

1. Création des BDD + Table

CREATE DATA BASE mathindex ;

- Structure de la table `classroom`

CREATE TABLE `classroom` (

`id` int(11) NOT NULL,

`name` varchar(255) NOT NULL

);

- Structure de la table `exercice`

CREATE TABLE `exercice` (

`id` int(11) NOT NULL,

`name` varchar(255) NOT NULL,

`classroom_id` int(11) NOT NULL,

`thematic_id` int(11) NOT NULL,

`chapter` varchar(255) NOT NULL,

`keywords` text NOT NULL,

`difficulty` int(2) NOT NULL,

`duration` float NOT NULL,

`origin_id` int(11) NOT NULL,

`origin_name` varchar(255) NOT NULL,

`origin_information` text NOT NULL,

`exercice_file_id` int(11) NOT NULL,

`correction_file_id` int(11) NOT NULL,

`created_by_id` int(11) NOT NULL

);

- Structure de la table `file`

CREATE TABLE `file` (

`id` int(11) NOT NULL,

`name` varchar(255) NOT NULL,

`original_name` varchar(255) NOT NULL,

`extension` varchar(255) NOT NULL,

`size` int(11) NOT NULL

);

- Structure de la table `origin`

```
CREATE TABLE `origin` (  
  `id` int(11) NOT NULL,  
  `name` varchar(255) NOT NULL  
);
```

- Structure de la table `thematic`

```
CREATE TABLE `thematic` (  
  `id` int(11) NOT NULL,  
  `name` varchar(255) NOT NULL  
);
```

- Structure de la table `user`

```
CREATE TABLE `user` (  
  `id` int(11) NOT NULL,  
  `email` varchar(255) NOT NULL,  
  `last_name` varchar(255) NOT NULL,  
  `first_name` varchar(255) NOT NULL,  
  `role` varchar(255) NOT NULL,  
  `password` varchar(255) NOT NULL  
);
```

2) Création de clé primaire

Index pour la table `classroom`

```
ALTER TABLE `classroom`  
  ADD PRIMARY KEY (`id`, `name`);
```

Index pour la table `exercice`

```
ALTER TABLE `exercice`  
  ADD PRIMARY KEY (`id`),  
  ADD KEY `classroom_id` (`classroom_id`),  
  ADD KEY `thematic_id` (`thematic_id`),  
  ADD KEY `origin_id` (`origin_id`),  
  ADD KEY `exercice_file_id` (`exercice_file_id`),  
  ADD KEY `correction_file_id` (`correction_file_id`),  
  ADD KEY `created_by_id` (`created_by_id`);
```

Index pour la table `file`

```
ALTER TABLE `file`
```

```
ADD PRIMARY KEY (`id`);
```

-Index pour la table `origin`

```
ALTER TABLE `origin`
```

```
ADD PRIMARY KEY (`id`);
```

Index pour la table `thematic`

```
ALTER TABLE `thematic`
```

```
ADD PRIMARY KEY (`id`);
```

Index pour la table `user`

```
ALTER TABLE `user`
```

```
ADD PRIMARY KEY (`id`,`email`);
```

3) Création de clé étrangère

Contraintes pour la table `exercice`

```
ALTER TABLE `exercice`
```

```
ADD CONSTRAINT `exercice_ibfk_1` FOREIGN KEY (`classroom_id`) REFERENCES `classroom` (`id`),
```

```
ADD CONSTRAINT `exercice_ibfk_2` FOREIGN KEY (`thematic_id`) REFERENCES `thematic` (`id`),
```

```
ADD CONSTRAINT `exercice_ibfk_3` FOREIGN KEY (`origin_id`) REFERENCES `origin` (`id`),
```

```
ADD CONSTRAINT `exercice_ibfk_4` FOREIGN KEY (`exercice_file_id`) REFERENCES `file` (`id`),
```

```
ADD CONSTRAINT `exercice_ibfk_5` FOREIGN KEY (`correction_file_id`) REFERENCES `file` (`id`),
```

```
ADD CONSTRAINT `exercice_ibfk_6` FOREIGN KEY (`created_by_id`) REFERENCES `user` (`id`);
```