

In Vue.js 3, utility functions (utils) are common helper functions that can be reused across different components in your application. They help in keeping your code clean and DRY (Don't Repeat Yourself).

Let's go through a basic example of how to create and use utility functions in a Vue.js 3 project.

## Step-by-Step Guide

1. **Create a Utility File**: First, create a file where you will define your utility functions. For example, let's create a file named utils.js in the src directory.

```
// src/utils.js
export function formatDate(date) {
    return new Date(date).toLocaleDateString();
}

export function capitalizeFirstLetter(string) {
    return string.charAt(0).toUpperCase() + string.slice(1);
}
```

2. **Use Utility Functions in a Component**: Now, import and use these utility functions in a Vue component. For example, let's use them in App.vue.

```
<script>
// Import the utility functions
import { formatDate, capitalizeFirstLetter } from './utils';
export default {
 data() {
   return {
     title: 'hello world', // Original title
     date: '2024-07-23' // Original date
 computed: {
   // Use the formatDate function to format the date
   formattedDate() {
     return formatDate(this.date);
   // Use the capitalizeFirstLetter function to capitalize the title
   capitalizedTitle() {
     return capitalizeFirstLetter(this.title);
 /script>
```

## **Explanation**:

- In utils.js, we defined two utility functions: formatDate and capitalizeFirstLetter.
- In App. vue, we imported these functions.
- We used the imported functions in the computed properties to format the date and capitalize the title.
- The template part of the component then uses these computed properties to display the formatted and capitalized values.
- Utility File (utils.js):
  - formatDate(date): Takes a date and formats it.
  - capitalizeFirstLetter(string): Takes a string and capitalizes the first letter.
- Vue Component (App. vue):

- o **Import the utility functions** at the top.
- Use these functions in computed properties:
  - formattedDate(): Formats the date data using the formatDate function.
  - capitalizedTitle(): Capitalizes the title data using the capitalizeFirstLetter function.
- Display the processed data in the template using {{ . . . }}.

This way, you can easily reuse these utility functions across different components by simply importing them, keeping your code clean and organized.