**Task:**

Implement an Angular app for validating and summarizing time sheets.

**Description:**

We need to validate the time sheet data contained in a CSV file and aggregate the results as number of hours worked per day.

The CSV file will contain three columns: description, start datetime and end datetime (this file will be for a single developer). The application will consist of a start page where the user can upload the file. On file upload, the CSV file will be read, and the list of entries extracted will be displayed as a table.

Below the table there will be a "Process" button, which, when pressed, will validate the data by checking for overlap between entries, then summarize it as daily hours worked.

Summary data will be displayed as a table with the columns: Date, Hours Worked, # of Entries, Flags. The "Flags" column will highlight any possible issue for the corresponding day: any existing overlap, more than 8 hours worked for the day.

The summary table will have an expander on each row where the detailed summary for the day will be displayed:

- the list of entries as a table with the data from the CSV, sorted chronologically, and the amount of time corresponding to each entry in a "1h20m" format, if overlapping, indicate that

As an example, should we have the following entries in the source file:

"task 1";"2023-01-20 09:00:00";"2023-01-20 09:30:00"

"task 2";"2023-01-20 09:30:00";"2023-01-20 12:00:00"

"task 3";"2023-01-20 09:45:00";"2023-01-20 10:30:00"

"task 4";"2023-01-20 12:30:00";"2023-01-20 17:30:00"

then the list of details in the expander for the date of 2023-01-20 should have the following entries:

09:00 09:30 30m

09:30 12:00 2h30m overlapping

09:45 10:30 45m overlapping

12:30 17:30 5h

**Key development features:**

- make use of material design or bootstrap

- modular approach

- reactive design

**Optional**

- use custom theming (colors and font)

- unit / e2e tests