

## INF 354

### Example 2022

#### Typescript:

ihero.ts interface:

```
export interface Ihero
```

```
{  
  id: number;  
  name: string;  
  image: string;  
}
```

hero.ts file:

```
import { Ihero } from "./ihero";
```

```
type allowNull = number | string | null;
```

```
export class Hero implements Ihero
```

```
{  
  id!: number;  
  name!: string;  
  age!: allowNull;  
  birthday!: allowNull;  
  height!: string;  
  image!: string;  
  alive!: boolean;  
}
```

## Angular:

chatstats.component.html:

```
<table class="table">
  <thead>
    <tr>
      <th>Stat</th>
      <th>Value</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td># Msgs from bot</td>
      <td>{{ messages.filtered( message => message.isBotAuthored).length }}</td>
    </tr>
    <tr>
      <td>># Msgs from user</td>
      <td>{{ messages.filtered( message => !message.isBotAuthored).length }}</td>
    </tr>
    <tr>
      <td># Msgs exceeding 10 words</td>
      <td>{{ messages.filter(message => message.text.split(' ').length > 10).length }}</td>
    </tr>
  </tbody>
</table>
```

chatpopup.component.ts:

```
onAddNewMessage(): void {  
  if (this.newMessageText.trim() !== "") {  
    const newMessage: ChatMessage = {  
      text: this.newMessageText.trim(),  
      isBotAuthored: false,  
      timestamp: new Date()  
    };  
    this.chatMessageManagerService.AddMessage(newMessage);  
    this.newMessageText = "";  
  }  
}
```

chatstats.component.ts:

```
export class ChatstatsComponent implements OnInit {
```

```
    botMessagesCount: number = 0;
```

```
    userMessagesCount: number = 0;
```

```
    longMessagesCount: number = 0;
```

```
    constructor(private chatMessageManagerService: ChatMessageManagerService) { }
```

```
    ngOnInit(): void {
```

```
        this.chatMessageManagerService.messageAdded.subscribe((newMessage: ChatMessage)  
=> {
```

```
            if (newMessage.isBotAuthored) {
```

```
                this.botMessagesCount++;
```

```
            } else {
```

```
                this.userMessagesCount++;
```

```
            }
```

```
            const words = newMessage.text.split(' ');
```

```
            if (words.length > 10) {
```

```
                this.longMessagesCount++;
```

```
            }
```

```
        });
```

```
    }
```

```
}
```

Example 2021:

Web API and Angular:

CourseController.cs:

[HttpGet]

[Route("GetCourseCode/{courseCode}")]

public async Task<IActionResult> GetCourseCode(string courseCode)

{

try

{

var course = await \_courseRepository.GetCourseByCourseCode(courseCode);

if (course == null)

{

return NotFound(400, "Not Found");

}

return Ok(course);

}

catch (Exception)

{

return StatusCode(500, "Internal service error");

}

}

course-details.component.ts: