

# WEB DEVELOPER ASSESSMENT TASK

## Cricket Game Design with Using OOPs in TypeScript

### TASK: CRICKET GAME USING BOOTSTRAP UI

Design a cricket game has two teams. Each team has a set of 10 players where each player has six balls.

### TASK DETAILS:

#### 1. What is a cricket game?

**Cricket** is a bat-and-ball game played between two teams of eleven players on a field at the center of which is a 20-meter (22-yard) pitch with a wicket at each end, each comprising two bails balanced on three stumps.

#### 2. How do I design a cricket game?

- Construct a two set of teams containing 10 players. Each player has to play 6 balls, where the balls are random whole numbers. If a player gets **zero** he's out of the game and the change goes to the next player of the same team.
- All the ten players of **TEAM** should get a chance to play the game.
- Each team will have an allotted time of 60 seconds.
- If a **TEAM** has completed its turn and the hit button of the corresponding team has to be disabled. And the next team gets to play.
- If a **TEAM** hasn't completed their turn on-time of 60 seconds & timer runs out then the hit button of the corresponding team has to be disabled. And the next team gets to play.
- While tapping on the HIT button of a **TEAM** total score has to be displayed near to the team name.
- Here is an example design of the cricket game.

## CRICKET 10

TEAM 1 SCORE

0

HIT 1

TIMER

60

TEAM 2 SCORE

0

HIT 2

TEAM 1 SCORE BOARD

TEAM 1	B1	B2	B3	B4	B5	B6	TOTAL
PLAYER 1							
PLAYER 2							
PLAYER 3							
PLAYER 4							
PLAYER 5							
PLAYER 6							
PLAYER 7							
PLAYER 8							
PLAYER 9							
PLAYER 10							

GENERATE RESULT

MATCH WON BY

MAN OF THE MATCH

TEAM 2 SCORE BOARD

TEAM 2	B1	B2	B3	B4	B5	B6	TOTAL
PLAYER 1							
PLAYER 2							
PLAYER 3							
PLAYER 4							
PLAYER 5							
PLAYER 6							
PLAYER 7							
PLAYER 8							
PLAYER 9							
PLAYER 10							

### 3. How do I process the output?

- After the completion of both **TEAM** turns, results have to be generated and displayed in a separate tab when **GENERATE RESULT** button is tapped to display each team player's total scores, match won by which team and man of the match from which team, as well as the name of the player and score, acquired.
- Here's an example design of the results.

TEAM 1 SCORE

151

HIT 1

TIMER

44

TEAM 2 SCORE

152

HIT 2

TEAM 1 SCORE BOARD

TEAM 1	B1	B2	B3	B4	B5	B6	TOTAL
PLAYER 1	1	4	0				5
PLAYER 2	1	6	6	4	4	4	25
PLAYER 3	4	6	6	3	4	6	29
PLAYER 4	1	0					1
PLAYER 5	6	6	4	6	2	4	28
PLAYER 6	4	2	0				6
PLAYER 7	2	0					2
PLAYER 8	2	1	6	2	2	0	13
PLAYER 9	6	1	6	2	2	4	21
PLAYER 10	2	6	1	6	4	2	21

GENERATE RESULT

MATCH WON BY

TEAM2

MAN OF THE MATCH

PLAYER3

TEAM 2

SCORE :25

TEAM 2 SCORE BOARD

TEAM 2	B1	B2	B3	B4	B5	B6	TOTAL
PLAYER 1	1	6	6	1	4	2	20
PLAYER 2	2	3	4	3	6	4	22
PLAYER 3	3	6	6	3	4	3	25
PLAYER 4	4	3	0				7
PLAYER 5	0						0
PLAYER 6	6	1	2	4	6	3	22
PLAYER 7	3	4	1	3	1	1	13
PLAYER 8	3	4	4	1	4	2	18
PLAYER 9	6	6	4	1	6	2	25
PLAYER 10							0

### 4. Any specification on the cricket game design?

Preferred UI framework: Bootstrap

You're supposed to use the only TypeScript using OOPs.

#### Requirements:

- UI should be responsive.

- Use fonts if it's required in the design.
- Use icons if it's required in the design.
- This is a front-end task

## 5. How do I submit my work?

### Preferred:

- Submit your Netlify and GitHub URL in the portal.
- Host your webpage in Netlify (<https://www.netlify.com>) and add push your work files to Github as well.

### Bonus:

1. In TypeScript Usages of **HTMLElement** or **HTMLInputElement** for creating HTML tags will be awarded extra marks.
2. Passing values of one HTML page to another HTML will be awarded extra marks

## 6. Any basic hints to solve?

- Check how to pass the values of one HTML page to another.
- <https://www.typescriptlang.org/>
- <https://www.javascripture.com/HTMLInputElement>
- <https://developer.mozilla.org/en-US/docs/Web/API/HTMLInputElement>
- [https://microsoft.github.io/PowerBI-JavaScript/interfaces/\\_node\\_modules\\_typedoc\\_node\\_modules\\_typescript\\_lib\\_lib\\_dom\\_d\\_HTMLElement.html](https://microsoft.github.io/PowerBI-JavaScript/interfaces/_node_modules_typedoc_node_modules_typescript_lib_lib_dom_d_HTMLElement.html)
- <https://getbootstrap.com/docs/4.4/getting-started/introduction/>

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