

GRAPHQL NONNULL

in this GraphQL tutorial I'll introduce you to the GraphQL NonNull type, which will allow us to prevent users from making mutations without passing through any required fields.



```
const graphql = require('graphql');
const Book = require('../models/book');
const Author = require('../models/Author');
const _ = require('lodash');
```

```
const {
  GraphQLObjectType,
  GraphQLString,
  GraphQLSchema,
  GraphQLID,
  GraphQLInt,
  GraphQLList,
  GraphQLNonNull
} = graphql;
```

...

Insert
code



```
...
const Mutation = new GraphQLObjectType({
  name: 'Mutation',
  fields: {
    addAuthor: {
      type: AuthorType,
      args: {
        name: { type: new GraphQLNonNull (GraphQLString) },
        age: { type: new GraphQLNonNull (GraphQLInt) }
      },
      resolve(parent, args){
        let author = new Author({
          name: args.name,
          age: args.age
        });
        return author.save();
      }
    },
    addBook: {
      type: BookType,
      args: {
        name: { type: new GraphQLNonNull(GraphQLString) },
        genre: { type: new GraphQLNonNull(GraphQLString) },
        authorId: { type: new GraphQLNonNull(GraphQLID) }
      },
      resolve(parent, args){
        let book = new Book({
          name: args.name,
          genre: args.genre,
          authorId: args.authorId
        });
        return book.save();
      }
    }
  }
});
```

Modify
code



Go to <http://localhost:4000/graphql>

The screenshot shows the GraphiQL interface. At the top, there's a toolbar with buttons: "Prettify", "Merge", "Copy", and "History". A red arrow points to a play button icon. Below the toolbar, the left pane contains a query:

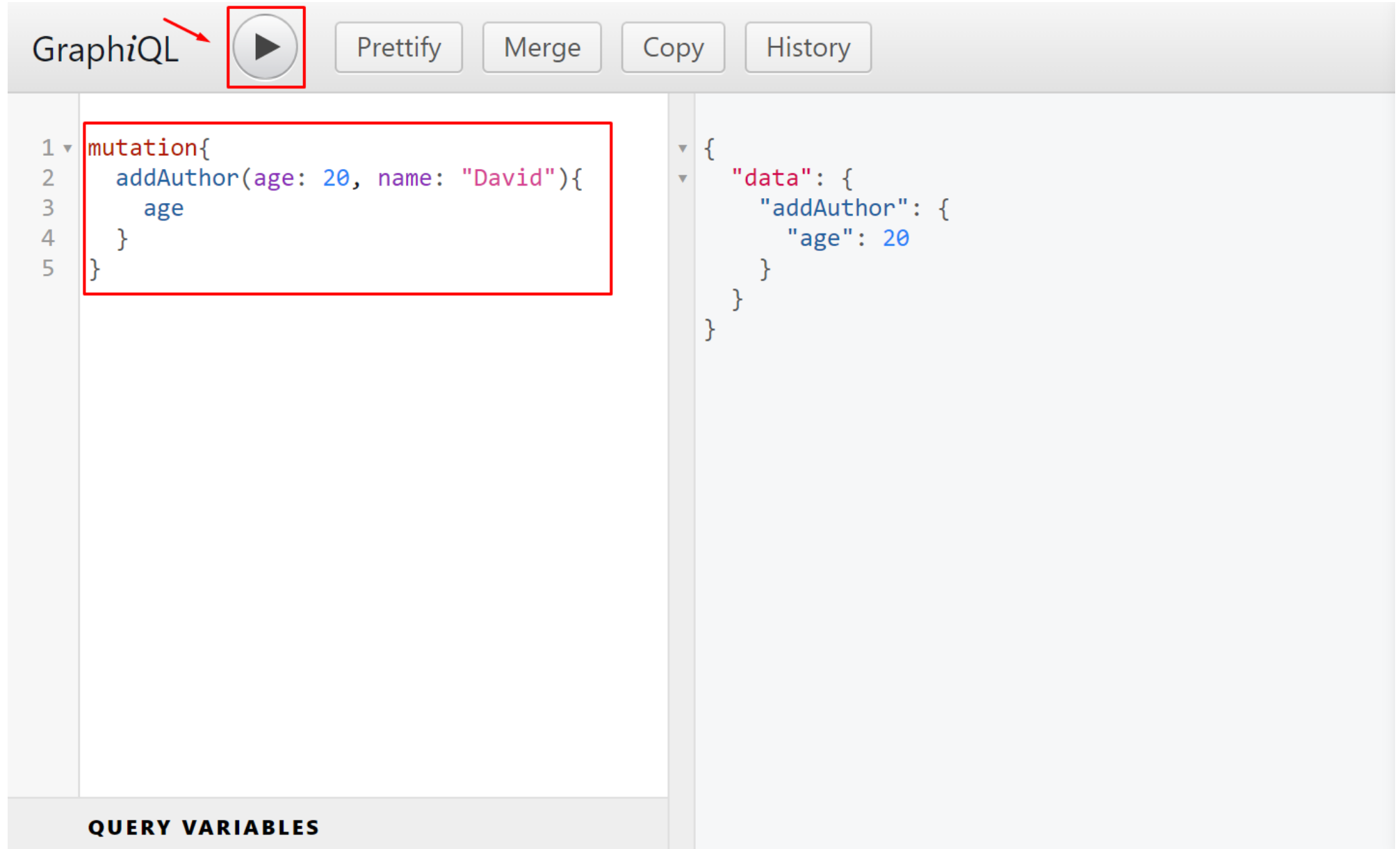
```
1 mutation{  
2   addAuthor(age: 20){  
3     age  
4   }  
5 }
```

The right pane shows the JSON response, which is an error:

```
{  
  "errors": [  
    {  
      "message": "Field \"addAuthor\" argument  
        \"name\" of type \"String!\" is required, but  
        it was not provided.",  
      "locations": [  
        {  
          "line": 2,  
          "column": 3  
        }  
      ]  
    }  
  ]  
}
```

At the bottom left, there is a section labeled "QUERY VARIABLES".

Go to <http://localhost:4000/graphql>



The screenshot shows the GraphQL Playground interface. At the top, the text "GraphiQL" is displayed with a red arrow pointing to a play button icon (a circle with a right-pointing triangle). To the right of the play button are four buttons: "Prettify", "Merge", "Copy", and "History". Below the toolbar, the interface is split into two main panels. The left panel contains a query editor with line numbers 1 through 5 on the left margin. The query text is:

```
1 mutation{
2   addAuthor(age: 20, name: "David"){
3     age
4   }
5 }
```

 A red rectangular box highlights the entire query text. The right panel displays the JSON response:

```
{
  "data": {
    "addAuthor": {
      "age": 20
    }
  }
}
```

 At the bottom of the interface, there is a section labeled "QUERY VARIABLES" which is currently empty.