet a deadline.

TASK

Our clients changed the requirements and we needed to develop a workaround so that we could implement all the features on time.

ACTION

First, we held a brainstorming session where we generated ideas on how we can work faster. At this point, we decid-ed to switch to a different language which all of us could understand. Then, I suggested implementing some code walkthroughs and pair programming techniques. Finally, I recommended some cost-effective tools we could use to help us increase our productivity.

RESULT

In the end, we managed to meet the deadline and our app was published on the App store within the following two weeks.

EXERCISE 1B

Talk about the last time something didn't go according to the plan in your project using the STAR technique.

Make sure to answer the questions:

- What went wrong?
- What pitfalls or problems did you come across?
- How did you manage to solve the problem?

WRITING & SOFT SKILLS

EXERCISE 1A

Read the text and prepare to write your own bug report.

WRITING A BUG REPORT

Look at the example of a good bug report. What makes it good? It's concise but doesn't miss any key details and contains all the necessary elements of a proper bug report namely:

1. Title / summary (missing product images)
2. Severity/Priority
3. Description
4. Expected Result
5. Actual Result
6. Steps to reproduce
7. Environment
8. Visual Proof (screenshots, videos, text)