

ganache-time-traveler is a tool that extends the functionality of Ganache, a widely used Ethereum development blockchain simulator. Ganache provides a local blockchain environment for Ethereum development, allowing developers to test and debug smart contracts without interacting with the actual Ethereum network. ganache-time-traveler adds the ability to manipulate the blockchain's timestamp, advancing it to simulate the passage of time quickly. This feature is especially useful for testing time-dependent smart contract functionalities like token vesting, staking, or auctions.

Example :

```
const { timeTravel, currentTimestamp } = require('ganache-time-traveler');
```

```
contract('YourTimeDependentContract', (accounts) => {  
  it('should do something after a certain time has passed', async () => {
```

```
    const contract = await YourTimeDependentContract.deployed();
```

```
    const initialTimestamp = await currentTimestamp();
```

```
    // Fast forward 1 day (in seconds)
```

```
    await timeTravel(24 * 3600);
```

```
    const newTimestamp = await currentTimestamp();
```

```
    assert.isAbove(  
      newTimestamp.toNumber(),
```

```
      initialTimestamp.toNumber(),
```

```
      initialTimestamp.toNumber() + 24 * 3600,
```

```
      'The timestamp should have advanced by at least 1 day'
```

```
    );
```

```
});
```

```
});
```

- We import `timeTravel` and `currentTimestamp` from `ganache-time-traveler`.
- We initially get the current timestamp.
- We use `timeTravel` to advance the timestamp by 24 hours (1 day).
- We then get the new timestamp and assert that it has advanced by at least 1 day.
- We can perform actions in your contract that depend on the time advancing.