

Tutorial 1: Set up your account for GDSC 2025

Welcome to the first tutorial of the 2025 GDSC: Green Agents of Change! The tutorials will teach you all the necessary steps to take part in this year's challenge. This first tutorial covers the (boring) groundwork that we need to cover before we can jump into the AI parts. It explains how to create an account, sign in, create and join a team and how to access AWS.

Before we begin, please check if you joined the [GDSC Teams channel](#) for all updates from the organisation team and meeting and connecting with other participants. GDSC Teams Channel is the place where you'll receive updates about the challenge, collaborate with other participant and ask questions if you are stuck.

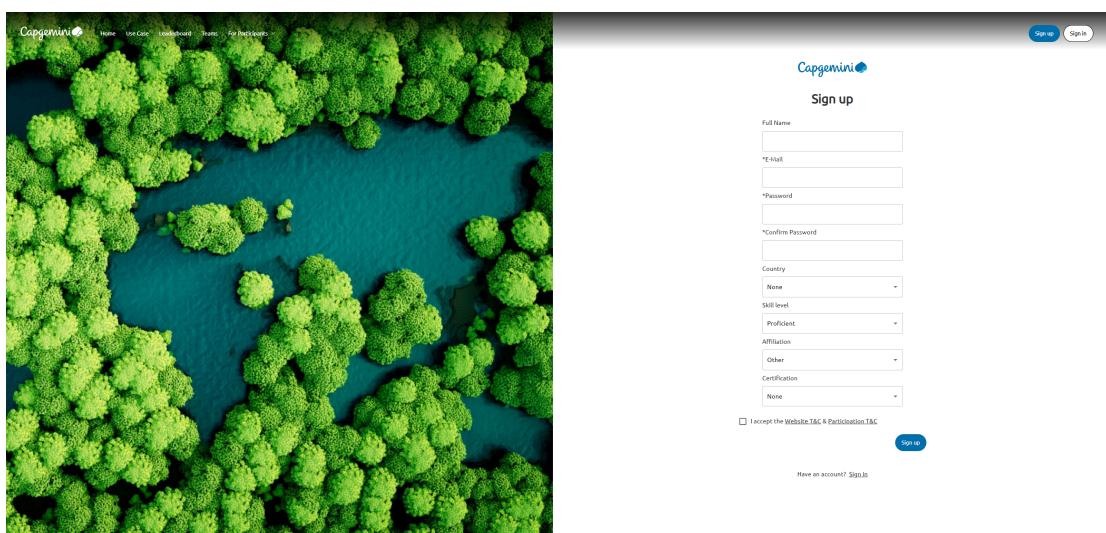
A quick overview of what will be covered in this tutorial:

- 1. Signing up and logging to the website
- 2. Creating and joining a team
- 3. Setting up your AWS accounts
- 4. How to use AWS
- 5. Running the tutorials
- 6. Setting up your Mistral accounts
- 7. Conclusion

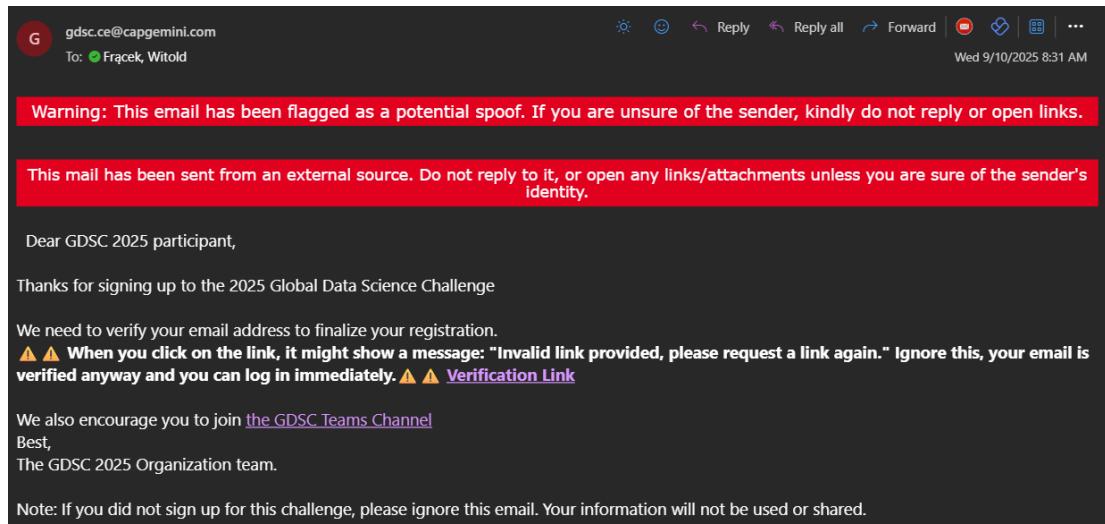
1. Signing up and logging to the website:

The very first thing you need to do to participate in the GDSC is to sign up:

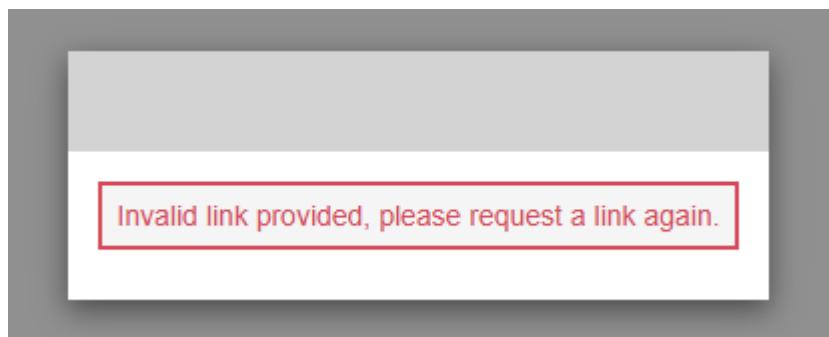
1. Navigate to the GDSC Portal's Sign-up page - <https://gdsc.ce.capgemini.com/app/>.
Make sure to enter your Capgemini email. The full name is not mandatory to sign up, but it is necessary to receive a certificate of completion after the challenge.



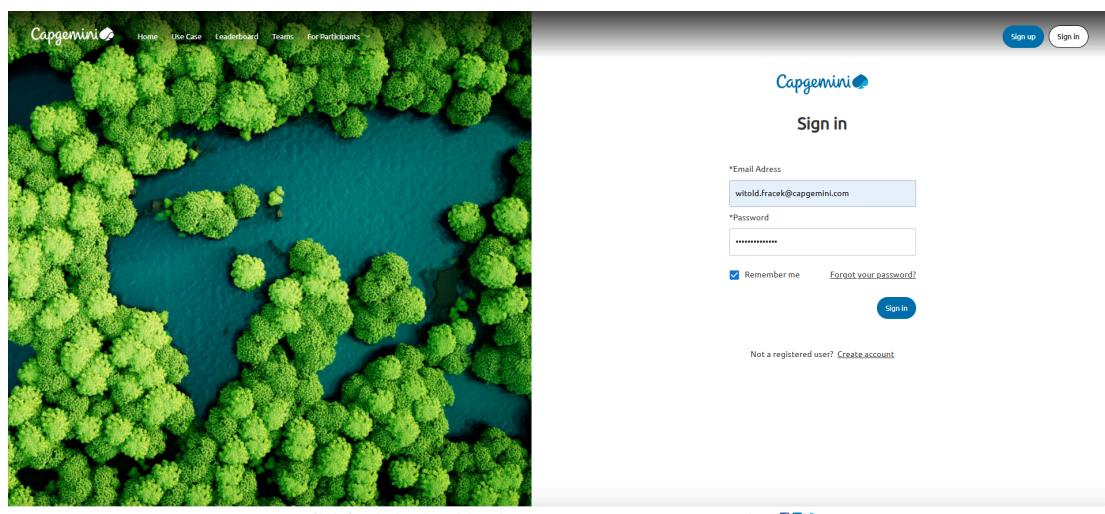
- Once you Sign-up, you will receive an e-mail like the one shown below from gdsc.ce@capgemini.com.



- Please click on the Verification link provided in the e-mail. You will receive an error such as the one shown below. Don't worry, you can now login to the website 😊



- To login to the website, navigate to the login page - <https://gdsc.ce.capgemini.com/app/login/> and enter your credentials.



- Once you login you will have access to the Resources - [resource page](#). The page has link to all the information and tutorials you will need for the challenge. You can also access the [Usecase page](#) to learn more about the challenge. Feel free to explore the website for information about the current challenge and the past editions.

2. Creating and joining a team

The next step is to form or join a team. Every participant needs to be in a team to participate in the challenge. You have three options:

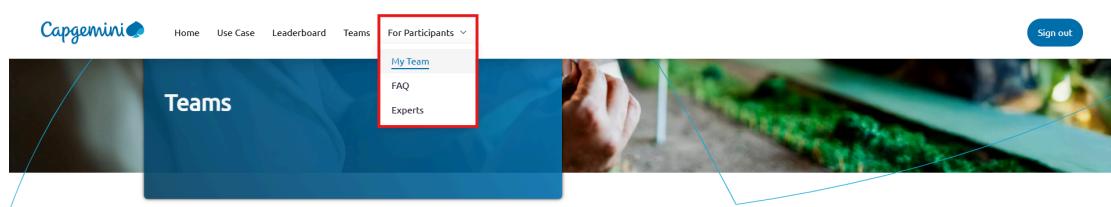
- Create a team only for yourself.
- Create a team, find other people to join, and share your team id with them. They will be able to request to join your team.
- Request to join an existing team.

We highly recommend that you form a team with other participants. This will help you share ideas, learn from each other and have a better chance of winning the challenge. If you don't have a team, you can find other people in the GDSC Teams channel '[Looking for Team](#)'. It's best to work with people in a similar timezone and with a similar motivation. If you really want to win make sure your teammates have the same goal. If you're here to learn and have fun, make sure your teammates are on the same page.

Note that there can be up to 4 people in a team.

To create a new team you need to

1. Go to the 'My Team' page.



2. Enter your team name (keeping in mind that there is a prize for the 'best' name) and press the 'Create Team' button.

How to get access to AWS

1. Login to AWS using this URL and the email you used to sign up to GDSC.
2. You will receive an Email from AWS to verify your identity.
3. Once verified you can login to your account. Your account name is

You are not part of any team yet. Join a team or create your own.

Team name	<input type="text" value="YeeMyLastHaw"/>	<input type="button" value="Create new team"/>
Team ID	<input type="text"/>	
	<input type="button" value="Join team"/>	

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3. Once a team is created, you are assigned a Team ID, which you can share with potential team members and ask them to join your team. You are also assigned an AWS account, in this example GDSC_Account_16.

How to get access to AWS

1. Login to AWS using this URL and the email you used to sign up to GDSC.
2. You will receive an Email from AWS to verify your identity.
3. Once verified you can login to your account. Your account name is GDSC_Account_16.

Team Information

Team Name: YeeMyLastHaw
 Team Id: 5e680ca4-3af0-4c80-b18e-f74245ca8ca3
 Team Captain: witold.fracek@capgemini.com
 Your team has received 0 vote's

Team Members

Full name	E-Mail	Affiliation	Certification	Skill level	Country	Action
Witold Fracek	witold.fracek@capgemini.com	I&D	AWS Machine Learning Speciality	Proficient	Poland	

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4. (Optional) To join a team, simply copy the team ID and paste it in the 'Join Team' section.

How to get access to AWS

1. Login to AWS using this URL and the email you used to sign up to GDSC.
2. You will receive an Email from AWS to verify your identity.
3. Once verified you can login to your account. Your account name is

You are not part of any team yet. Join a team or create your own.

Team name	<input type="text"/>	<input type="button" value="Create new team"/>
Team ID	<input type="text" value="5d948f86-457f-4cd7-8973-d7826961831"/>	<input type="button" value="Join team"/>

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If you no longer wish to join a team, you can cancel your request.

How to get access to AWS

1. Login to AWS using this URL and the email you used to sign up to GDSC.
2. You will receive an Email from AWS to verify your identity.
3. Once verified you can login to your account. Your account name is Please contact support

Your request to join a team is pending approval.

Team ID: 5d948f86-457f-4cd7-8973-d782696183b8

Team Lead Email (who approves your request): ane.berasategi@capgemini.com

[Cancel Join Request](#)

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5. (Optional) The team lead can approve or decline requests from new members.

Full name	E-Mail	Affiliation	Certification	Skill level	Country	Action
Kanwalmeetsingh Kochar	kanwalmeetsingh.amarjeetsingh.kochar@capgemini.com	Other	AWS Cloud Practitioner	Intermediate	Germany	REMOVE
Ani Berasategi	ane.berasategi@capgemini.com	OS	AWS Machine Learning Speciality	Expert	Germany	

6. (Optional) The team lead (i.e. the team creator) can remove members from the team.

Keep in mind that there can be at most 4 members in a team.

Full name	E-Mail	Affiliation	Certification	Skill level	Country	Action
Kanwalmeetsingh Kochar	kanwalmeetsingh.amarjeetsingh.kochar@capgemini.com	Other	AWS Cloud Practitioner	Intermediate	Germany	REMOVE
Ani Berasategi	ane.berasategi@capgemini.com	OS	AWS Machine Learning Speciality	Expert	Germany	

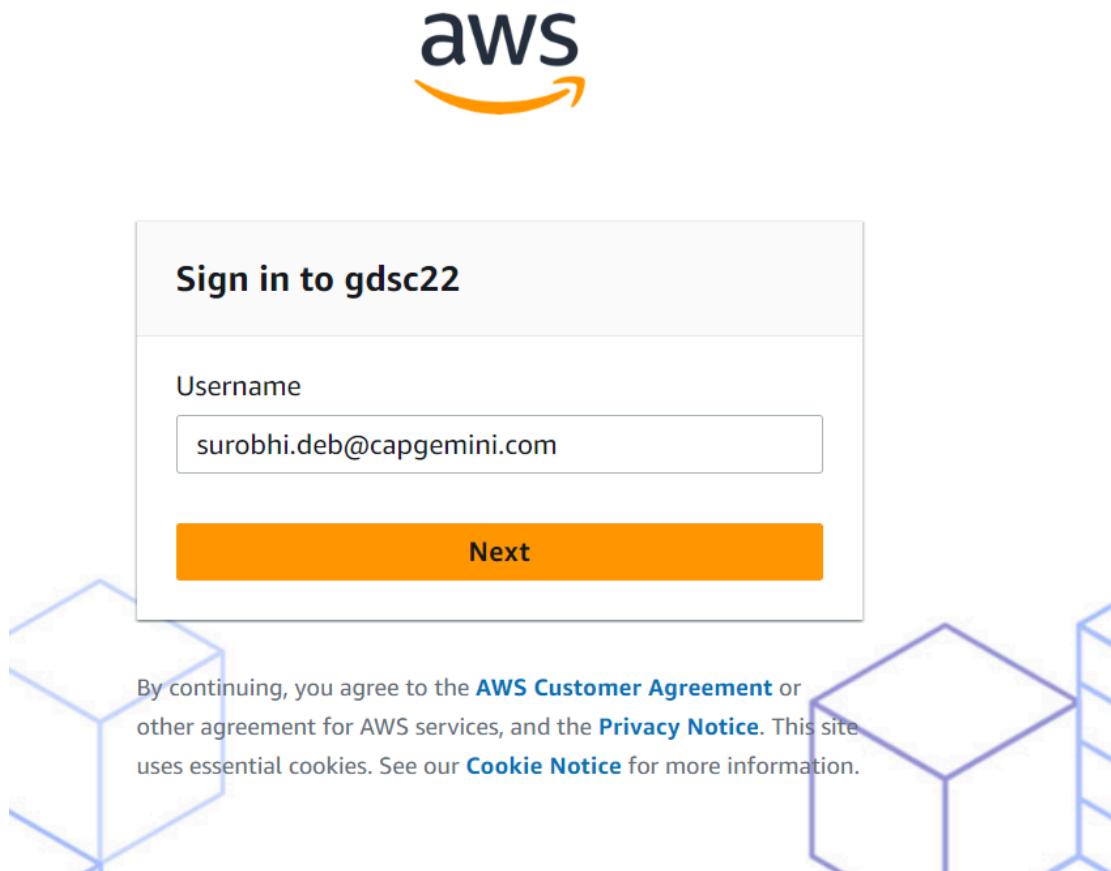
7. ! Warning for the Team Leads: If you delete the team, all members, permissions and resources in your AWS account will be destroyed. This potentially included the

code you have been working on. Make sure you have a backup of your code before deleting the team.

3. Setting up your AWS accounts

AWS is an integral part of the GDSC. It is where you will be developing your solution and accessing the LLM models. You will be assigned an AWS account when you create a team. Here is how you can access your AWS account:

1. Go to the [My Team](#). In the *How to get access to AWS* you can see the access link and your account name.
2. Login to your AWS account with the Capgemini email address that you used to sign up for the GDSC as the username <https://gdsc22.awsapps.com/start#>



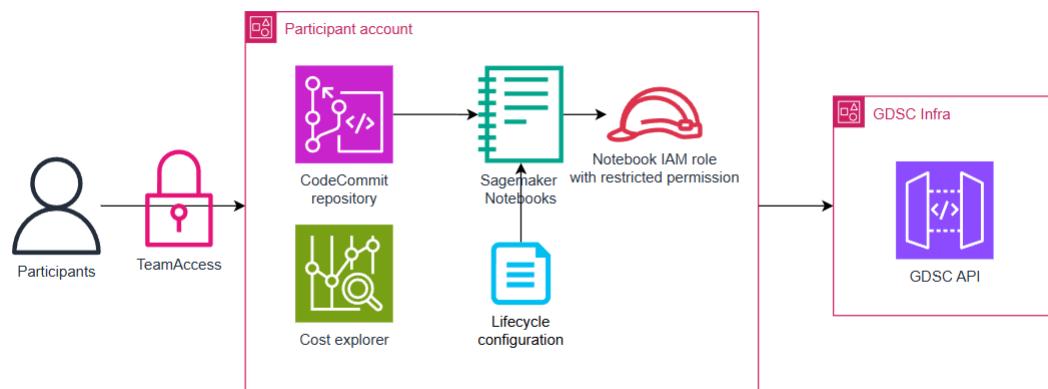
3. You might be prompted to enter your PingID credentials
4. You should now be logged into AWS and see the AWS Portal with your account.

Click on *TeamAccess* to access your account!

4. Your AWS environment

Almost done! Now that you have access to AWS, let's see how you can use it for the GDSC. Your screen should look like this when you log in.

Your account is prepared with the infrastructure you will need to participate in the GDSC. The following diagram shows the resources available:

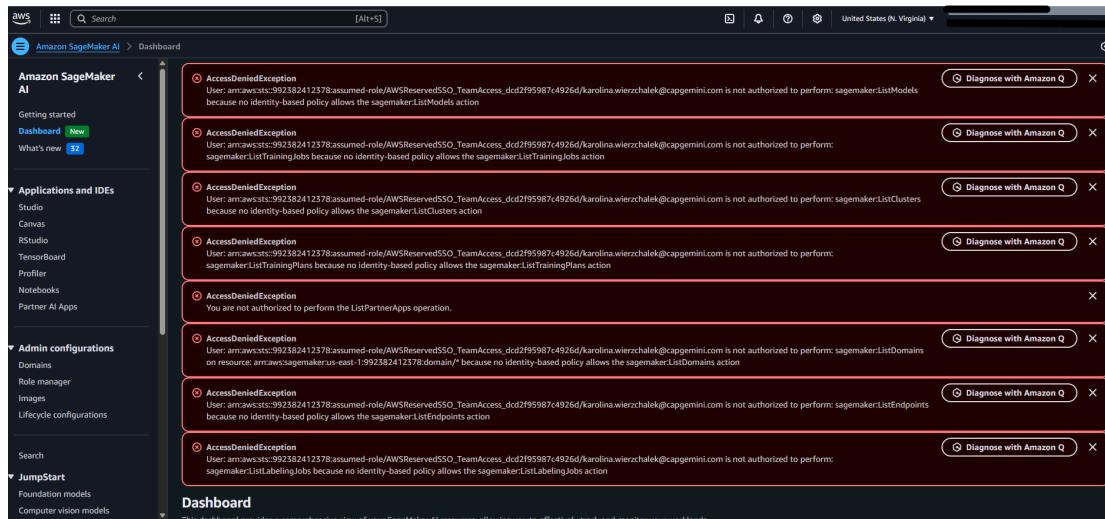


- CodeCommit repository: to store your code
- Sagemaker Notebooks: 4 notebooks are made available for max 4 team members.
Each member should use one notebook so work can be parallel
 - The notebooks are automatically connected to the repository
- Sagemaker lifecycle policy: shuts down notebooks if they have been idle for 1h, to save costs
- Cost explorer: to see the costs

AWS has a lot of resources, so your permissions (TeamAccess) are also restricted to the challenge:

- You are allowed to use only N. Virginia (us-east-1) region and no other
- You are allowed to interact with your CodeCommit repo but not delete it or create another
- You are allowed to start and stop your Sagemaker notebooks but not delete them or create new ones
- You are allowed to access the GDSC API endpoint
- The rest of the permissions in AWS are denied

A usual situation is encountering following screen when opening Sagemaker. This is normal, since Sagemaker has a lot of (costly) resources, you are only allowed to use Notebooks



If you are denied access to CodeCommit or Sagemaker Notebooks, it is probably due to one of 2 reasons:

- the challenge didn't start yet (kickoff is on September 17th)
- your team has exceeded the budget and the account is blocked until next week

Developing AI solution with Amazon SageMaker AI

Amazon SageMaker AI is a fully managed service that provides every developer and data scientist with the ability to build, train, and deploy machine learning models quickly. We'll use it to develop our AI solutions.

Type in "Amazon SageMaker AI" in the search bar and click on the service. On the left hand side click on "Notebooks" under "Applications and IDEs". Your screen should look like this:

The screenshot shows the AWS Lambda interface. In the top navigation bar, 'Amazon SageMaker AI' is selected. On the left sidebar, under 'Applications and IDEs', 'Notebooks' is highlighted. The main content area displays a list of 'Notebook instances' with the following details:

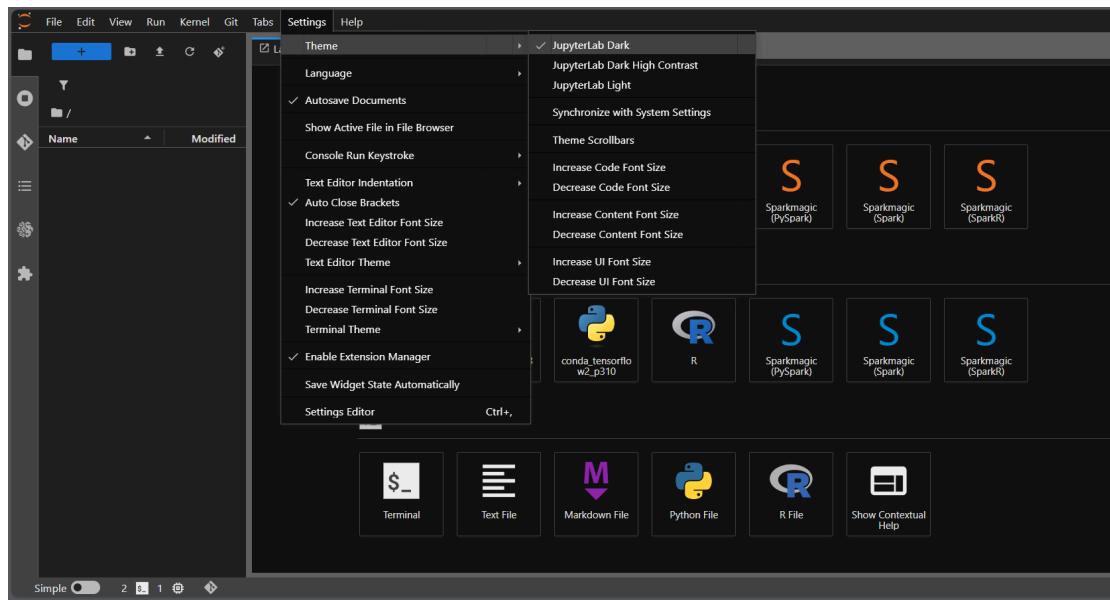
Name	Instance	Creation time	Status	Actions
tejasree	ml.t3.medium	9/3/2025, 11:57:24 AM	Stopped	Start
artur	ml.t3.medium	8/8/2025, 1:09:19 PM	InService	Open Jupyter Open JupyterLab
karolina	ml.t3.medium	8/8/2025, 1:09:02 PM	InService	Open Jupyter Open JupyterLab
witek	ml.t3.medium	8/8/2025, 1:08:31 PM	Stopped	Start

You will find 4 stopped notebooks created for your team, one for each team member. Align with your team member who will work on which notebook, then press the "Start" button to start your notebook and wait for a few minutes until the status is a green "InService". Under the actions column, click on "Open JupyterLab" and you should see the following screen:

The screenshot shows the JupyterLab interface. The left sidebar contains a file tree and a terminal. The main area is titled 'Launcher' and contains three sections:

- Notebook**: Contains icons for 'conda_pytorch_p310', 'conda_python3', 'conda_tensorflow_w2_p310', 'R', 'Sparkmagic (PySpark)', 'Sparkmagic (Spark)', and 'Sparkmagic (SparkR)'.
- Console**: Contains icons for 'conda_pytorch_p310', 'conda_python3', 'conda_tensorflow_w2_p310', 'R', 'Sparkmagic (PySpark)', 'Sparkmagic (Spark)', and 'Sparkmagic (SparkR)'.
- Other**: Contains icons for 'Terminal', 'Text File', 'Markdown File', 'Python File', 'R File', and 'Show Contextual Help'.

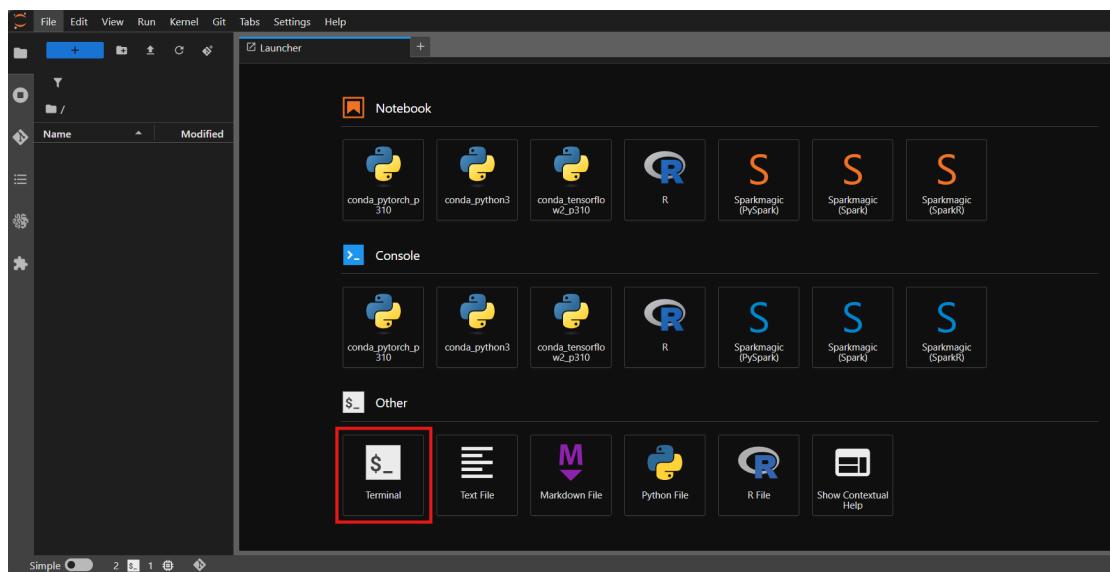
Note that you can edit the appearance of the environment in "Settings", for instance changing to dark mode or changing the language. Further instructions on how to use notebooks will be provided in the upcoming tutorials.



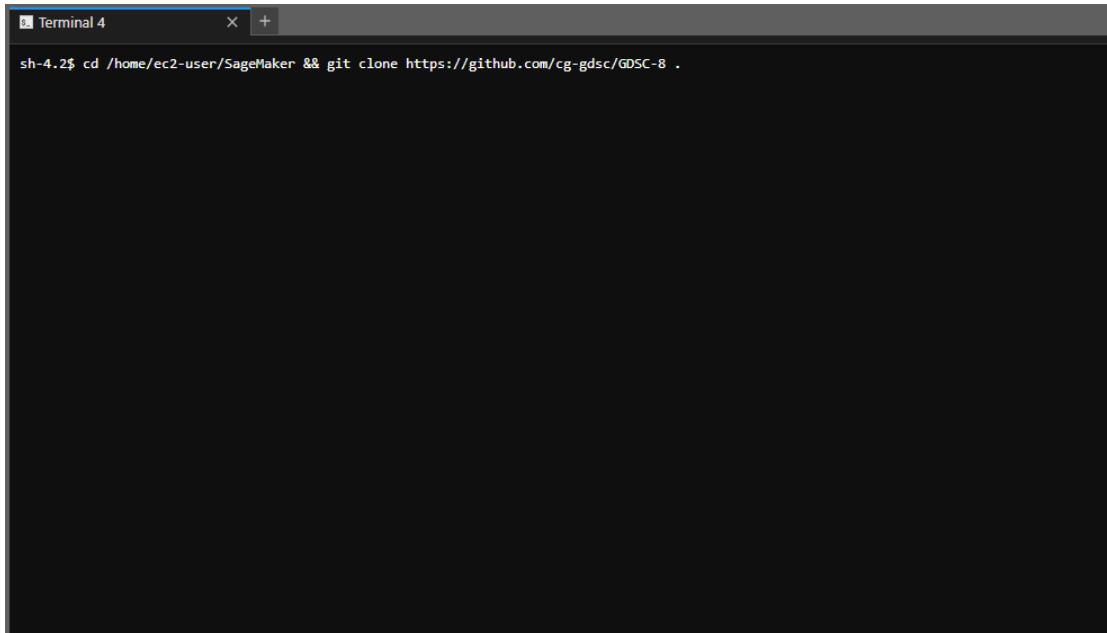
Cloning the repository

Before we can start working with the code there is one more step that you have to do. We need to download the tutorials.

To do that open terminal on SageMaker



After you opened new terminal use the command `cd /home/ec2-user/SageMaker && git clone https://github.com/cg-gdsc/GDSC-8 .` to clone the repository. Paste that line into the terminal and press "Enter". After a few seconds you shoud have the tutorials ready!

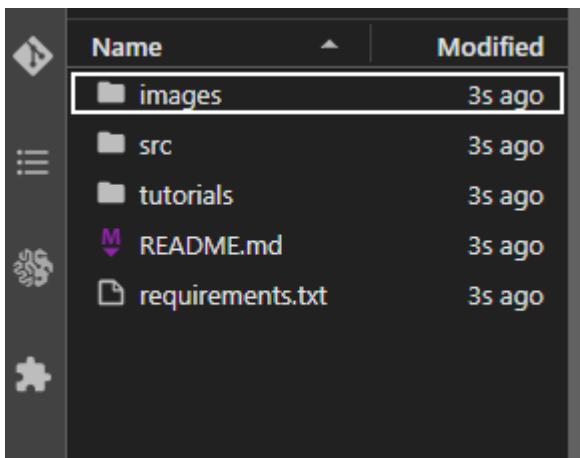


```
sh-4.2$ cd /home/ec2-user/SageMaker && git clone https://github.com/cg-gdsc/GDSC-8 .
```

You should get a message similar to this:

```
remote: Enumerating objects: 389, done.
remote: Counting objects: 100% (26/26), done.
remote: Compressing objects: 100% (19/19), done.
remote: Total 389 (delta 9), reused 17 (delta 7), pack-reused 363 (from 1)
Receiving objects: 100% (389/389), 22.01 MiB | 48.36 MiB/s, done.
Resolving deltas: 100% (216/216), done.
sh-4.2$
```

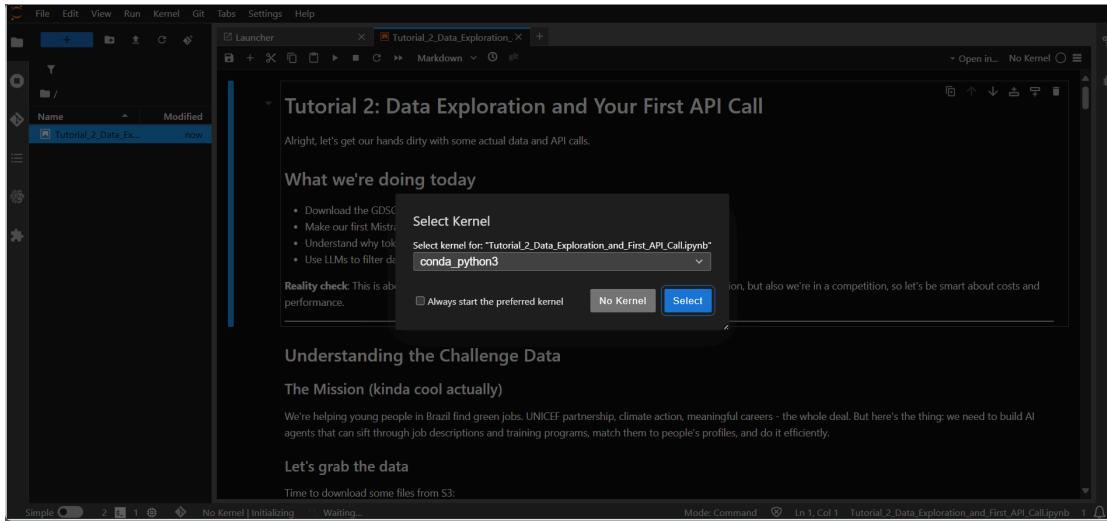
In the panel on the left you should see all the files. Tutorials are in the `tutorials` folder.



5. Running the tutorials

All that's left now is to do one final check that everything is working. We'll do this by opening the second tutorial. Go back to Sagemaker, open your notebook and start JupyterLab as described in the previous section.

In the left sidebar, you will see the `tutorials` folder. Open the second tutorial by clicking on `Tutorial_2_Data_Exploration_and_First_API_Call.ipynb`. Your screen should look like this:



In the **Select Kernel** box click on **Select**. Scroll down to the first Python cell in the **Let's grab the data** section. Click in the cell and press **Shift + Enter** to run the cell. You should see the output below the cell.

```
[46]: !aws s3 cp s3://gdsc-25-data-bucket/ . --recursive
download: s3://gdsc-25-data-bucket/data/trainings/tr87.md to data/trainings/tr87.md
download: s3://gdsc-25-data-bucket/data/trainings/tr85.md to data/trainings/tr85.md
download: s3://gdsc-25-data-bucket/data/trainings/tr83.md to data/trainings/tr83.md
download: s3://gdsc-25-data-bucket/data/trainings/tr90.md to data/trainings/tr90.md
download: s3://gdsc-25-data-bucket/data/trainings/tr88.md to data/trainings/tr88.md
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```

And that's all from this section! Now, you can focus on learning how to set up your Mistral account. Good luck!

6. Setting up your Mistral accounts

Why Mistral matters for GDSC 2025

This year we partnered with [Mistral](#) - and this isn't just another tech vendor choice. Mistral is Europe's answer to Silicon Valley's and China's AI dominance, the only major European AI lab that can go toe-to-toe with companies like OpenAI and Anthropic. Mistral champions open-source AI and European values around data sovereignty.

What makes this partnership special:

EU European AI Leadership: Mistral represents European excellence in AI - they're not just copying US approaches, they're pioneering their own path with multilingual models and open-source commitment.

 **Capgemini Strategic Alliance:** We have an official partnership with Mistral, giving GDSC participants access to cutting-edge models and potentially preferential access to new releases. This isn't just about using their API - it's about being part of the European AI ecosystem.

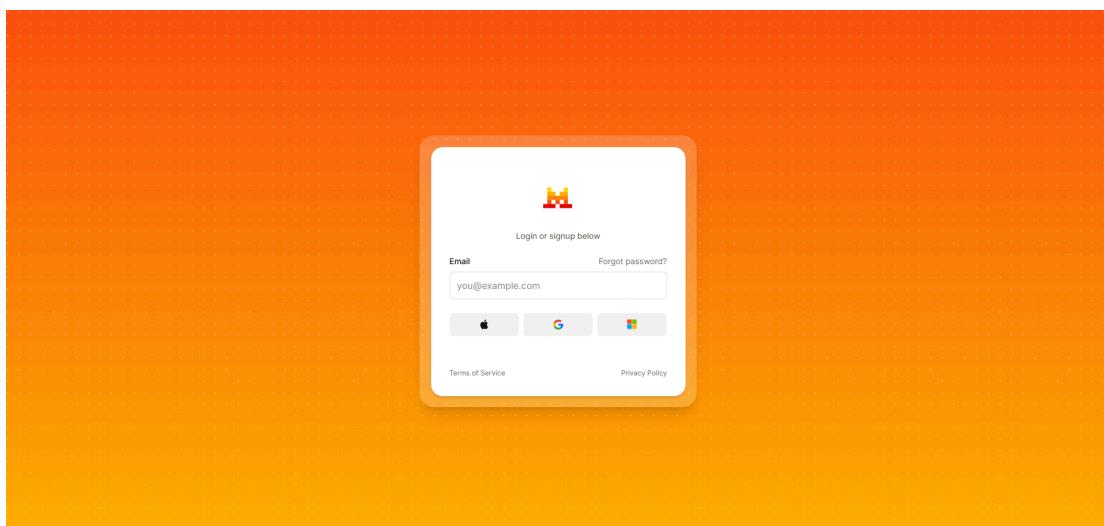
 **Perfect for Brazil:** Mistral's models excel at multilingual tasks and understand diverse cultural contexts - crucial for matching people to green jobs across Brazil's diverse regions and languages.

 **Cost & Performance:** Their model portfolio (from mistral-small for quick tasks to mistral-large for complex reasoning) lets you optimize for both quality and budget - essential skills for real consulting projects.

Any LLM agents that you create will use Mistral models as the "brain" of the operation. Think of this challenge as your introduction to European AI leadership in action.

Setting up your account

1. To setup your account go to [mistral login page](#) and log in.

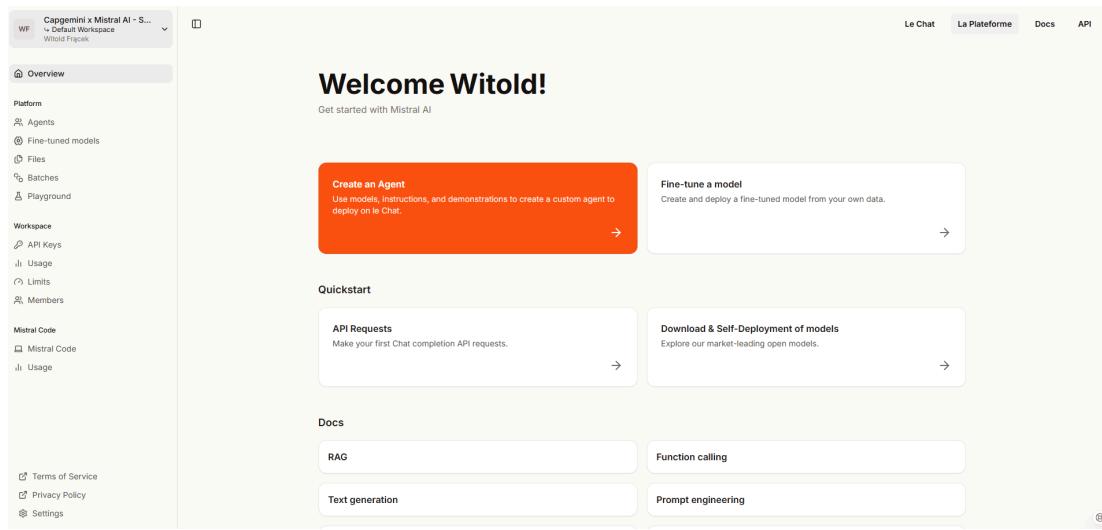


If this is your first time using Mistral you will have to create an account. Use your Capgemini email. Remember to set a strong password 😊

2. After your account is created you will receive an email from no-reply@emails.mistral.ai asking you to join your team. The email might not come right after you register and it is due to the updates between GDSC and Mistral accounts. In the email there will be a link allowing you to join our Mistral Team.



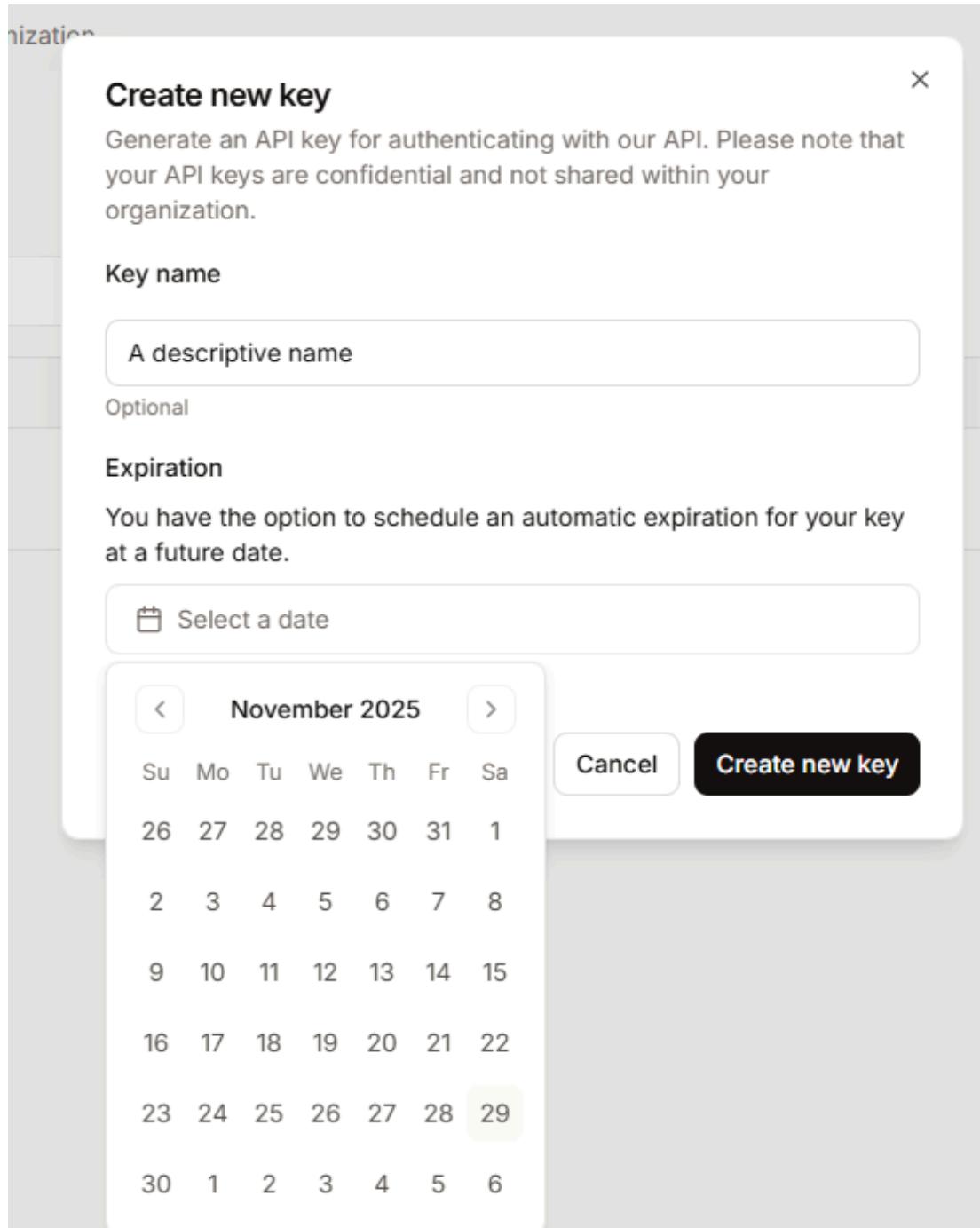
3. This is how the main page of the Mistral platform should look like after you join the team:



4. To access the Mistral models you will need to generate an API key. To do that click on the "API Keys" under the "Workspace" section on the left. On the page you will be able to create new keys and see the ones that were already created. To create a new key click on "Create new key" on the right.

The screenshot shows the 'Your API keys' page within a workspace. The left sidebar includes sections for Overview, Platform (Agents, Fine-tuned models, Files, Batches, Playground), Workspace (API Keys, Usage, Limits, Members), and Mistral Code (Mistral Code, Usage). The 'API Keys' section is currently selected. The main area displays a table of existing API keys, with one entry shown: 'test_key' (Key: **...g5ml, Created: 1 month ago, Expires: in 4 months). A 'Create new key' button is located in the top right corner of the main area, which is highlighted with a red box.

- When creating a new key, set a descriptive name for it. It is also a good practise to have the expiration date for your key. When ready click on the "Create new key" button.



6. After clicking on "Create new key" you will get the opportunity to copy it and save it in some place safe. Do it because it is not possible to see the value of the key again!

⚠ Only one person from the team is required to generate the API key. It can be then shared with other team members.

7. Conclusion

In this tutorial you have learnt how to sign up for the challenge and form your team. You have been assigned an AWS account, where you have explored the coding environment. We also covered how to access Mistral platform and get the API key - your gateway to European AI leadership.

What you've accomplished:

- GDSC account setup and team formation
- AWS environment ready for development
- Mistral API access configured
- Understanding of why Mistral matters for European AI

Remember that you can always ask for help in the [GDSC Teams channel](#) and that there is a community voted **special prize** for the team that helps other the most!

You are now ready to go to the next tutorials and start developing your solution!

Next up: Tutorial 2 will show you how to make your first Mistral API calls, understand the challenge data, and start thinking like a modern AI consultant. Let's build something amazing with European AI! 