

Borne de Gel connectée

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SN-IR 2

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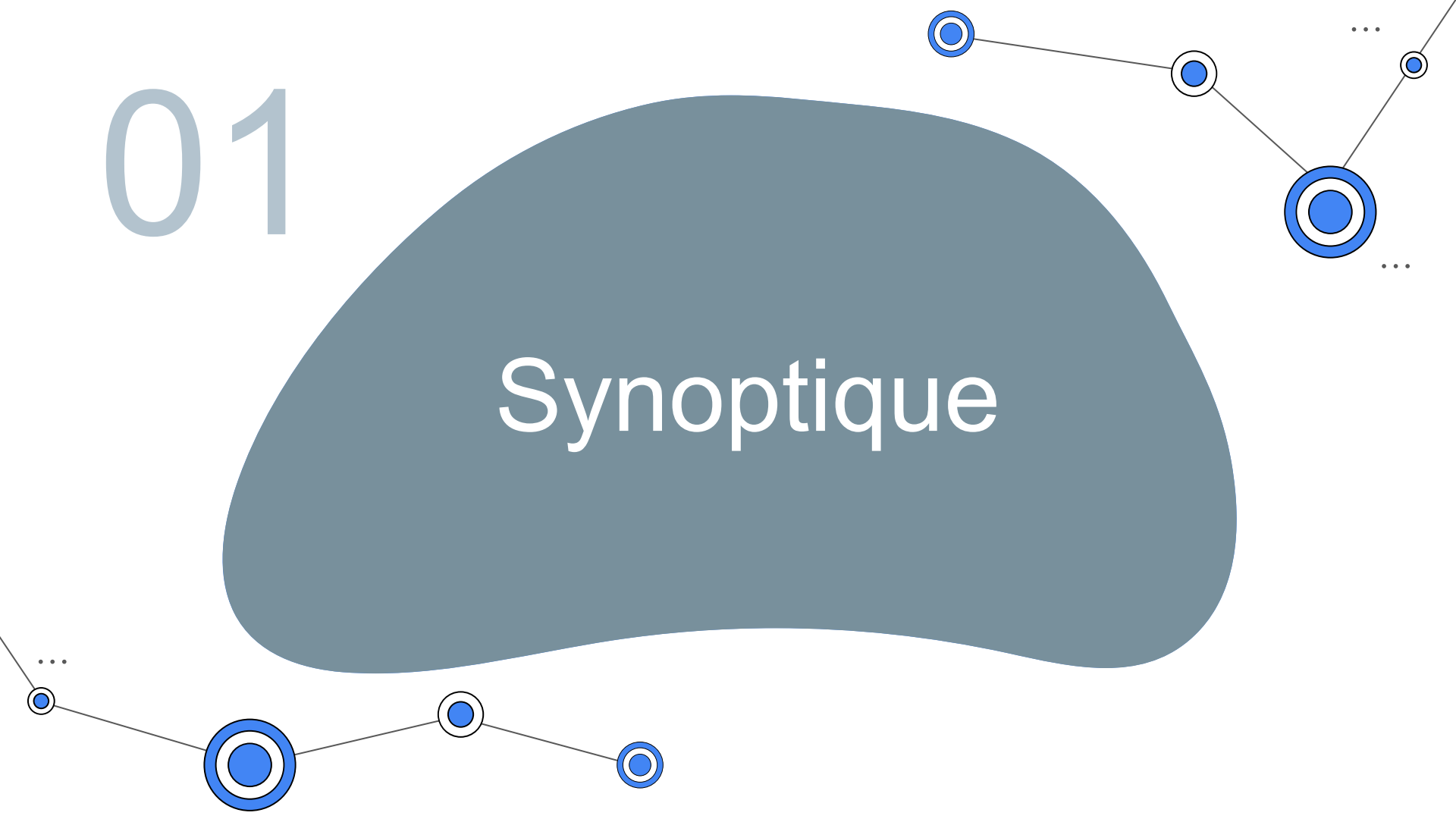
Partie numérique

...



01

Synoptique



Contexte

Période de pandémie

Les établissements s'équipent en réponse aux conditions d'hygiène d'équipements tels que les bornes de gels.



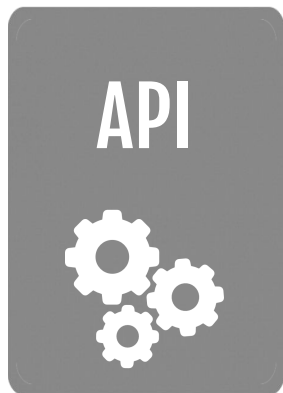
Solution informatique

Pour centraliser et simplifier le suivi des bornes de gel hydro alcoolique, on équipe chaque borne d'un système autonome.



Répartition des tâches

Nawfel



Modélisation de la BDD

Communication et transfert de données (JSON) de la BDD

Elyes



Avoir accès aux informations concernant les bornes à distance

Assigner des bornes à des agents

Créer/gérer les bornes et les comptes

Massil



Distribution de gel

Récupération et envoie des informations concernant les niveaux de gel et de batterie

Thadsayian



Avoir accès aux informations concernant les bornes à distance

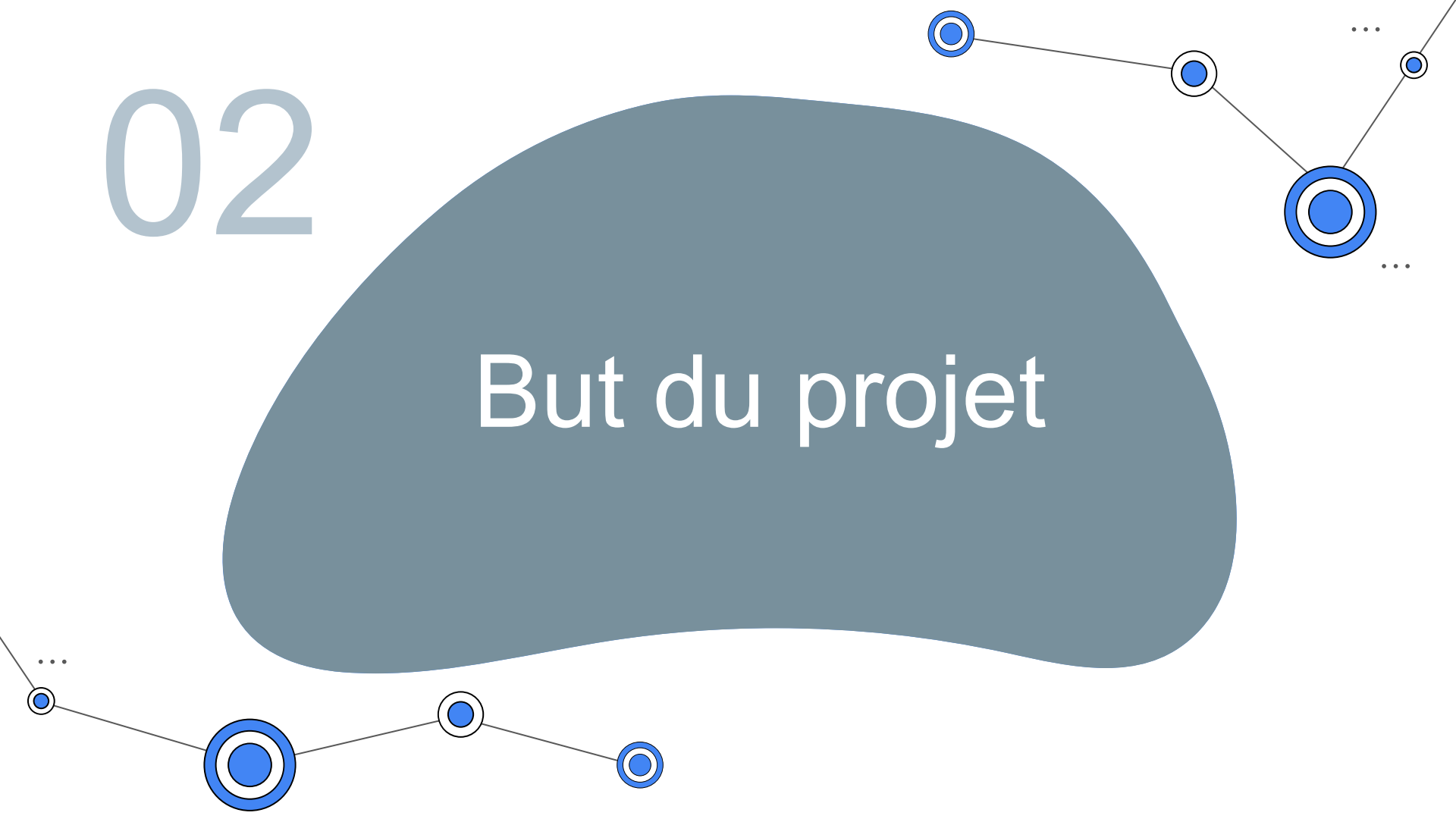
Assigner des bornes à des agents

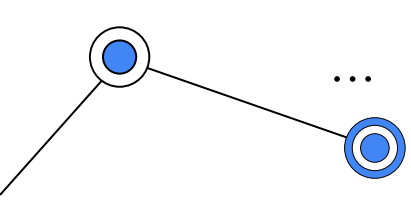
Créer/gérer les bornes et les comptes

Notification si une borne est sous un certain seuil

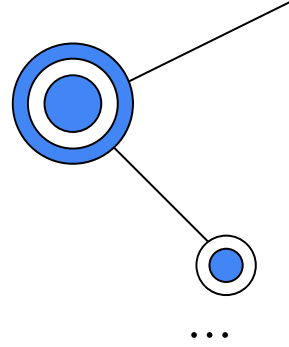
02

But du projet





Gains



01

Temps

02

Efficacité

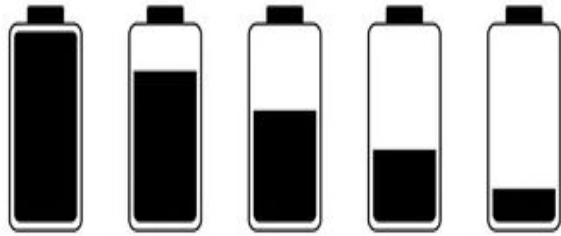
03

Organisation

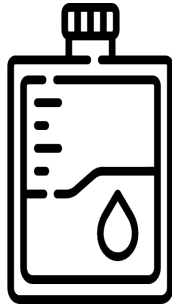
04

Communication

Schéma explicatif

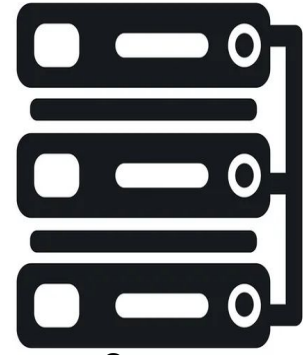


API (POST)



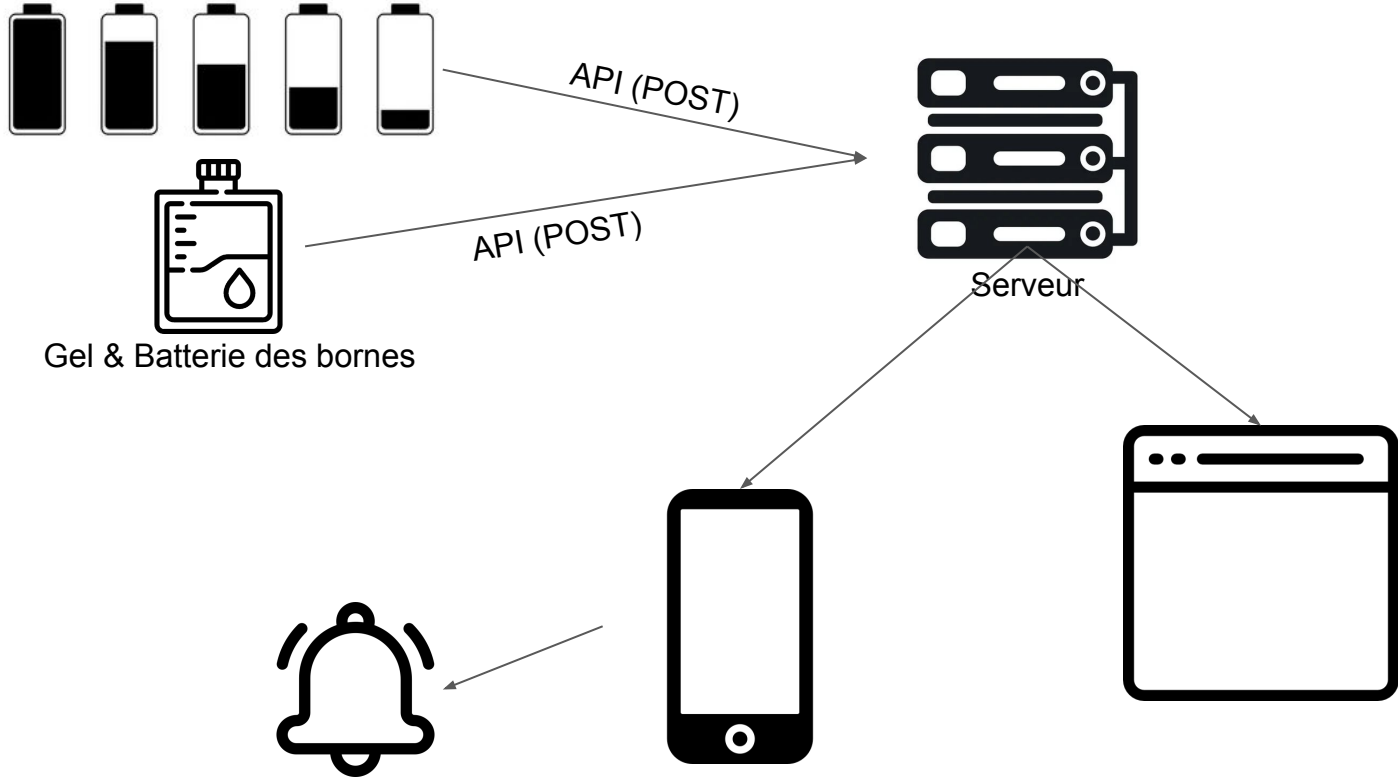
Gel & Batterie des bornes


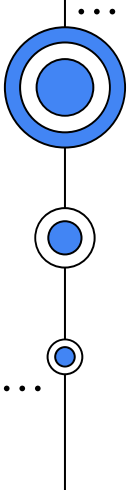
API (POST)



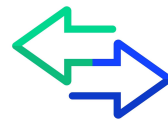
Serveur

Schéma explicatif





En bref



...

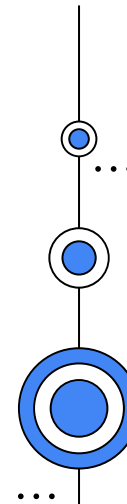


Diagramme de cas d'utilisation de la borne

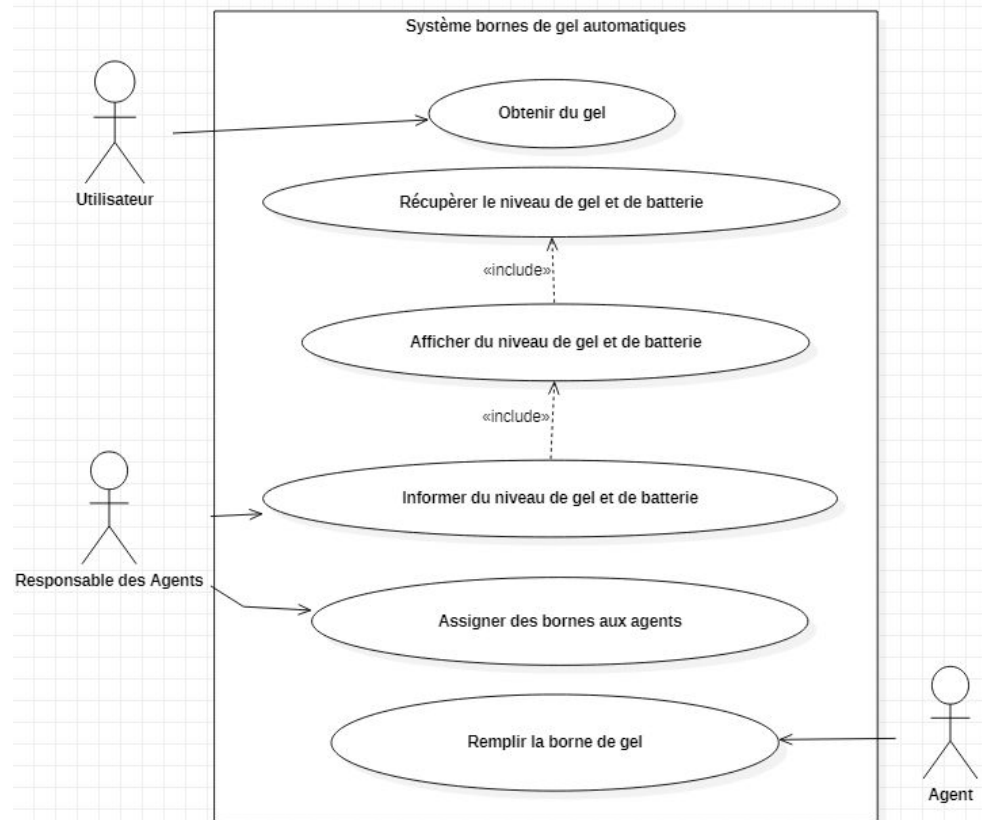


Diagramme de séquence concernant la borne

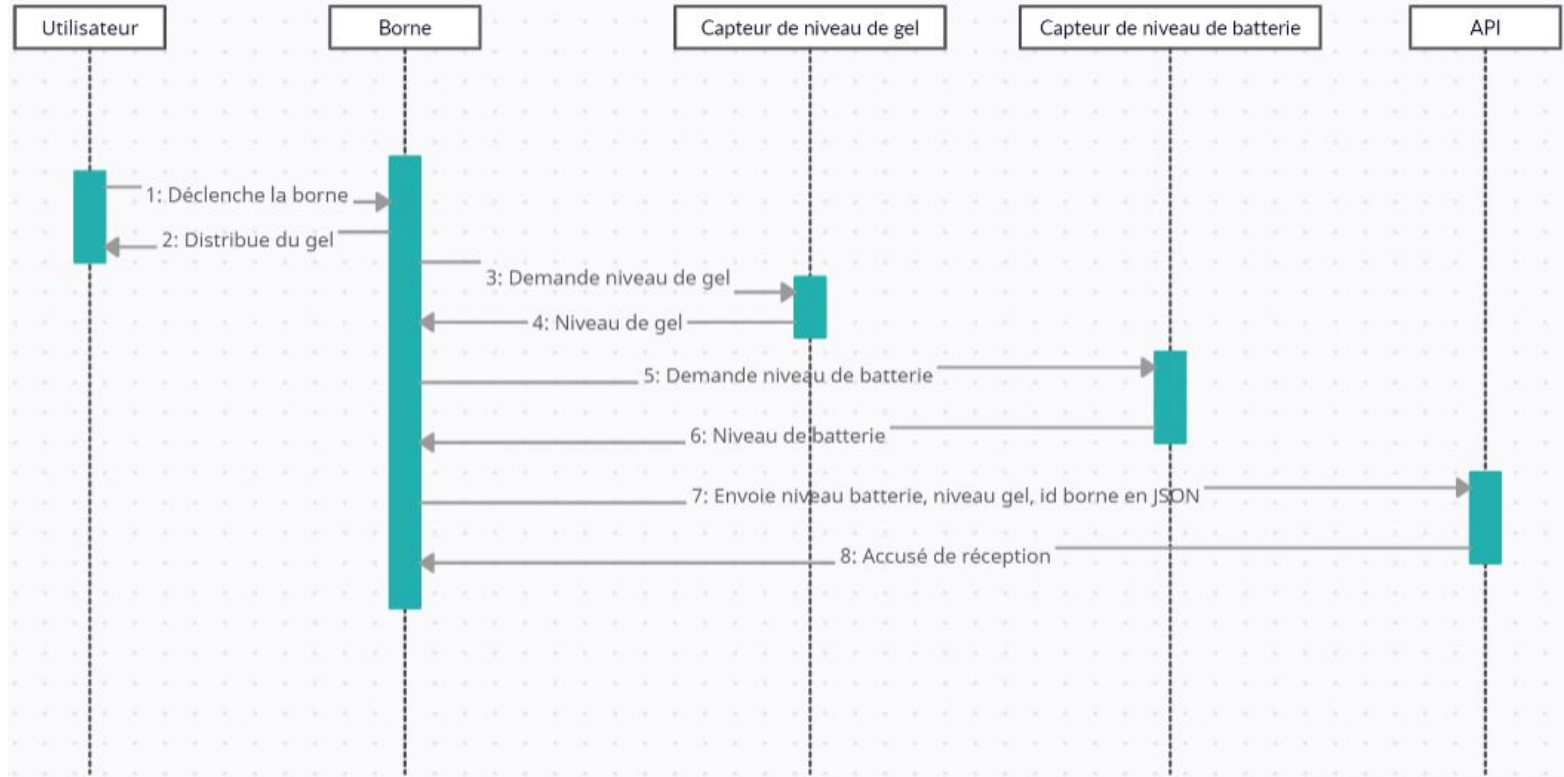


Schéma explicatif

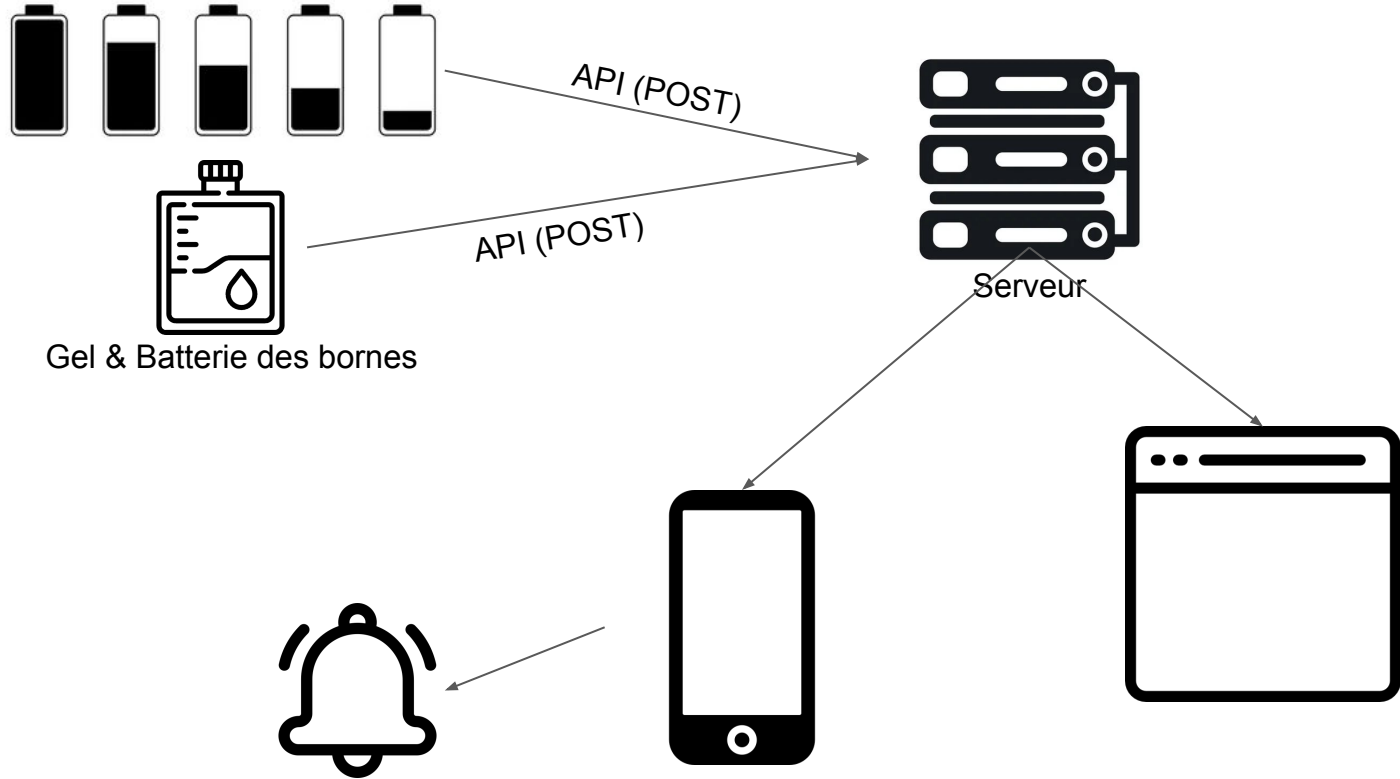
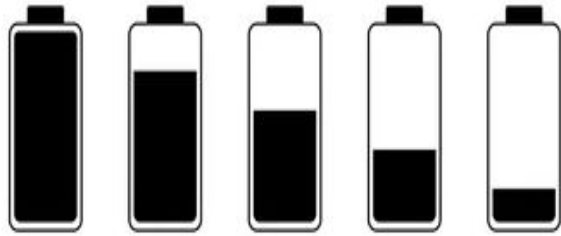
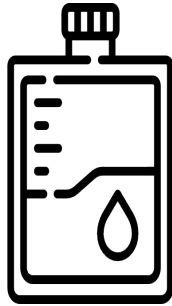


Schéma explicatif

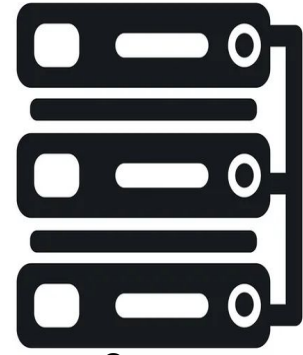


API (POST)



Gel & Batterie des bornes

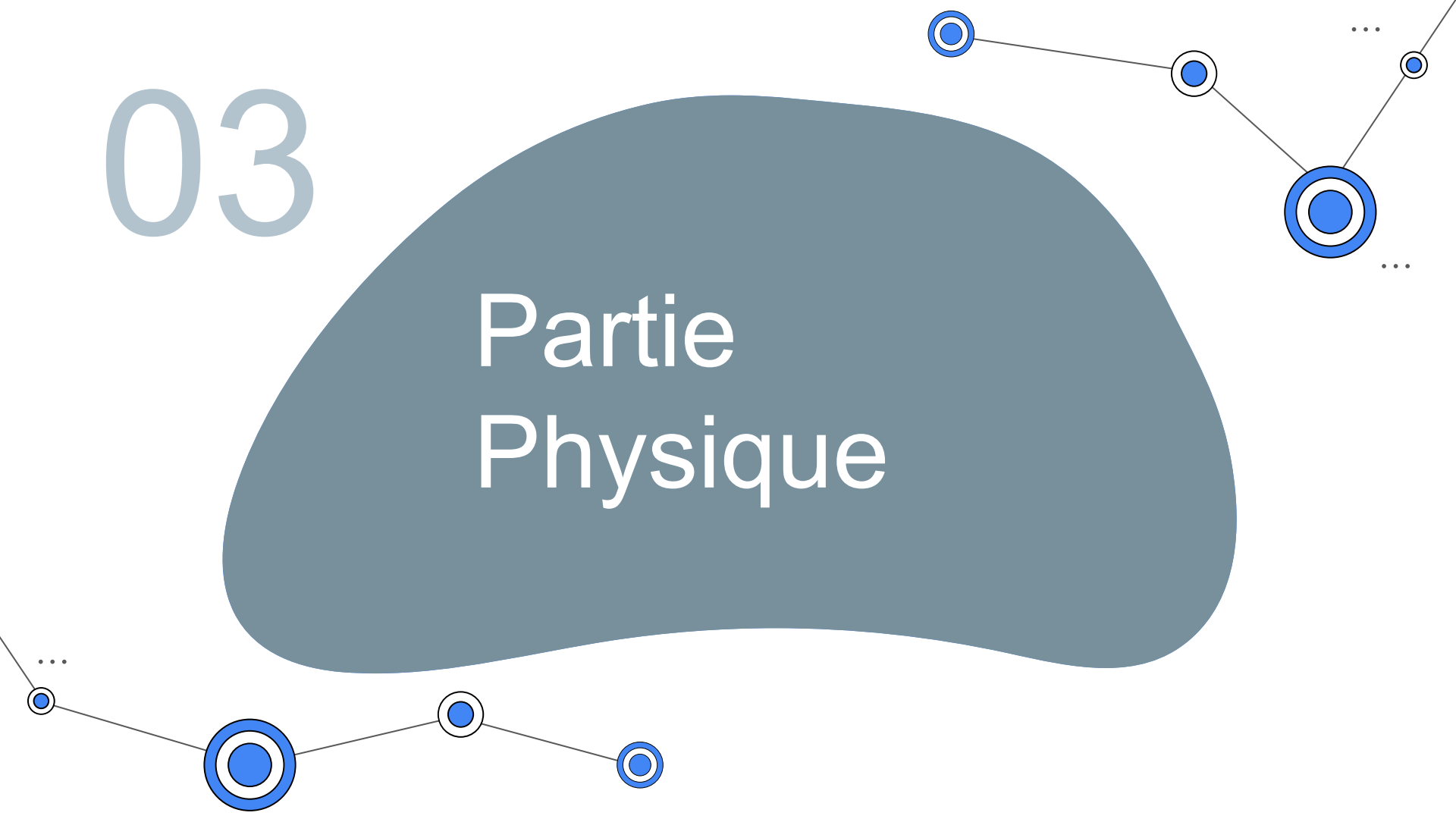
API (POST)



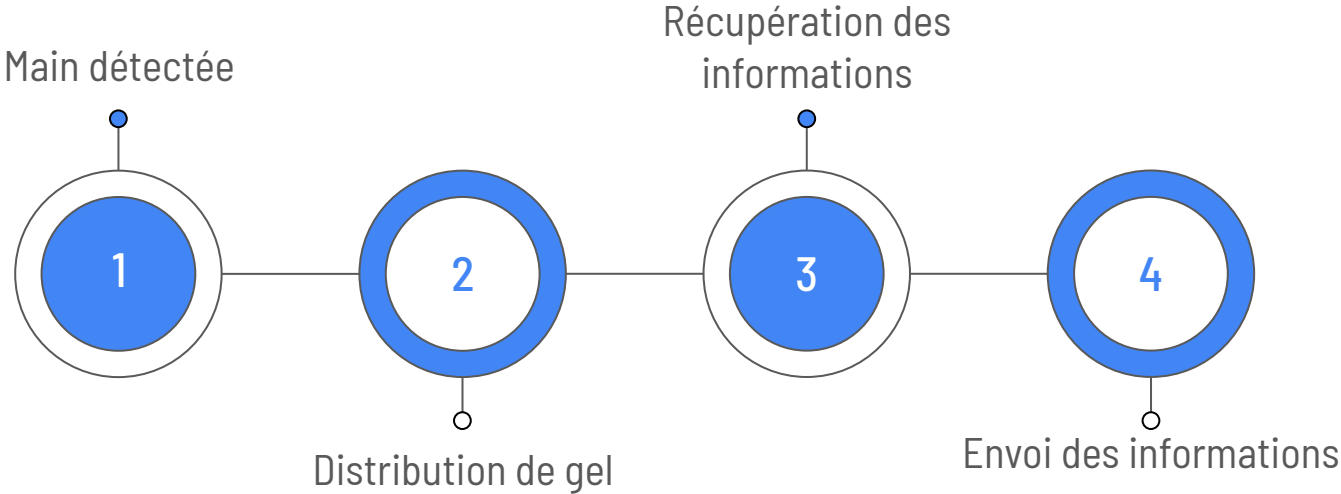
Serveur

03

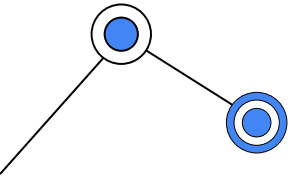
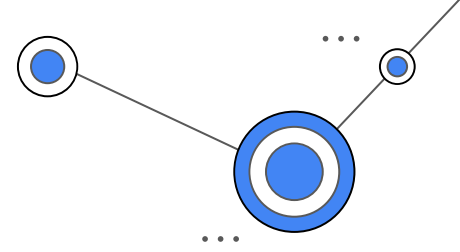
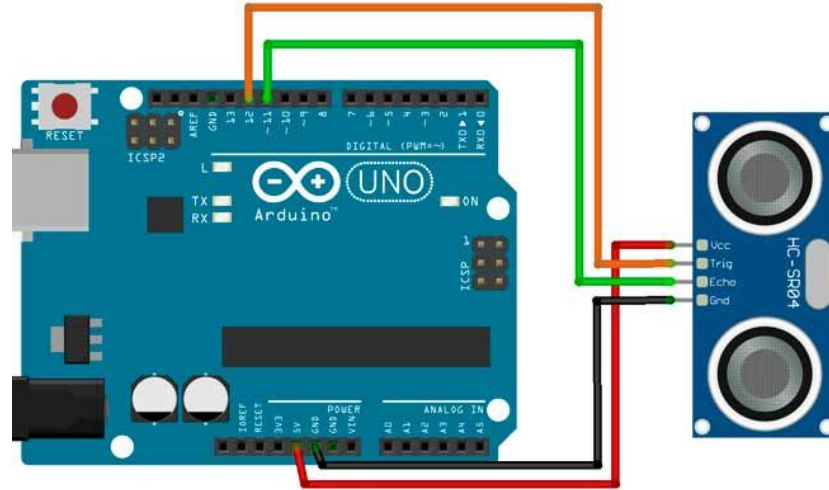
Partie Physique



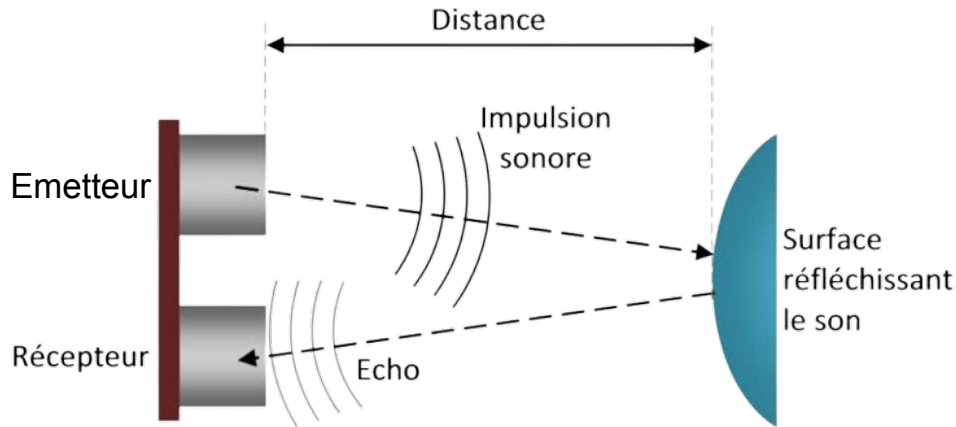
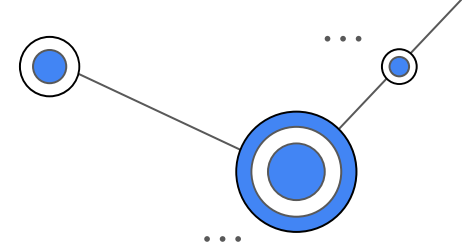
En 4 étapes plus simples



Matériel utilisé



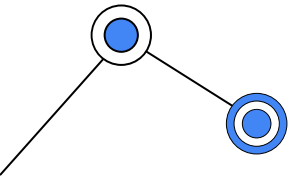
Matériel utilisé



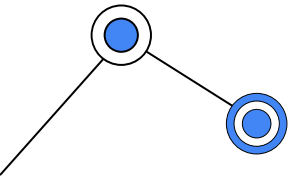
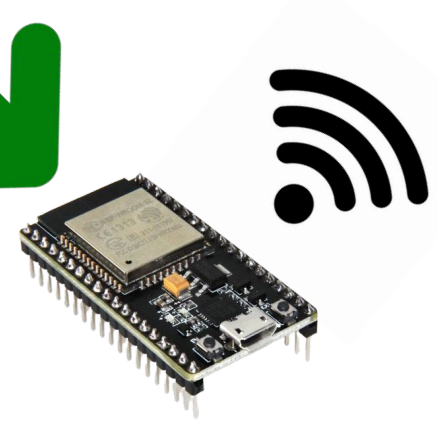
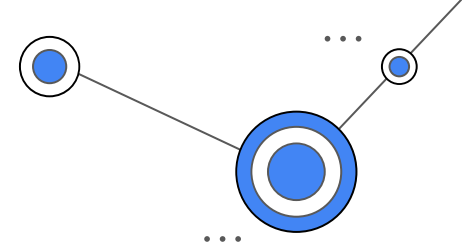
```
long getDist(){
    digitalWrite(trigPin, LOW);
    delayMicroseconds(2);
    digitalWrite(trigPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(trigPin, LOW);

    dur = pulseIn(echoPin, HIGH);
    dist = dur * 0.034/2;
    return dist;
}
```

$$d = v \times t$$

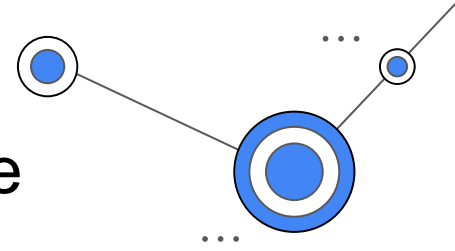
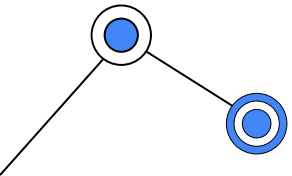
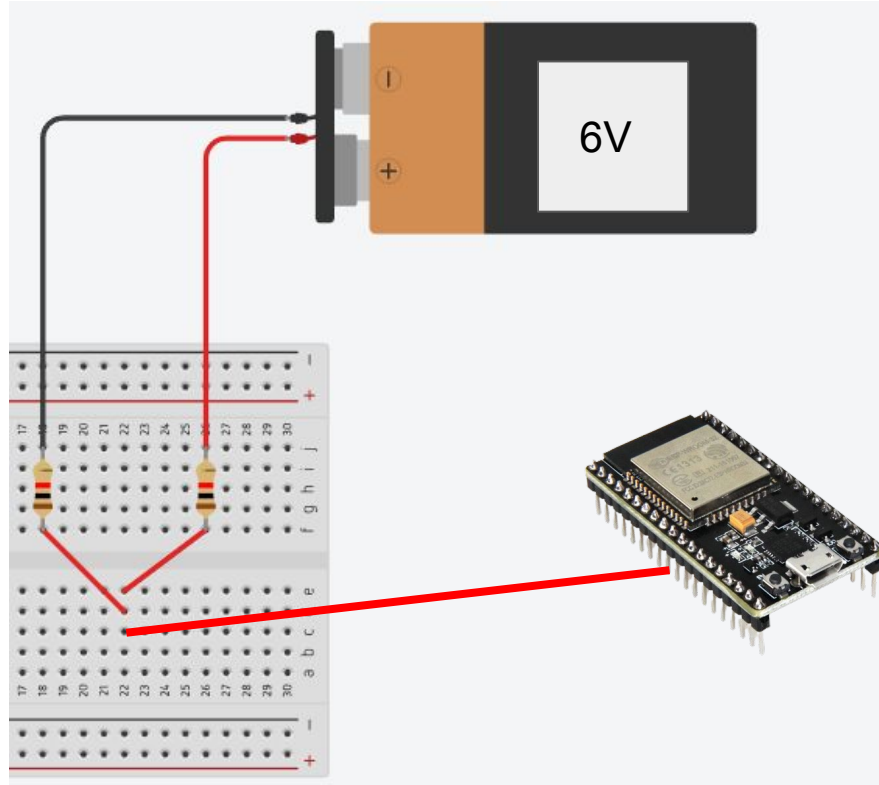


Pourquoi l'ESP32

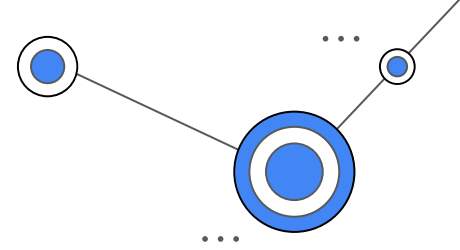


Récupération du niveau de batterie

```
25 int nivBatterie(){  
26     int recu = analogRead(34);  
27     recu *= 100;  
28     recu /= 4095;  
29     return recu;  
30 }
```



POSTMAN



▼ Borne de gel

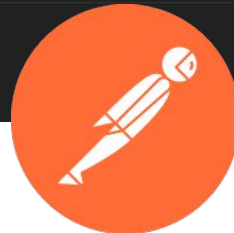
- > GET authentication
- ▼ GET bornes
 - 📄 Default
 - > POST createBorne
 - > DEL deleteBorne
 - > GET singleBorne
 - > POST createUser
 - > DEL deleteUser
 - > GET getUsers
 - ▼ POST post borne info
 - 📄 post borne info

POST `{{url}}/bornes?id="6"&batterie="67"&gel"34"`

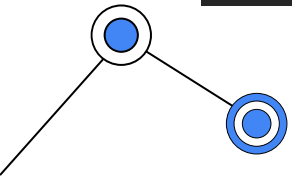
Params • Authorization Headers (6) Body Pre-request Script Tests Settings

Query Params

	Key	Value
<input checked="" type="checkbox"/>	id	"6"
<input checked="" type="checkbox"/>	batterie	"67"
<input checked="" type="checkbox"/>	gel"34"	
	Key	Value



POSTMAN



Vérification des données

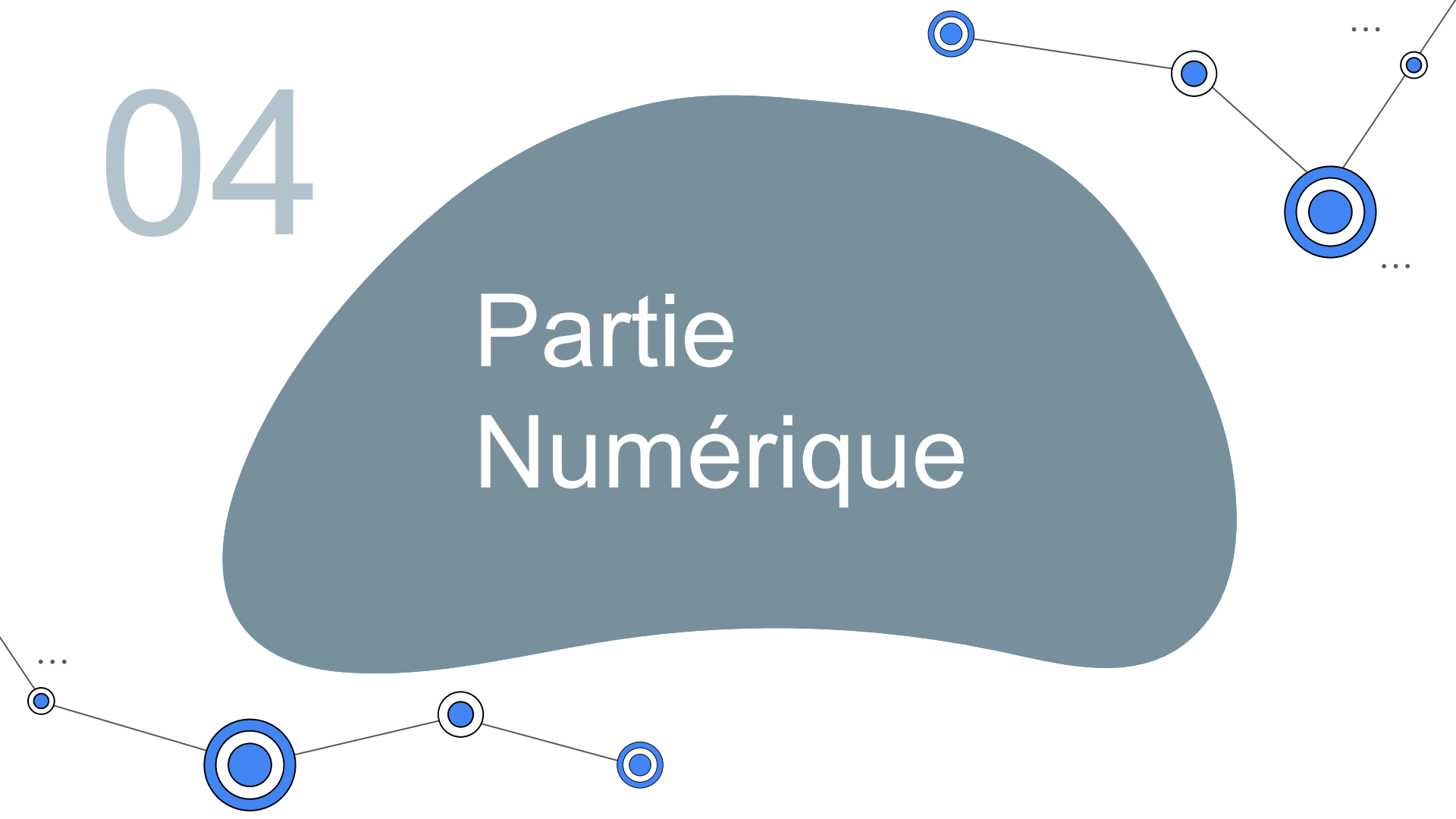
Serial.println()

```
Niveau gel :  
100 %  
niveau batterie :  
100 %  
16443108<br />
```

```
niveau batterie :  
100 %  
16443108<br />  
<b>Warning</b>: Use of undefined constant id - assumed 'id' (this will throw an Error in a future version of PHP) in  
Enregistrement effectué avec succès.<br> L'esp32 86 a :<br>100 % de batterie <br>100 % de gel<br> situé salle GR1  
Niveau gel :  
100 %  
niveau batterie :  
100 %  
16443108<br />  
<b>Warning</b>: Use of undefined constant id - assumed 'id' (this will throw an Error in a future version of PHP) in  
Enregistrement effectué avec succès.<br> L'esp32 86 a :<br>100 % de batterie <br>100 % de gel<br> situé salle GR1  
Niveau gel :  
100 %  
niveau batterie :  
100 %  
16443108<br />  
<b>Warning</b>: Use of undefined constant id - assumed 'id' (this will throw an Error in a future version of PHP) in  
Enregistrement effectué avec succès.<br> L'esp32 86 a :<br>100 % de batterie <br>100 % de gel<br> situé salle GR1  
Niveau gel :  
100 %  
niveau batterie :  
100 %  
16443108<br />  
<b>Warning</b>: Use of undefined constant id - assumed 'id' (this will throw an Error in a future version of PHP) in  
Enregistrement effectué avec succès.<br> L'esp32 86 a :<br>100 % de batterie <br>100 % de gel<br> situé salle GR1  
Niveau gel :  
100 %  
niveau batterie :  
100 %  
16443108
```

04

Partie Numérique



Solution Numérique



Voir l'état des bornes

Des informations en direct sur chacune des bornes.

...



Gérer l'attribution des bornes

Les responsables ont désormais un tableau de bord leur permettant de mettre en œuvre leurs stratégies sans effort.

...



Accessibilité constante

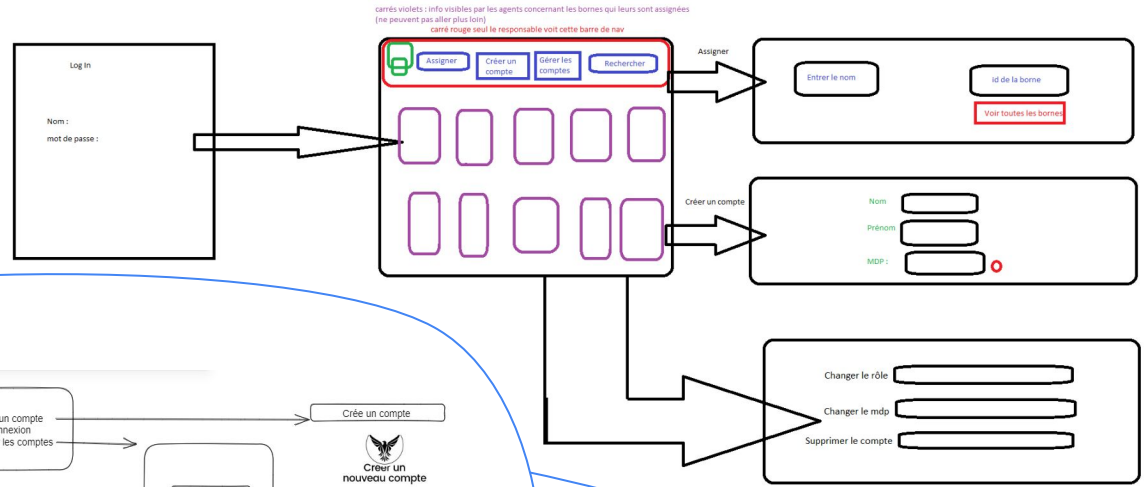
Les informations peuvent être consultées n'importe quand et depuis n'importe où.

...

Comment ça marche?

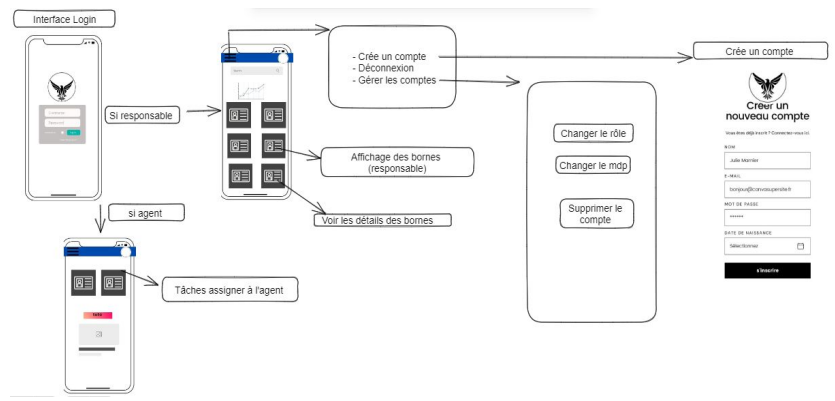


Site WEB



carres violets : info visibles par les agents concernant les bornes qui leurs sont assignées
(ne peuvent pas aller plus loin)
carré rouge seul le responsable voit cette barre de nav

Application



Responsables des agents

Gérer les comptes

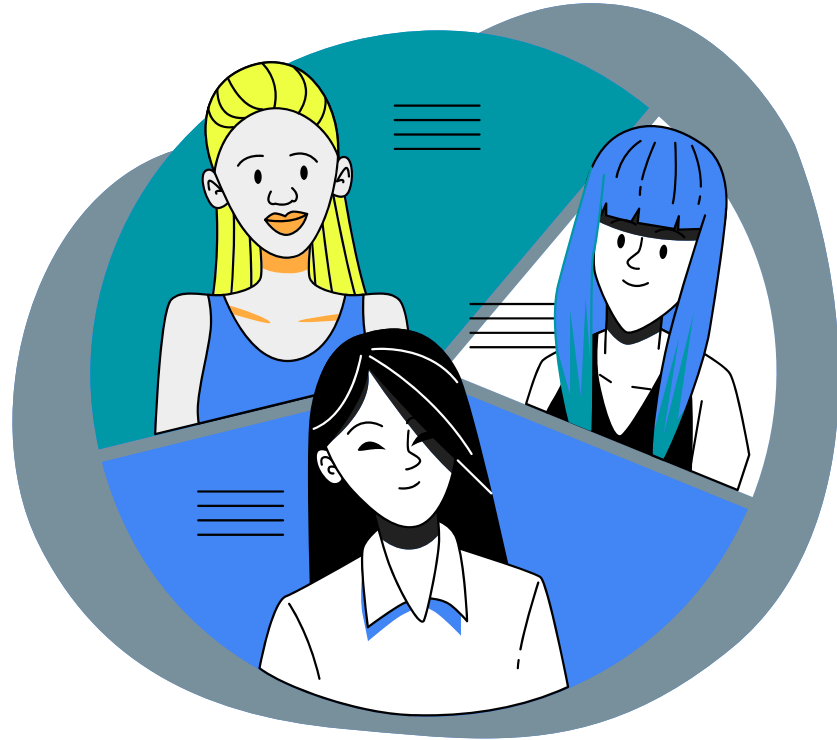
En créer ou en supprimer en cas de venue ou de départ

Assigner les bornes





Pouvoir désigner les bornes à des agents qu'ils consulteront

Modifier les bornes

S'ils en ajoutent ou en suppriment.



Dashboard restreint pour les agents

	Marc	Ismael	Jeanne	Sarah
 Borne Nord	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
 Borne Est	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
 Borne Sud	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
 Borne Ouest	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vue

Responsables Agents et Techniques

The screenshot displays the SMARTGEL dashboard interface. On the left is a blue sidebar with navigation options: 'Tableau de bord', '+ Assigner', 'Créer un compte', and 'Déconnexion'. The main content area is divided into two sections: 'Tableau de bord' and 'Notification'. The 'Tableau de bord' section lists five agents with their IDs, battery levels, gel levels, and status icons. The 'Notification' section shows two alerts for 'Borne 7' and 'Borne 8' regarding gel levels.

Agent	ID	Niveau de batterie	Niveau de gel	Status
Yannick	1	57%	32%	✓
Yanis	2	21%	44%	⚠
Ismael	3	4%	13%	⏸
Thad	4	71%	17%	✓
Nawfel	5	32%	16%	✓

Station	Message
Borne 7	Ne possède que 3% de gel !
Borne 8	Ne possède que 0% de gel !

Vue d'un agent

SMARTGEL

Recherche

Tableau de bord

Déconnexion

Tableau de bord

Marc	ID : 7	Niveau de batterie : 0%	Niveau de gel : 3%	⏸
Marc	ID : 8	Niveau de batterie : 3%	Niveau de gel : 0%	⏸
Marc	ID : 11	Niveau de batterie : 53%	Niveau de gel : 26%	✅
Marc	ID : 12	Niveau de batterie : 46%	Niveau de gel : 32%	✅

Notification

- Borne 7
Ne possède que 3% de g
- Borne 8
Ne possède que 0% de g

Les difficultés rencontrées

Penser la partie physique

Il faut trouver le moyen
le plus efficace et
économique à la fois pour
subvenir aux besoins

Tout lier à la bonne API

Les différentes parties
doivent être
logiquement
rassemblées pour
terminer ce projet !

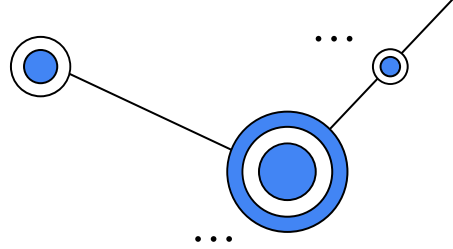
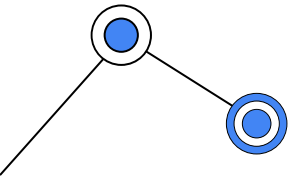


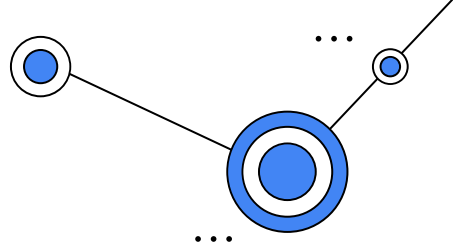
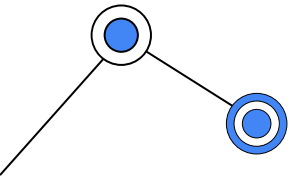
Merci!

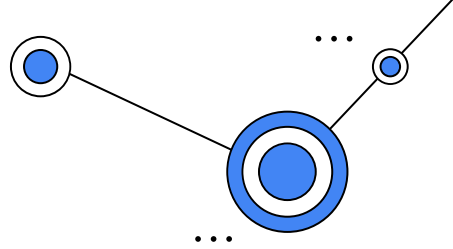
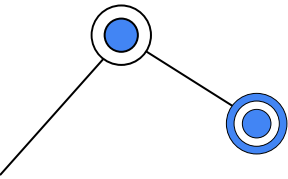
Des questions ?



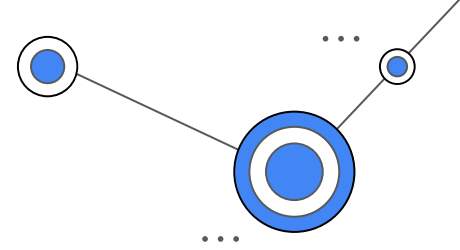
fin







Infographics Make Your Idea Understandable...

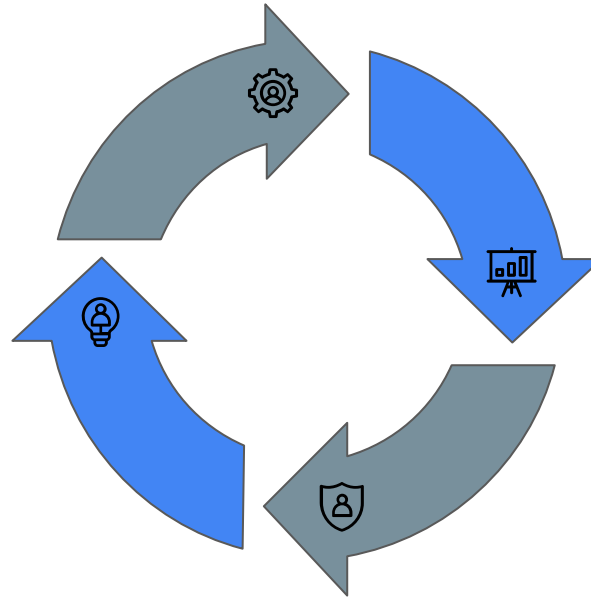


Mercury

Mercury is the closest planet to the Sun

Jupiter

Jupiter is the biggest planet of them all

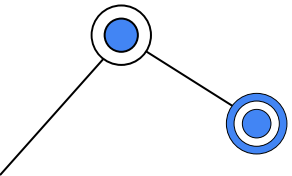


Neptune

Neptune is the farthest planet from the Sun

Saturn

Saturn is the ringed one and a gas giant





Our Solutions

01

Mercury

Recenser les bornes à gérer

02

Venus

Partager les bornes pour plus d'efficacité

03

Jupiter





Jupiter is the biggest planet of them all

04

Neptune

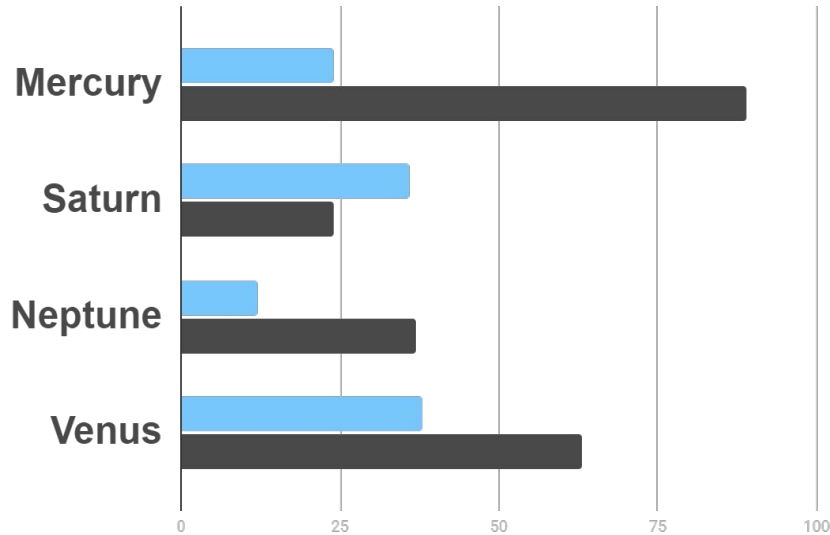
Neptune is the farthest planet from the Sun

Main Competitors

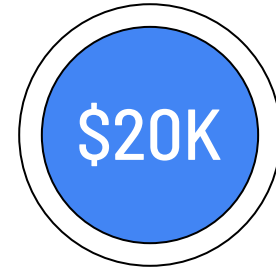
	Mercury	Jupiter	Venus	Neptune
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Market Research

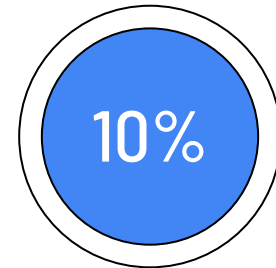
Evolution



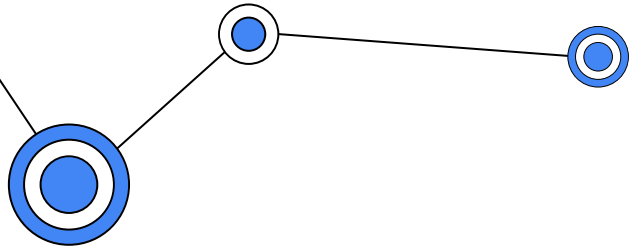
To modify this graph, click on it, follow the link, change the data and paste the resulting graph here



Gross Revenue in the Sector

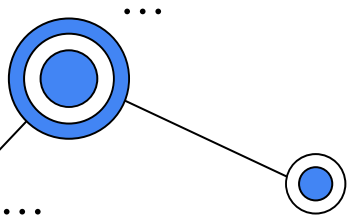


Sector Growth



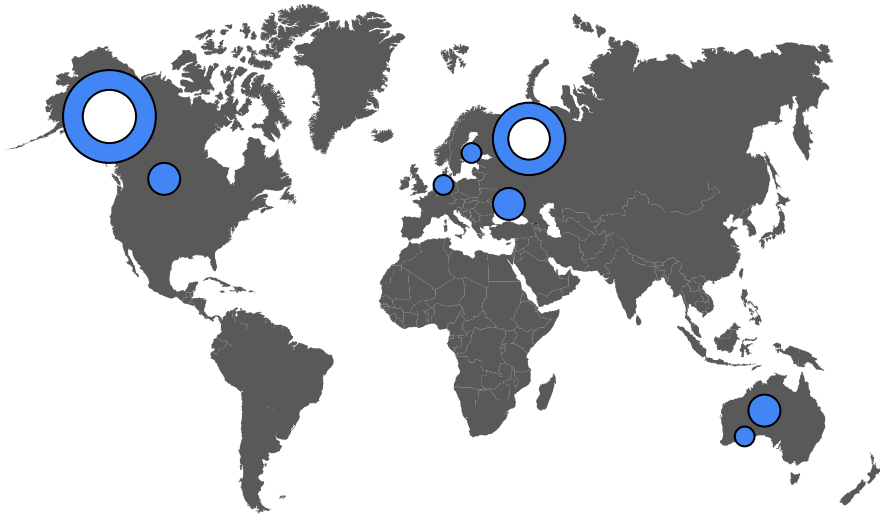
“This is a quote, words full of wisdom that someone important said and can make the reader get inspired.”

—Someone Famous

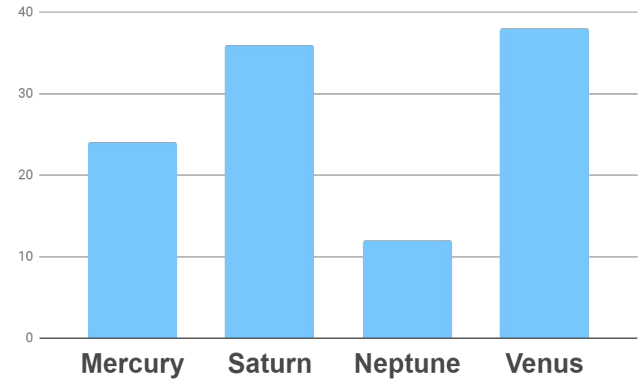


Analysis

Outreach



Top Rated Values



To modify this graph, click on it, follow the link, change the data and paste the new graph here



333,000.00

earths is the sun's mass

24h 37m 23s

is Jupiter's rotation period

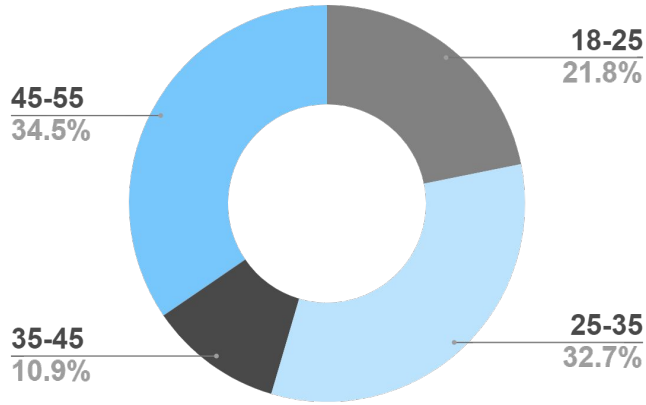
386,000 km

is the distance to the Moon



Target

Age

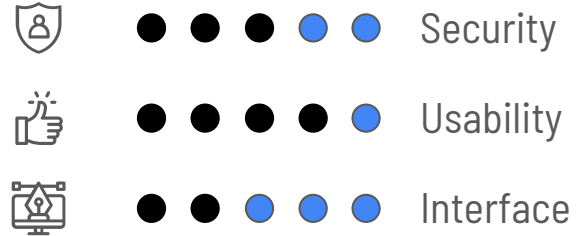


To modify this graph, click on it, follow the link, change the data and paste the new graph here

Gender

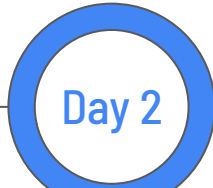


Interests



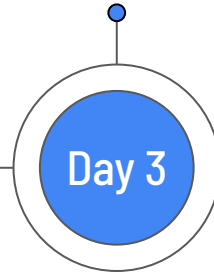
Our Process

Mercury is the closest planet to the Sun

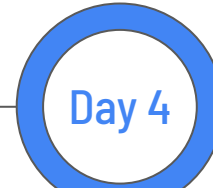


Jupiter is the biggest planet in the Solar System

Venus is the second planet from the Sun



Neptune is the farthest planet from the Sun





Whoa!

This could be the part of the presentation where you can introduce yourself, write your email...

Our Partners



Mercury

Mercury is the closest planet to the Sun



Jupiter

Jupiter is the biggest planet of them all



Neptune

Neptune is the farthest planet from the Sun



Saturn

Saturn is the ringed one and a gas giant



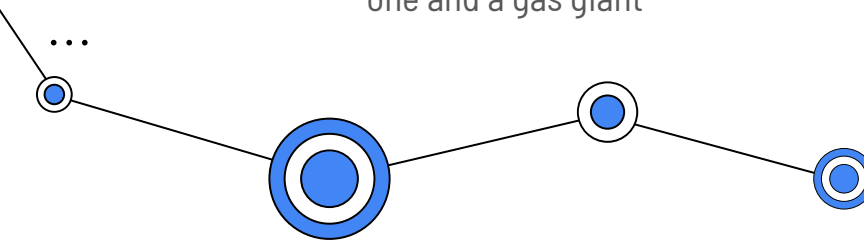
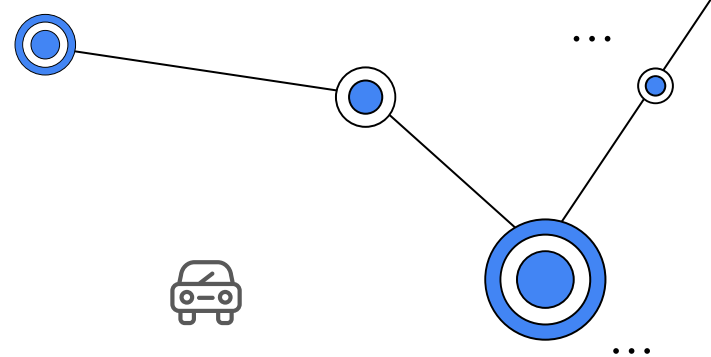
Mars

Despite being red, Mars is actually a cold place



Venus

Venus is the second planet from the Sun



Testimonials

Helena James

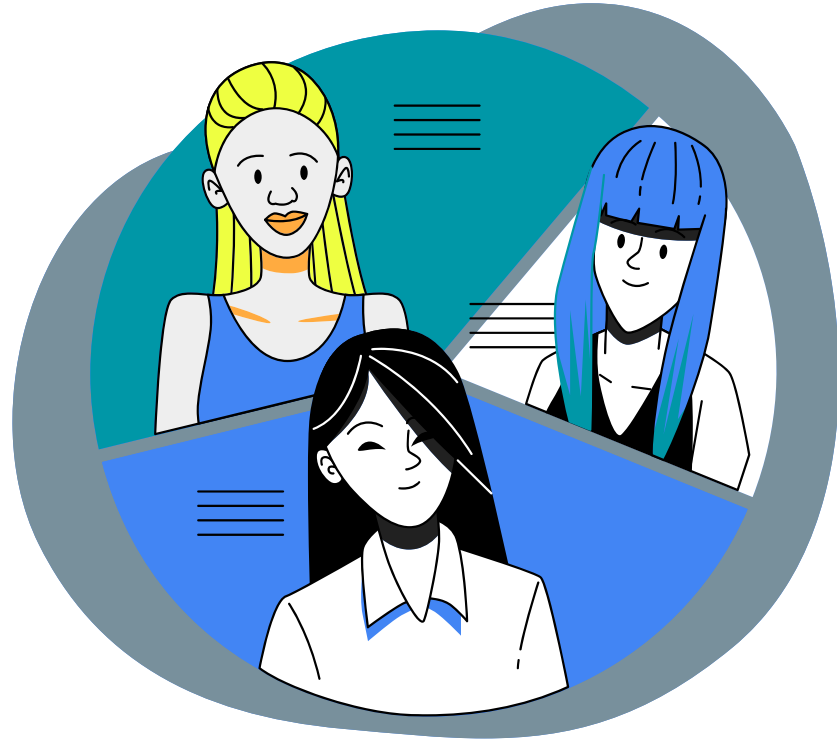
"Mercury is the closest planet to the Sun"

Jenna Doe

"Jupiter is the biggest planet of them all"

Mary Patterson

"Neptune is the farthest planet from the Sun"

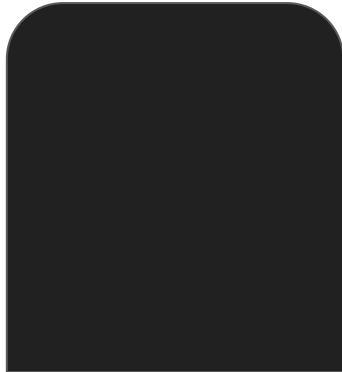


Awards



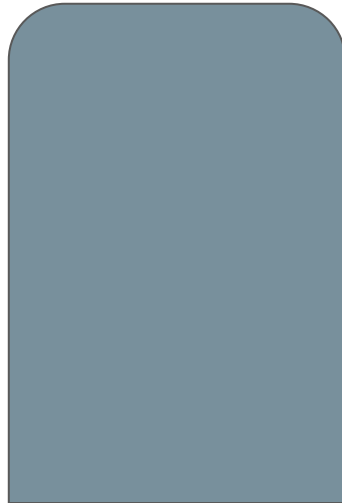
Venus

Venus is the second planet from the Sun



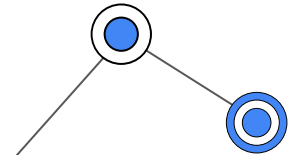
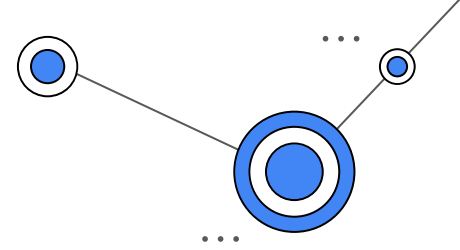
Mercury

It's the closest planet to the Sun



Jupiter

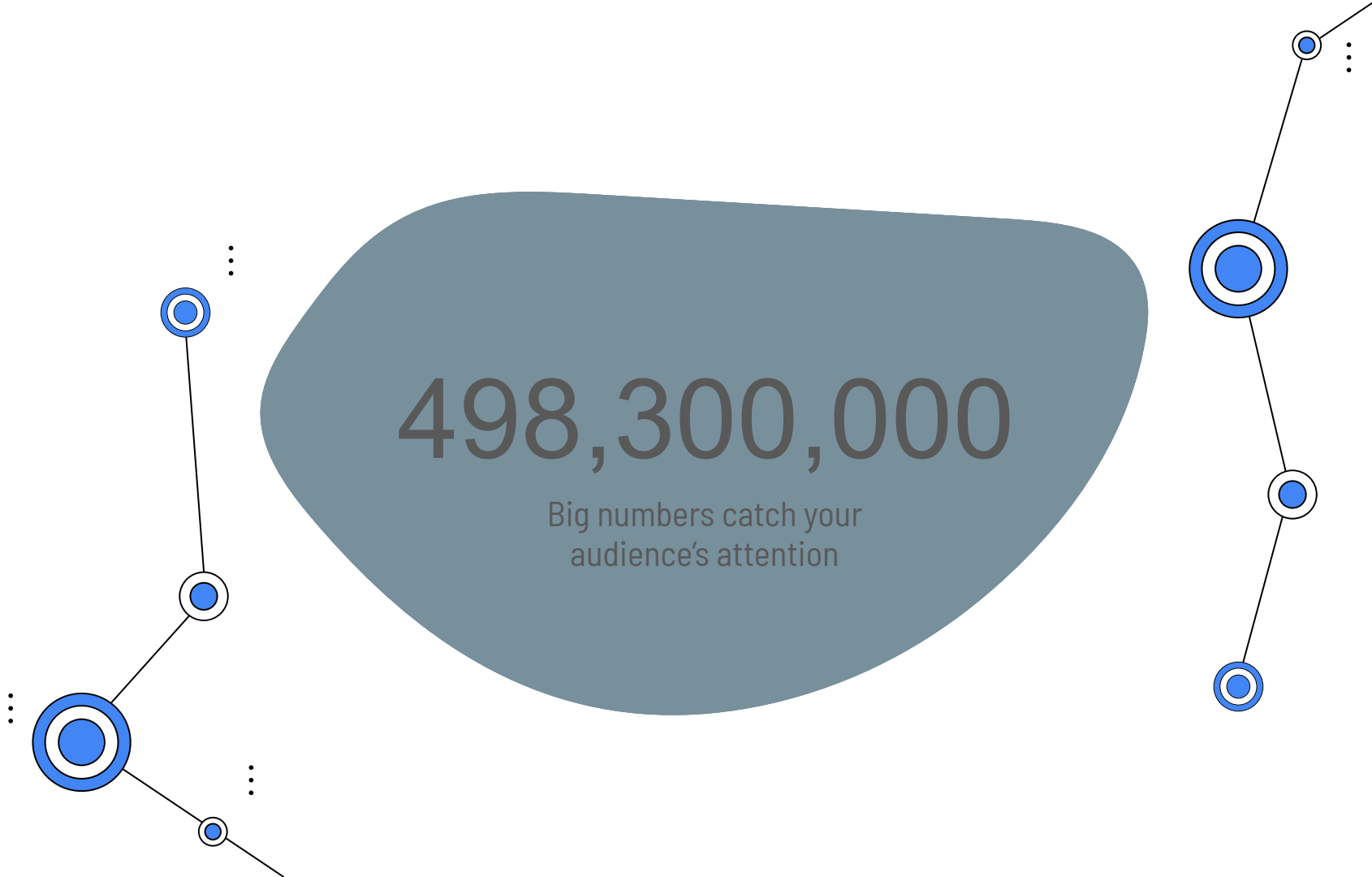
Jupiter is the biggest planet of them all



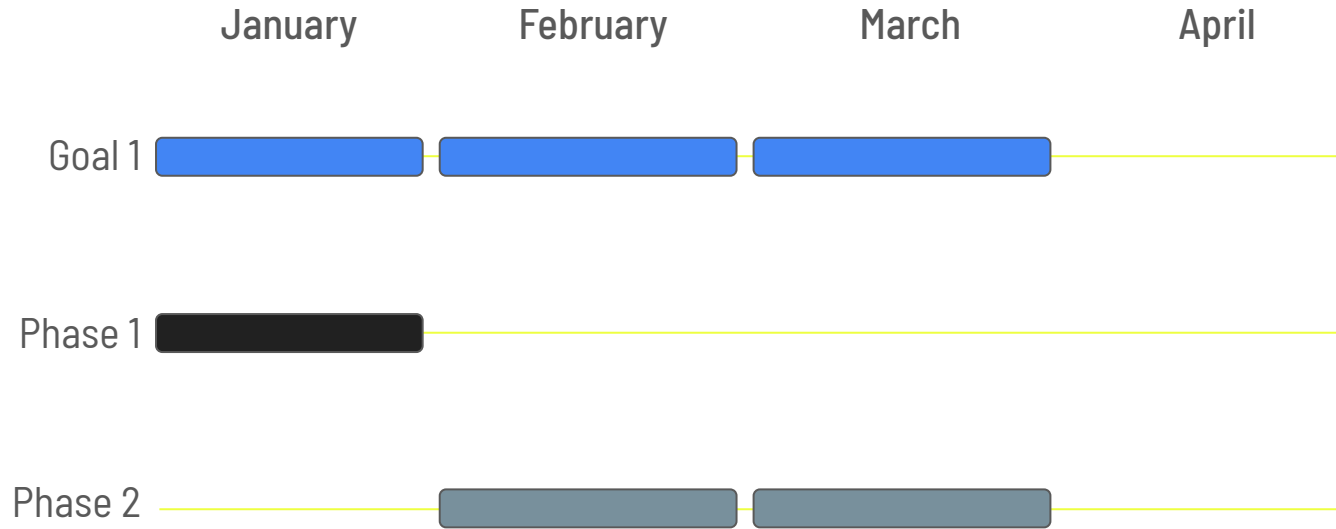


498,300,000

Big numbers catch your
audience's attention



Upcoming Goals



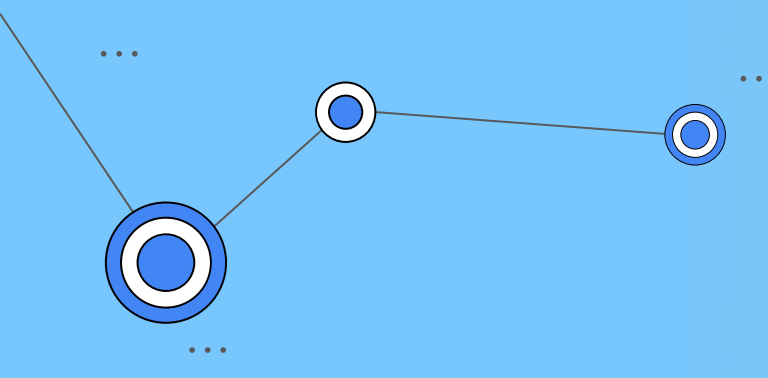
The Slide Title Goes Here!



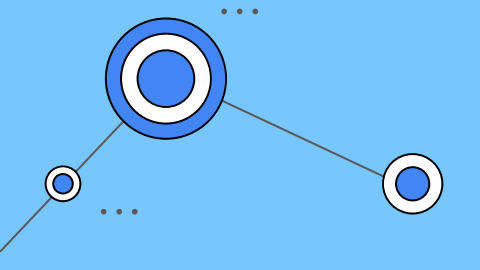
Do you know what helps you make your point clear? Lists like this one:

- They're simple
- You can organize your ideas clearly
- You'll never forget to buy milk!

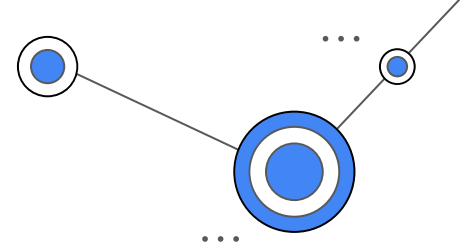
And the most important thing: the audience won't miss the point of your presentation



A Picture Is Worth a
Thousand Words



Infographics Make Your Idea Understandable...

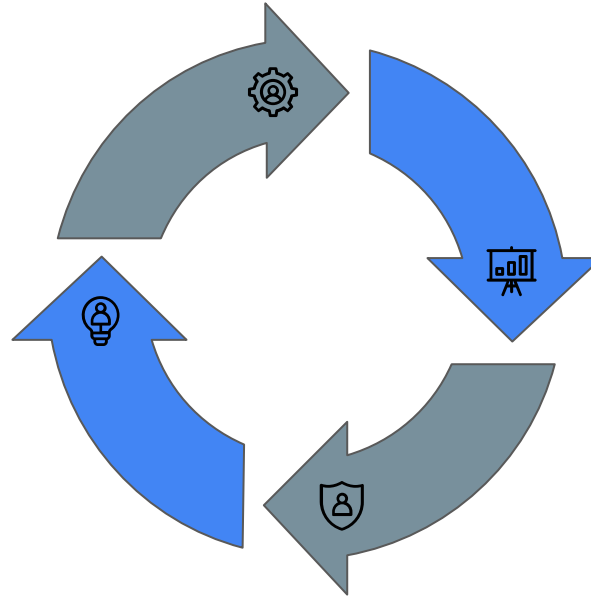


Mercury

Mercury is the closest planet to the Sun

Jupiter

Jupiter is the biggest planet of them all

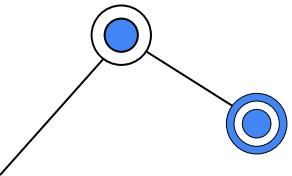


Neptune

Neptune is the farthest planet from the Sun

Saturn

Saturn is the ringed one and a gas giant



...And the Same Goes for Tables

	Mass (earths)	Diameter (earths)	Gravity (earths)
Mercury	0.06	0.38	0.38
Mars	0.11	0.53	0.38
Saturn	95.2	9.4	1.16

Maybe You Need to Divide the Content

01

Neptune

Neptune is the farthest planet from the Sun and the fourth-largest in the Solar System

02

Jupiter

Jupiter is the biggest planet in the Solar System and the fourth-brightest one

Desktop Software

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Thanks!

Do you have any questions?

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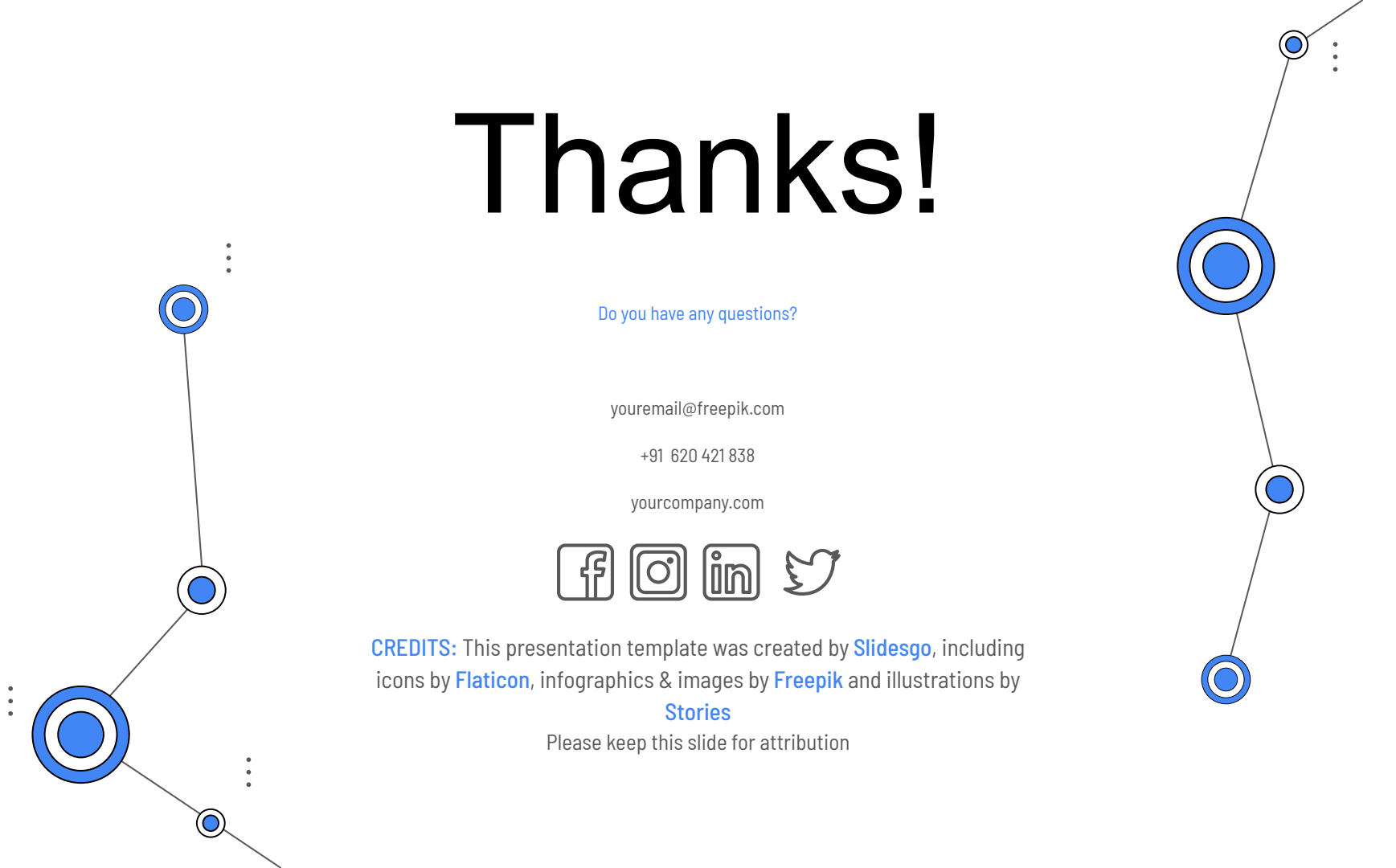
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- Site stats
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- Analysis
- Cyber attack
- Secure server
- Control panel

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- Close-up of woman using a laptop
- Beautiful young woman holding laptop on pink backdrop

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- Project Management Icon

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Pana



Amico

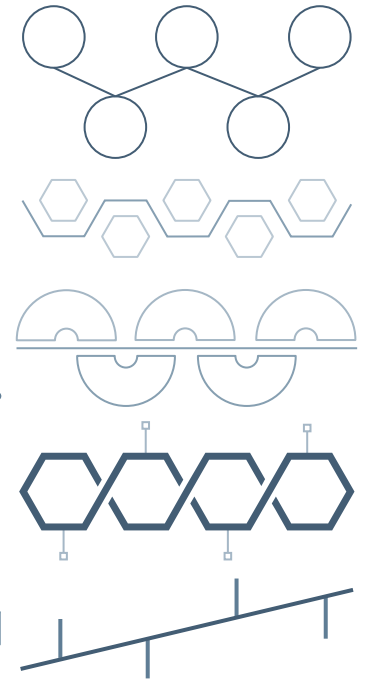
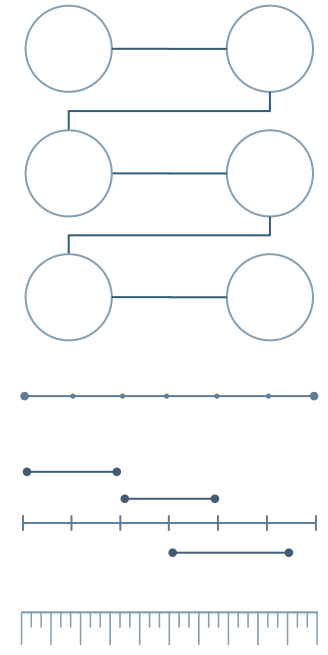
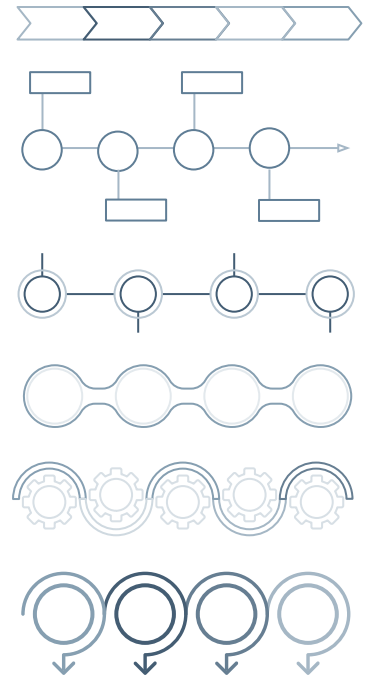
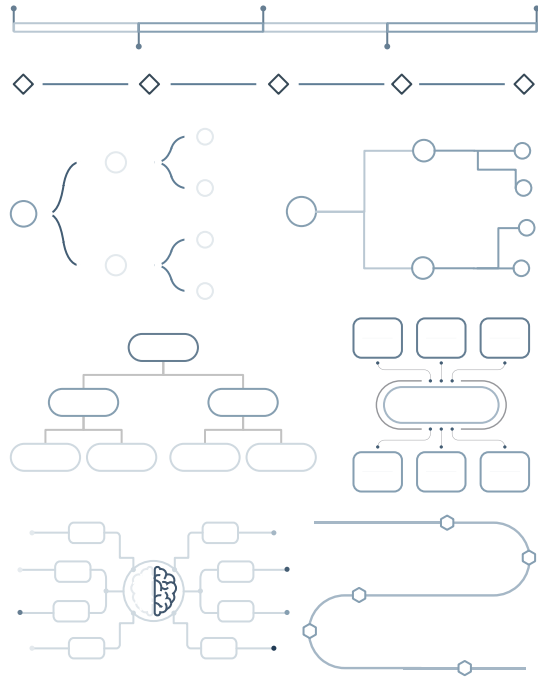


Bro



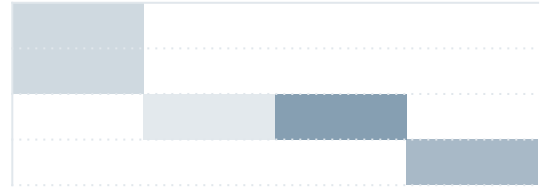
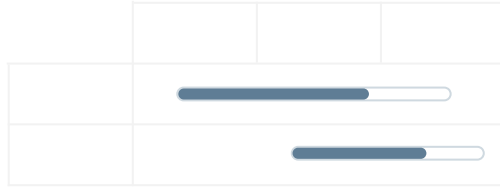
Rafiki



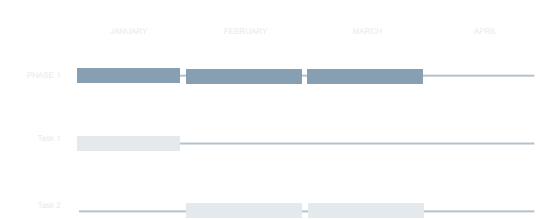


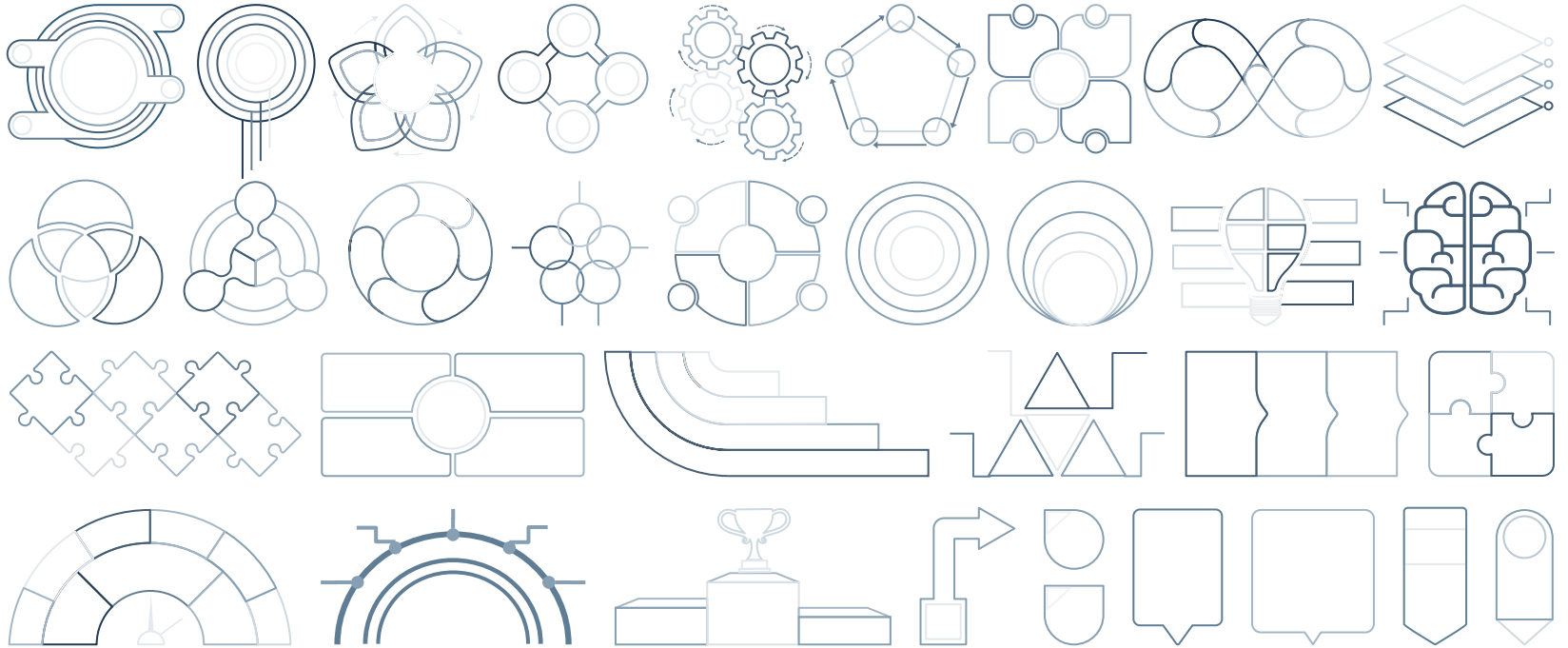
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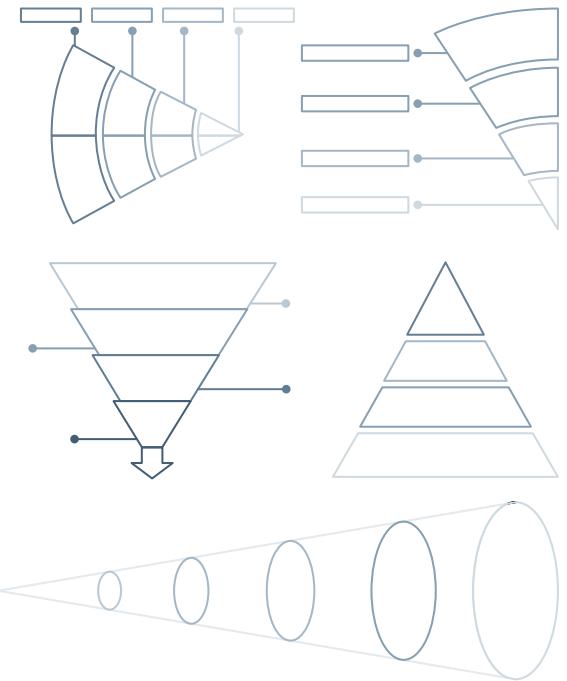
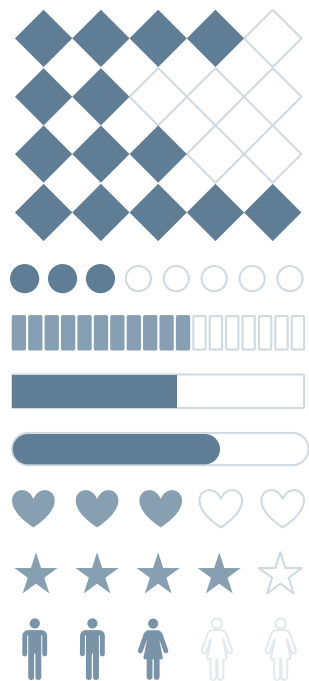
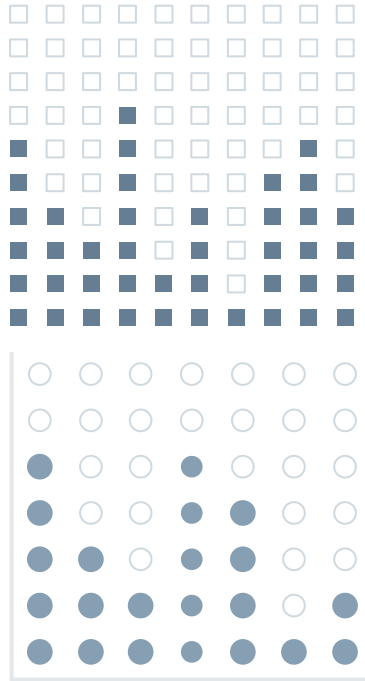




	✓	✗	✗	✗
	✗	✓	✓	✓







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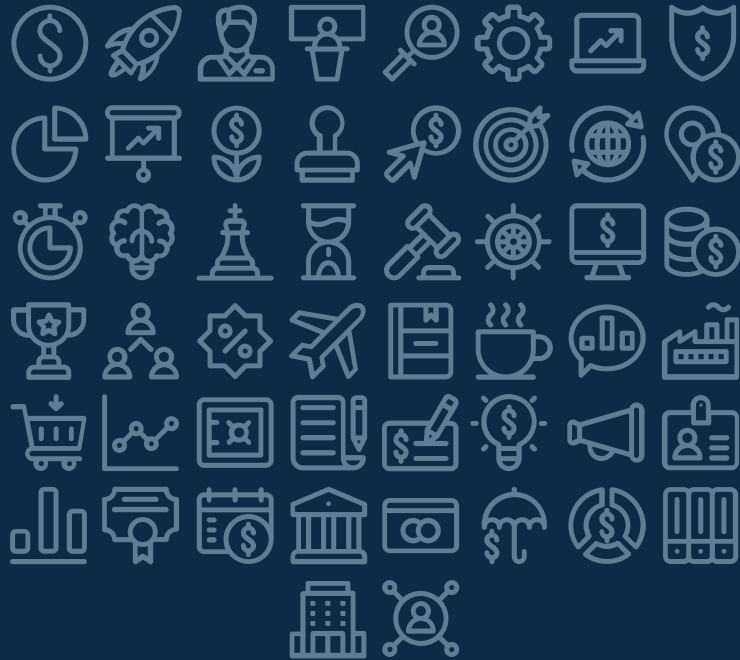
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