

Explanation:

Sunday Surcharge:

1. Inputs:

- hourlyRate: The hourly wage.
- date: The date to check if it is a Sunday.

2. Logic:

- date.DayOfWeek is used to determine if the day is a Sunday.
- If it is, a surcharge of 50% is calculated:

csharp

Code kopieren

```
decimal sundaySurcharge = hourlyRate * 0.5m;
```

```
decimal total = hourlyRate + sundaySurcharge;
```

3. Outputs:

- If it's Sunday, the response includes:
 - The hourly rate.
 - The surcharge.
 - The total hourly pay.
 - The date.
- If not, a message indicates the date is not a Sunday.

Holiday Surcharge:

1. Logic:

- Checks if the date is a public holiday using the **Nager.Date** library:

csharp

Code kopieren

```
bool isPublicHoliday = DateSystem.IsPublicHoliday(date, CountryCode.DE);
```

- Calculates the holiday surcharge at 100%.

2. Outputs:

- Includes the hourly rate, holiday surcharge, total pay, and date if it is a public holiday.
- Returns a message if it is not a public holiday.