

Senior Frontend

☰ Tags

Hi there 😁

Thanks for throwing your hat in the ring for our Frontend Engineer opening 🧑💻

As part of our interview process, we've prepared a little homework for you. Don't worry, it's nothing too crazy or serious, just a fun challenge and a way for us to get a better sense of your skills, how you approach problem-solving and see how you think on your feet.

About the task 🧠

This homework should not take you more than 30-60 minutes. Once an hour pass, stop coding, drop everything and submit what you have in front of you along with your answers to the questions below

- *How much time it took to complete*
- *Your overall thoughts on the exercise*
- *Identify what is lacking in the task definition*
- *Whether the solution is complete? Whether it is optimized or solved through brute force?*
- *Be sure that your code is readable and well commented or that the naming is semantic*

We're not expecting a novel or a 10-pages essay, just a short explanation will do, we'll talk about the results more in-depth during the next round

Are you ready? 💪 Go! 🏁

```
``typescript
// internal data types
type ShoppingItemType = {
  title: string
  price: number
}
```

```

    currency: string
    date: string
  }

  interface INodeElement {
    firstName: string
    lastName: string
    age: number
    birthDate: string
    shoppingItemsList?: ShoppingItemType[]
  }

  type Chat = {
    title: string
    nodesList: INodeElement[]
  }

  // external data types
  type Timestamp = {
    seconds: number
    nanos: number
  }

  type ExtShoppingItemType = {
    Title: string
    Price: number
    Currency: string
    Date: Timestamp
  }

  interface IExtNodeElement {
    FirstName: string
    LastName: string
    Age: number
    BirthDate: Timestamp
    ShoppingItems: ExtShoppingItemType[]
  }

  type ExtChat = {
    Title: string
    ChatItems: IExtNodeElement[]
  }
  ...

```

The task

Sometimes we experience a mismatch in data types between different components. We need a converter that will represent the provided data as expected.

Create a converter that gets data with internal types and returns data with external types.

- *Optional: please, prepare a mock function that will generate the test data that will be used for testing purposes.*

Please, follow the steps:

1. *Read the whole doc*
2. *Review the types added above*
3. *Code with TypeScript*
4. *???*
5. *Profit!!!*

 **PS. This little exercise resembles a real tasks from our dally routine—so hopefully it gives you a glimpse to our our day-to-day here at Zeals**