

Your task is to create similar **SPEEDTEST** by using React.js

1. Create new React app in **reactjs_sandbox**
2. Clean your app
3. Update **App.js** to have a class component
 - Add heading
 - A placeholder for score
 - Buttons for start and end game
4. Make overall **CSS** changes
 - Add gradient background
 - Change font (use playful font)
 - Style also buttons
5. Create a new separated function component: **Circle.js**, and connect it with App.js
 - Make circles using Circle.css
 - Show min 4 circles on the application (use a map())
6. Make **circles clickable** and **update the score** by state
 - State -> score: 0
 - clickHandler -> setState - this.state.score +1
 - connect clickHandler with circles -> {props.clicks} and {this.clickHandler}
 - pass circle number to clickHandler -> use data passing to the event handler (binding)
 - show updated score in score placeholder -> see step 3.
7. **Finding a random number** for a random circle highlight
 - You need a random number from 1-4 (or how many circles you have) ->
https://www.w3schools.com/js/js_random.asp
 - Add state -> current: 0
 - Use the **Do While loop** to find a number which is 1-4 but not the same as it was previously
 - Use setState for that number generated randomly -> setState - current : nextActive
8. **Add a timer for random numbers** (use, for example setTimeout method)
 - Define speed and timer
 - add start handler
 - add end handler -> use clearTimeout
9. **Colours changes** (use inline styling and conditional rendering)
 - Add **different colours for all circles** -> check is circle default or active (the random number we created) and use active colour or inline style background colour
 - Add **highlight colour for active circle** -> add class in CSS for the active state (for example, default is „circle“, but in the active phase, it is „circle .active“)
10. Create a **GameOver.js** function component and connect it with App.js
 - Create **overlay**
 - Create a **popup box**
 - Add Heading
 - Add Score
 - Add close button
 - **Style** GameOver view
11. By using a true/false state, **hide the GameOver component** until endHandler is triggered.
 - State -> showGameOver: false

- Add trigger -> endHandler setState - showGameOver:true
- Wrap component in JavaScript code which checks if state is true or false

12. Add the right circle, click check

- If the randomly generated number and circle ID does not match, then endHandler will be triggered

13. Add rounds to end the game after five rounds (if the player does not click five rounds, then the game will end)

- State -> rounds: 0
- setState – this.state.rounds + 1
- Add round check -> if more than five, then endHandler will be triggered
- Add in clickHandler setState, which will clear rounds if the user clicks circles.

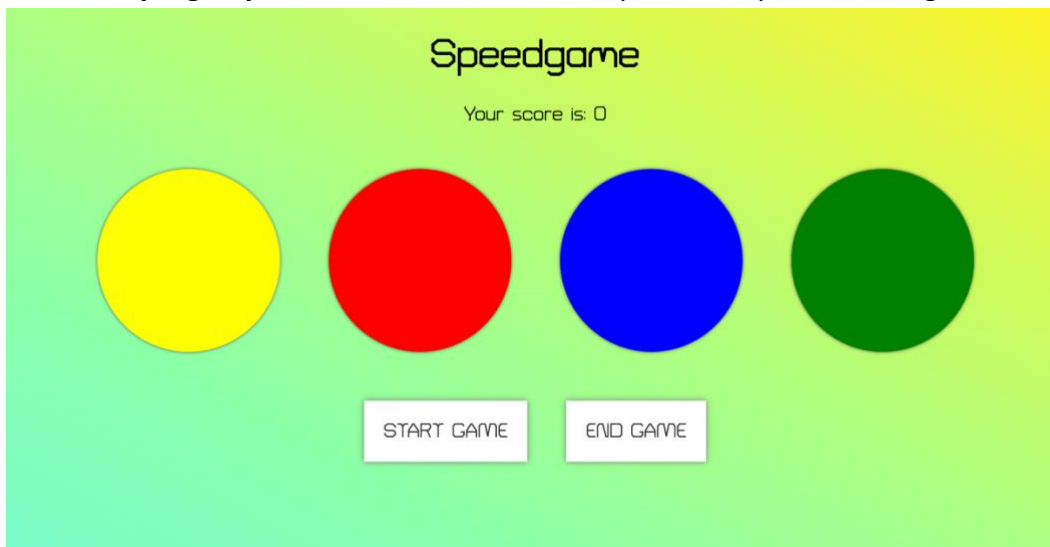
14. Disable the Start button during the game

- Use the disabled attribute on the button element, which is checking if the state is true or false.

15. Disable circle clicks before the game starts

- Use inline styling

16. Add styling of your choice. Here is an example of one possible design:



17. Add sounds to every circle click and an image to for active circle.

18. Add a screenshot from your application and add it to the readme file.

Make GitHub commit

This game is a great way to use your knowledge about **function and class components, props and states**, and how to **style your application**.

Well done!