

# POLYQUIZ


Entretien Technique  
TEAM.JS

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VAN DER TUIJN ANTON

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- Architecture de notre API
- Difficultés rencontrées
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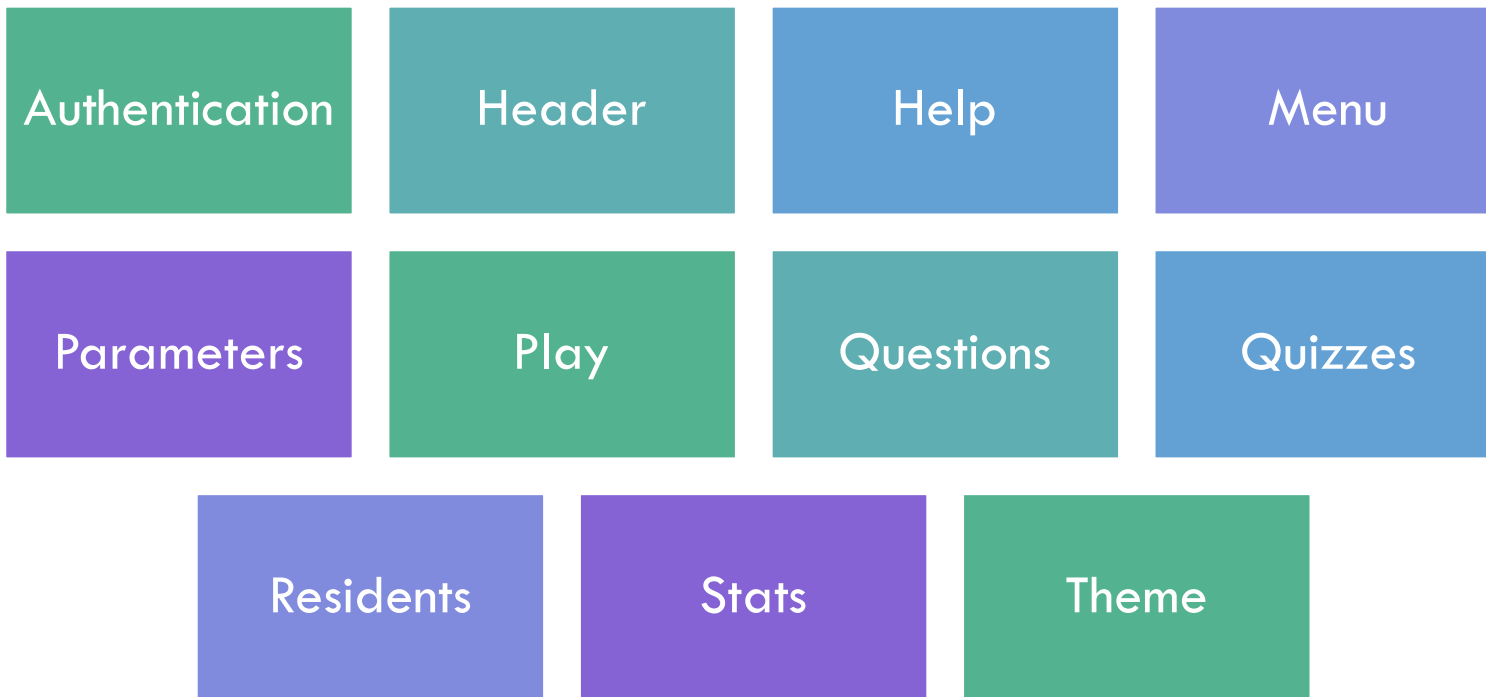


# Architecture de notre application

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# Les composants principaux

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# Les services

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Auth

Games

Help

Quiz

Result

Settings

Statistics

Themes

# Service Toaster

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```
this.toasterService.activateToaster( {isErrorMessage: false, message: 'Contraste enregistré !', ms: 1000});
```



The screenshot shows a web application interface. At the top, there is a dark grey header bar. On the left, there is a green button with a house icon and the text 'Aide'. On the right, there is a red button with the text 'Déconnexion'. Below the header, there is a light grey section titled 'Paramètres'. In the top right corner of this section, there is a red button with the text 'Réinitialiser'. Below 'Paramètres', there is a light blue section titled 'Vision'. Inside the 'Vision' section, there is a blue button labeled 'Contraste'. To its right, there are two radio buttons: 'Faible' (which is selected) and 'Elevé'.



# Service Toaster

---

```
this.toasterService.activateToaster( {isErrorMessage: false, message: 'Contraste enregistré !', ms: 1000});
```

 Aide 

Déconnexion

## Paramètres

Réinitialiser

### Vision

Contraste

☒ Faible

☐ Elevé

# Les Services Auth-Guard

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http://

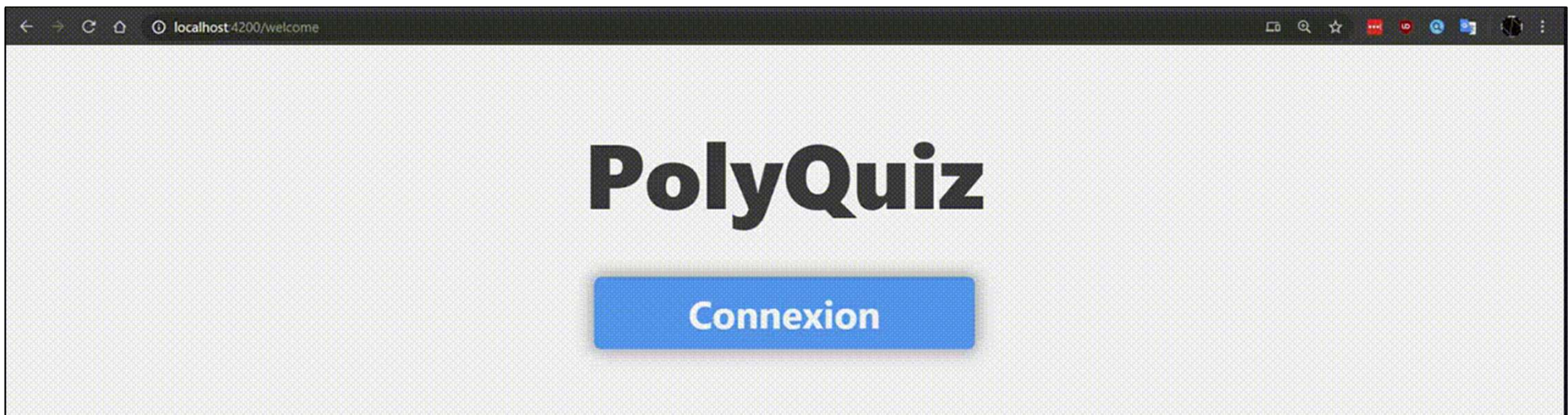


# Les Services Auth-Guard

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Routing module :

```
{path: 'welcome', canActivate: [NotAuthGuardService], component: WelcomeComponent},  
{path: 'themes', canActivate: [AuthGuardService], component: ThemeComponent},  
{path: 'residents', canActivate: [AuthGuardAdminService], component: ResidentsComponent},
```



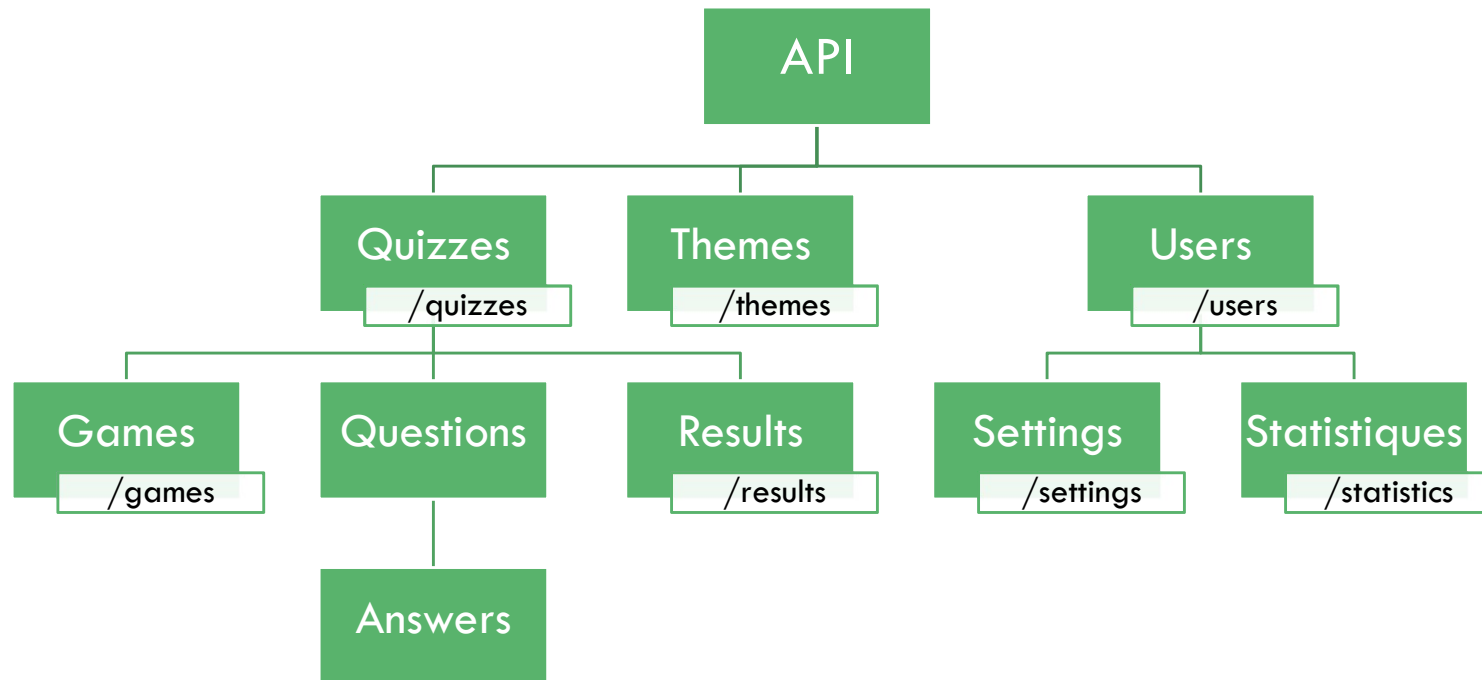


# Architecture de notre API

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# Structure de notre API

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# Les ressources

Quizzes	
/	GET POST
/:quizId/questions	GET
/:quizId	GET PUT DELETE
/quizData/:quizId	GET

Games	
/	PUT
/quizCompleted	PUT
/:userId	GET DELETE
/:userId/:quizId	GET DELETE

Results	
/:resultId	GET

Users	
/	POST
/residents	GET
/login	GET POST
/logout	GET
/:userId	DELETE

Settings	
/:residentId	GET PUT
/resetSettings/:residentId	PUT
/copySettings/:residentId	PUT

Statistiques	
/:residentId	GET

Themes	
/	POST
/:themeId	GET PUT

# Exemple de modèle de données

Statistiques	
id	number
currentWeek	number
successPercentage	number
totalQuizMade	number
weekQuizMade	number
perfectQuiz	number
quizzesResultIds	[number]

Results	
id	number
date	number
playTime	number
quizId	number
userId	number
maxScore	number
userScore	[number]
quizSuccessPercentage	
Answers	[questionId answerId correctAnswerId (optional) questionScore]

# La suppression d'un Quiz

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# Difficultés rencontrées

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# Louis

---

```
html {  
  --customFont: "Segoe UI";  
  
  --customWhite: white;  
  --customGray: #3d3d3d;  
  --customDarkGray: #2a2a2a;  
  --customRed: #de5252;  
  --customDarkRed: #8d0000;  
  --customGreen: #65a800;
```

--my

; | \$myvar

PolyQuiz

Aide

Déconnexion

# Paramètres

Réinitialiser

## Vision

Contraste	<input checked="" type="radio"/> Faible	<input type="radio"/> Elevé
Taille Police	<input checked="" type="radio"/> Moyenne	<input type="radio"/> Grande
Police	Segoe UI	
	Arial	
	Segoe UI	
	Times New Roman	
Taille de selection	<input checked="" type="radio"/> Moyenne	<input type="radio"/> Grande

```

contrastEvent($event) {
  this.userSettings.contraste = $event;
  this.settingsService.updateSettings(this.userSettings);
  if (response.status === 200) {
    this.toasterService.activateToaster({
      message: "Paramètres enregistrés avec succès !",
      type: "success",
      duration: 1000
    });
  } else {
    this.toasterService.activateToaster({
      message: "Erreur lors de l'enregistrement des paramètres.",
      type: "error",
      duration: 2000
    });
  }
});
}

updateSettings(settings: Settings) {
  const url = this.settingsUrl + '/update';
  return this.http.put<Settings>(url, settings, {
    options: {
      ...this.httpOptions,
      observe: 'response'
    }
  });
}

// ##### CHANGE FONT #####
const fonName = this.settingsService.settings.font;
document.getElementsByTagName('html')[0].style.setProperty('--customFont', fonName);

// ##### CHANGE COLORS #####
if (this.settingsService.settings.contraste !== undefined && this.settingsService.settings.contraste === 2) {
  document.getElementsByTagName('html')[0].style.setProperty('--customWhite', 'white');
  document.getElementsByTagName('html')[0].style.setProperty('--customGray', '#363636');
  document.getElementsByTagName('html')[0].style.setProperty('--customDarkGray', 'black');
  document.getElementsByTagName('html')[0].style.setProperty('--customRed', '#650000');
}

```

# Louis – La police (cas particulier)

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L'unité de mesure REM

```
// ##### CHANGE FONT SIZE #####  
if (this.settingsService.settings.fontSize === 1) {  
  document.getElementsByTagName(qualifiedName: 'html')[0].style.setProperty( propertyName: 'font-size', value: '5vmin');  
} else {  
  document.getElementsByTagName(qualifiedName: 'html')[0].style.setProperty( propertyName: 'font-size', value: '8vmin');  
}
```

```
font-size: 0.6rem;
```



# Guillaume – Authentication

---

Sécuriser les mots de passe avec le module Bcrypt :

```
bcrypt.hash(req.body.password, salt);
```

**MonMotDePasse**



\$2b\$10\$zS7UM0ZdwNviNi0su/brC.fG8RXJmEK2DXhtKloer2xDhwgZI6C2K

salt


Mot de passe hashé



# Guillaume – Authentication

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Sauvegarde de la session d'un utilisateur :

Session	Token
<b>Express Session + Session File Storage</b>	<b>JWT (JSON Web Token)</b> 

# Guillaume – Authentication

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Envoi d'un  
session Middleware :

```
router.use(session({  
  store: new FileStore({}),  
  
  name: SESSION_NAME,  
  resave: false,  
  saveUninitialized: true,  
  secret: SESSION_SECRET,  
  
  cookie: {  
    maxAge: SESSION_LIFETIME,  
    secure: false,  
    sameSite: true,  
  },  
}));
```

# Guillaume – Authentication

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Problème avec le **Cross-Origin Ressource Sharing (CORS)**

```
✖ Access to XMLHttpRequest at 'http://localhost:9428/api/users/login' from origin 'http://localhost:4200' has been blocked by CORS policy: Response to preflight request doesn't pass access control check: The value of the 'Access-Control-Allow-Origin' header in the response must not be the wildcard '*' when the request's credentials mode is 'include'. The credentials mode of requests initiated by the XMLHttpRequest is controlled by the withCredentials attribute.
```

# Guillaume – Authentication

---

Solution des problèmes CORS :

```
app.use(cors({credentials: true, origin: 'http://localhost:4200'}));

app.use(function (req, res, next) {
  // Website you wish to allow to connect
  res.setHeader('Access-Control-Allow-Origin', 'http://localhost:4200');
  res.setHeader('Access-Control-Allow-Methods', 'GET, POST, OPTIONS, PUT, PATCH, DELETE');
  res.setHeader('Access-Control-Allow-Headers', 'X-Requested-With,content-type');
  res.setHeader('Access-Control-Allow-Credentials', true);

  // Pass to next layer of middleware
  next();
});
```

# Anton – Mauvaise piste

```
constructor(private route: ActivatedRoute, private resultService: ResultService) {  
  this.sbAnswerSelected = this.resultService.answerSelected$.subscribe( onNext: (answer) => this.answerSelected = answer);  
  this.sbQuestion = this.resultService.questionSelected$.subscribe( onNext: (question) => this.question = question);  
  this.sbAnswerCorrect = this.resultService.correctAnswerSelected$.subscribe( onNext: (answer) => this.answerCorrect = answer);  
}  
ngOnInit() {  
  this.resultService.setSelectedQuestion(this.quizId, String(this.questionId));  
  this.resultService.setSelectedAnswer(this.quizId, String(this.questionId), String(this.answerId));  
  if (this.correctAnswerId) {  
    this.resultService.setSelectedCorrectAnswer(this.quizId, String(this.questionId), String(this.correctAnswerId));  
  }  
}
```

Numéro	Question et Réponse			Score
1	bbb	question4	valeur2	50
2	bbb	question4	valeur2	100
3	bbb	question4	valeur2	100
4	bbb	question4	valeur2	50

# Anton – Meilleur implémentation

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Solution :

Construction des objets par le back-end et non pas le front

Le component parent contient l'observer qui fait appel au back

Numéro	Questions et Réponses	Score
1	<b>Avec quoi joue-t-on au basketball ?</b> Bonne réponse : <b>Un ballon</b> Réponse choisi : <b>Une raquette</b>	50
2	<b>Lequel de ces joueurs est Français ?</b> Bonne réponse choisi : <b>Tony Parker</b>	100
3	<b>Le basketball se joue avec combien de joueurs par équipe ?</b> Bonne réponse : <b>5</b> Réponse choisi : <b>7</b>	50



# Lara – Suppression des quiz

```
deleteQuiz() {  
  for (const q of this.quizToCreate.questions) {  
    this.quizService.deleteQuestion(this.quizToCreate, q);  
  }  
  this.quizService.deleteQuiz(this.quizToCreate);  
  this.goToThemeMenu();  
}
```



```
deleteQuiz() {  
  if (confirm('Etes-vous sur de vouloir supprimer ce quiz ?')) {  
    this.quizService.deleteQuiz(this.quizToCreate);  
    this.goToThemeMenu();  
  }  
}
```

Problème :

Une totale suppression posait problème lors de l'affichage des statistiques

Solution :

Un attribut "deleted" sur les quiz, leurs questions, et les réponses aux questions

```
export interface Quiz {  
  id: string;  
  name: string;  
  themeId: string;  
  theme?: Theme;  
  questions?: Question[];  
  nbQuestions?: number;  
  difficulty: string;  
  deleted?: boolean;  
}
```



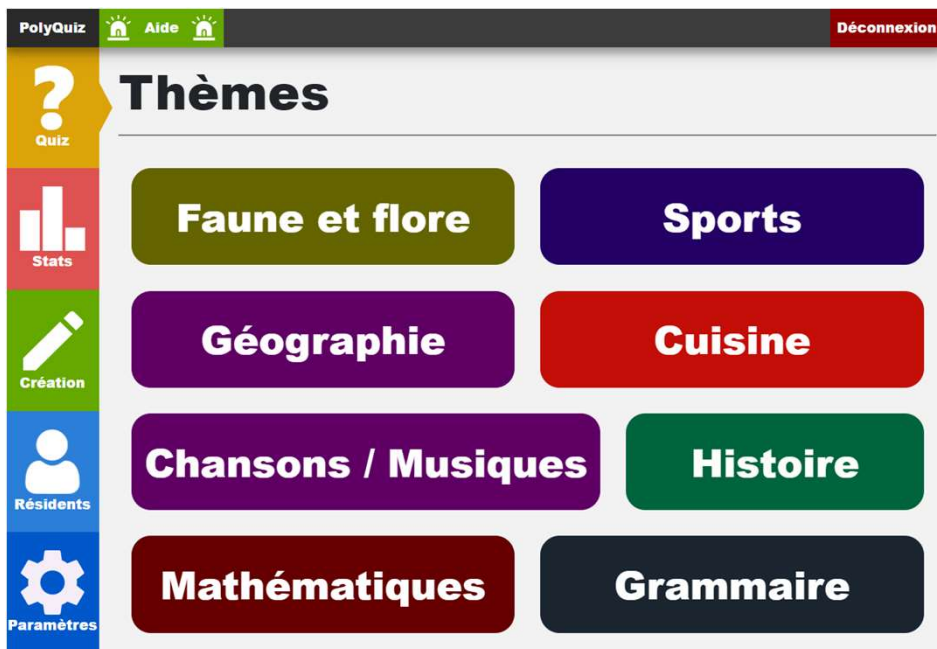
# Problèmes techniques actuels

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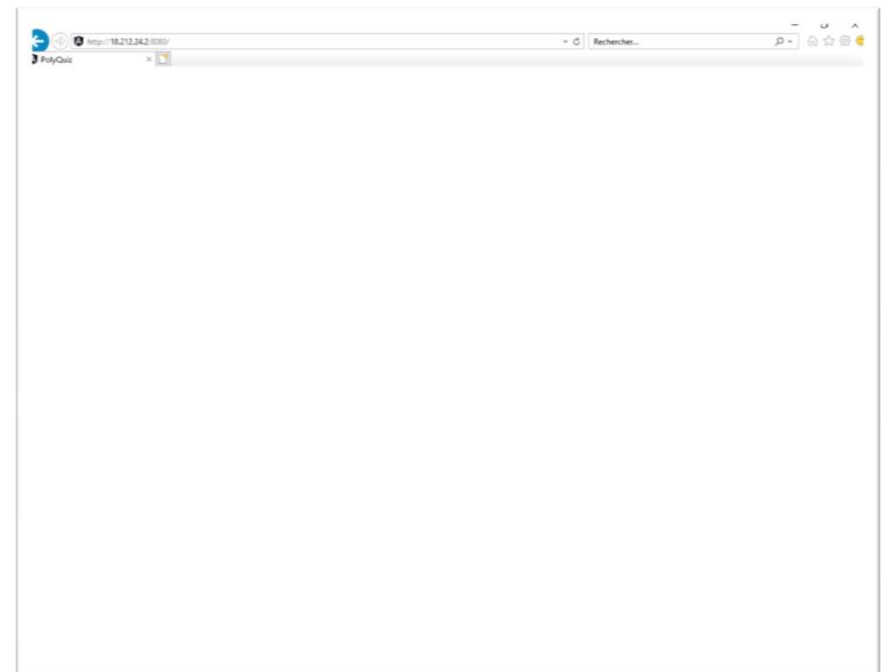
# Problèmes de compatibilités entre navigateurs

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Chrome / Firefox



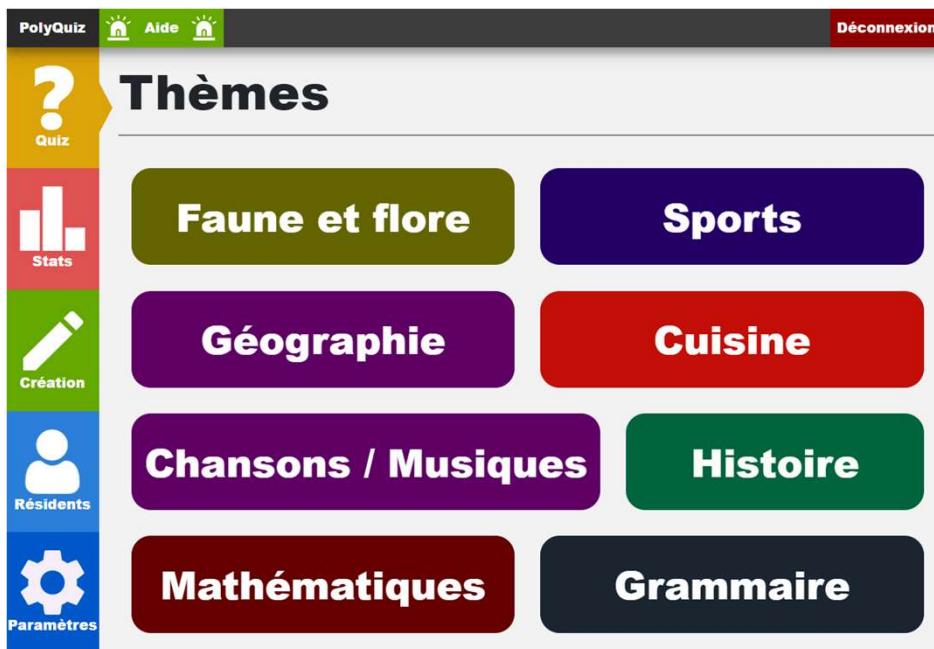
Internet explorer



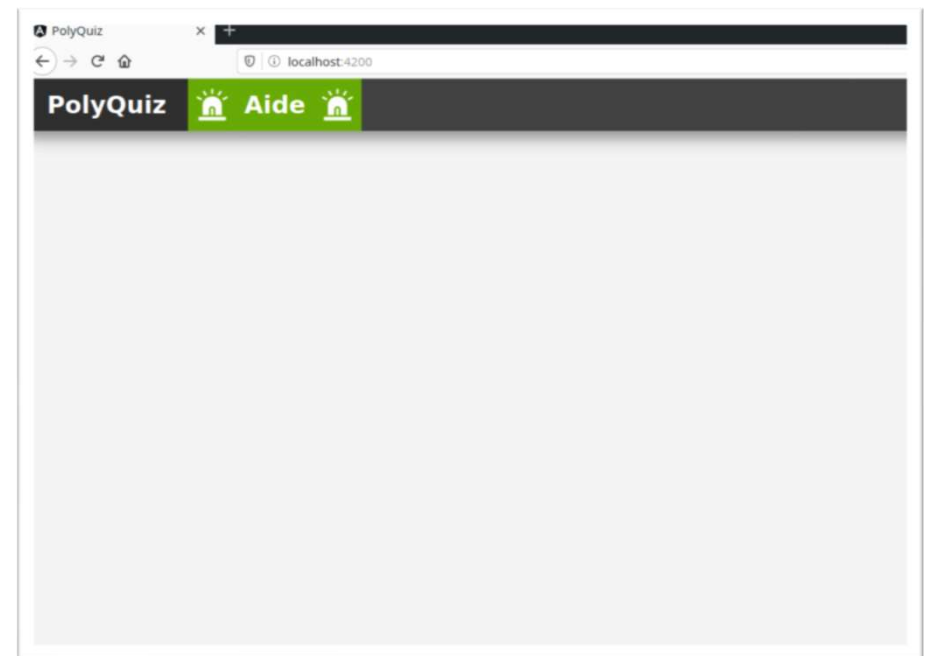
# Problèmes de compatibilités entre OS

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## Chrome sous Windows



## Firefox sous Linux

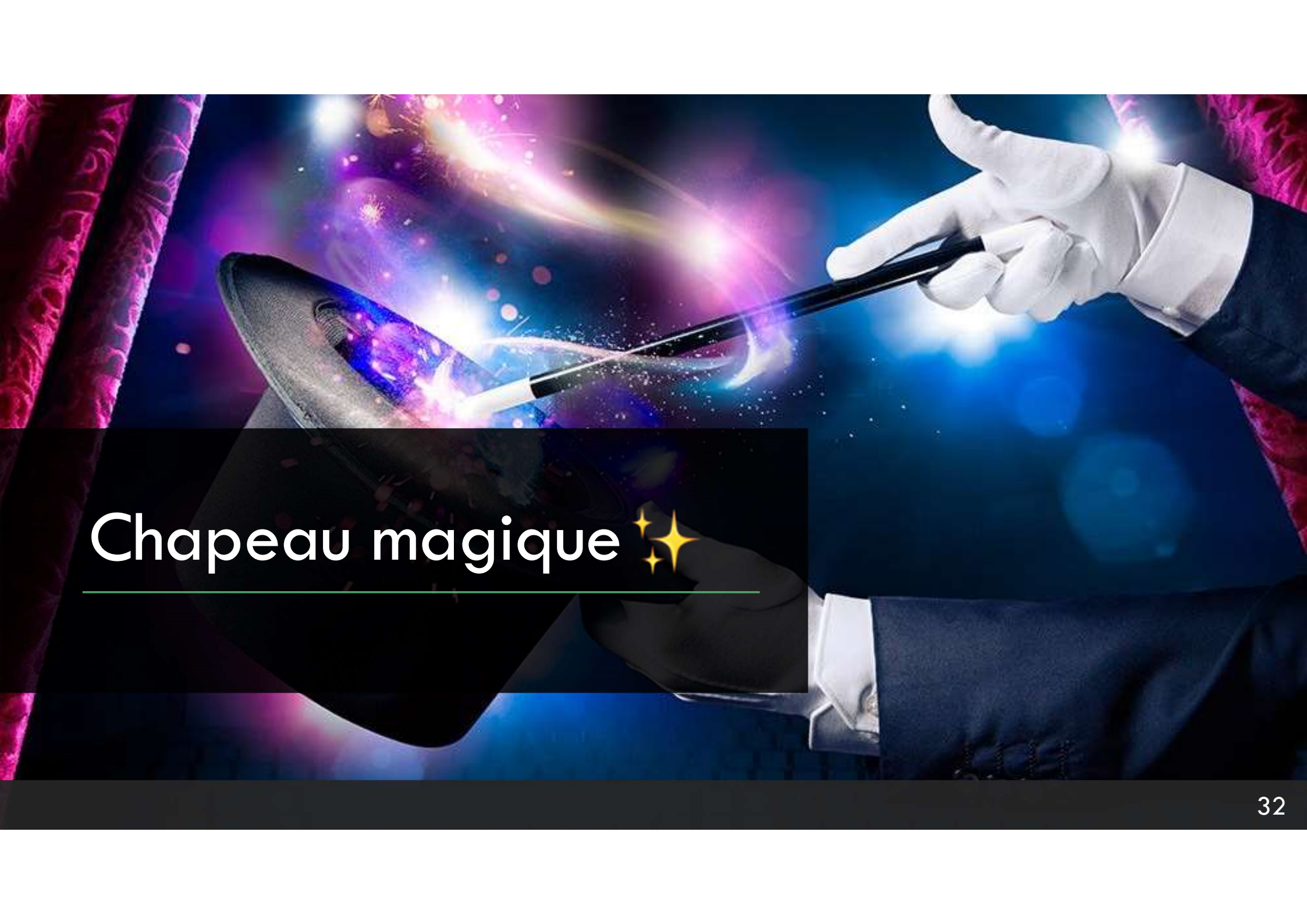


# Améliorations possibles

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Utiliser des bibliothèques  
permettant de  
maximiser la  
compatibilité entre  
navigateurs

Changer le modèle  
d'authentification de  
session à token



Chapeau magique ✨