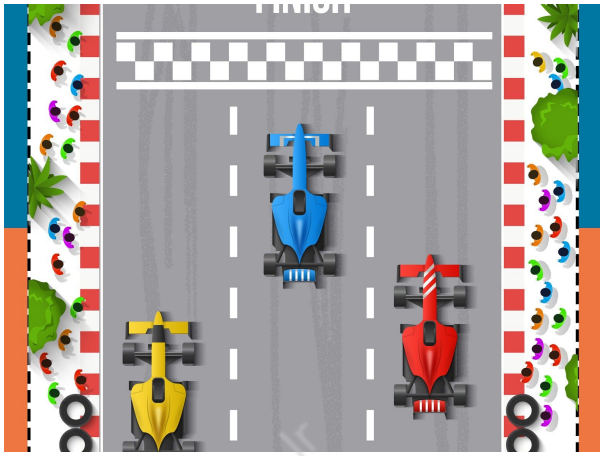
PRO-C38

GAME IN THE DATABASE



What is our GOAL for this MODULE?

We used our knowledge about databases to create a multiplayer car racing game.

What did we ACHIEVE in the class TODAY?

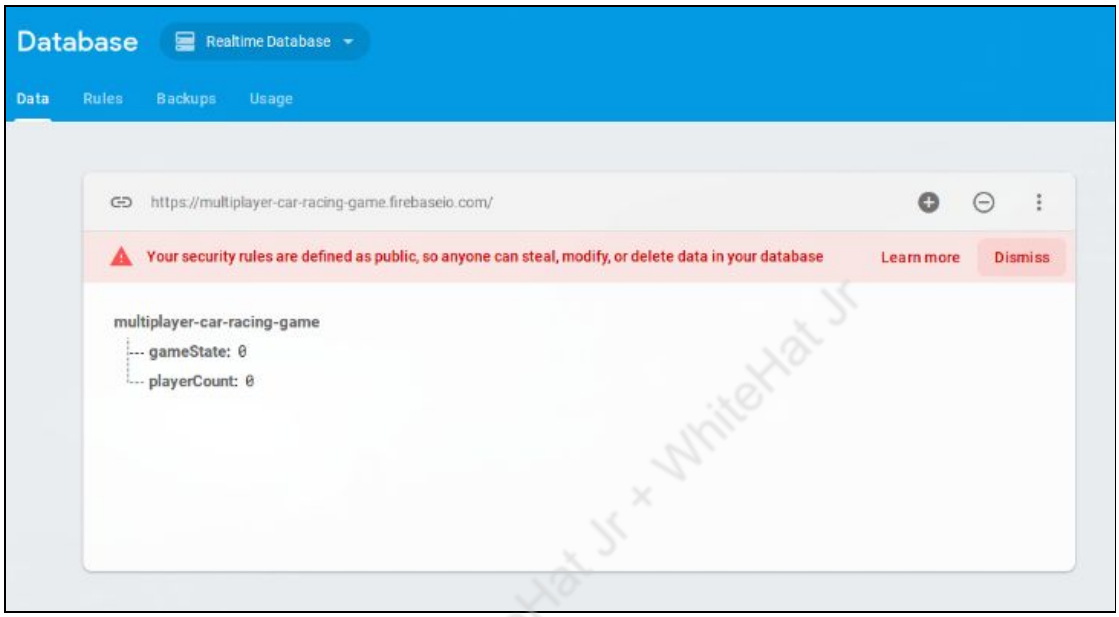
- We made a multiplayer car racing game which happens only in the database.
- We enabled press of the up arrow key to change the distance covered between the properties of each player in the database.
- The distance covered by all players is shown on the screen with the player playing the game being highlighted.

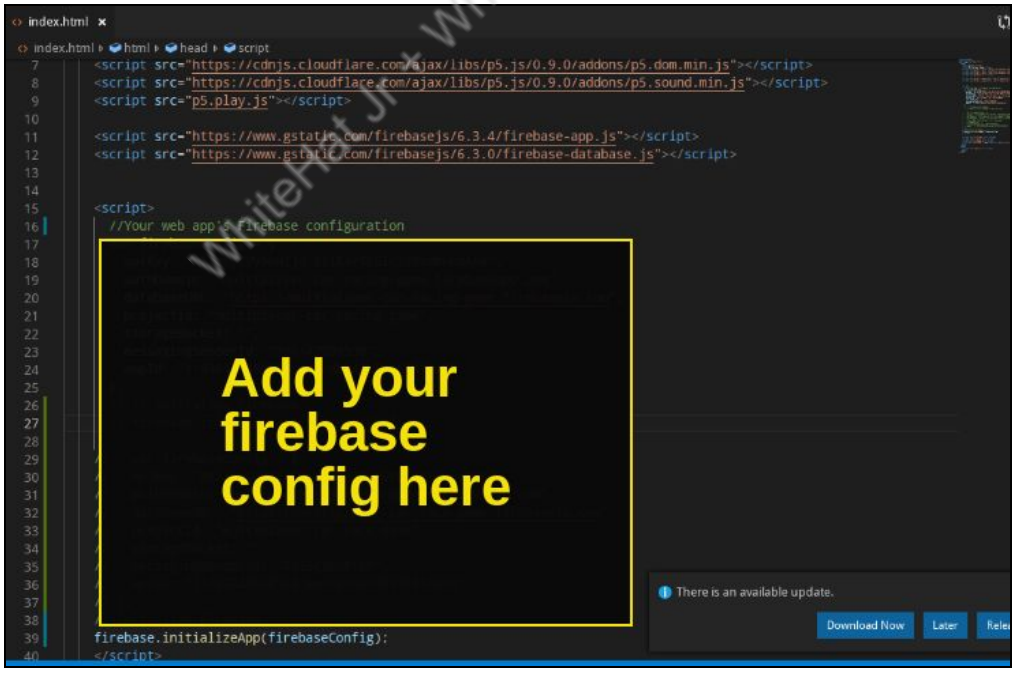
Which CONCEPTS/CODING BLOCKS did we cover today?

- The concept of OOPs programming.
- Firebase database.
- Game states.

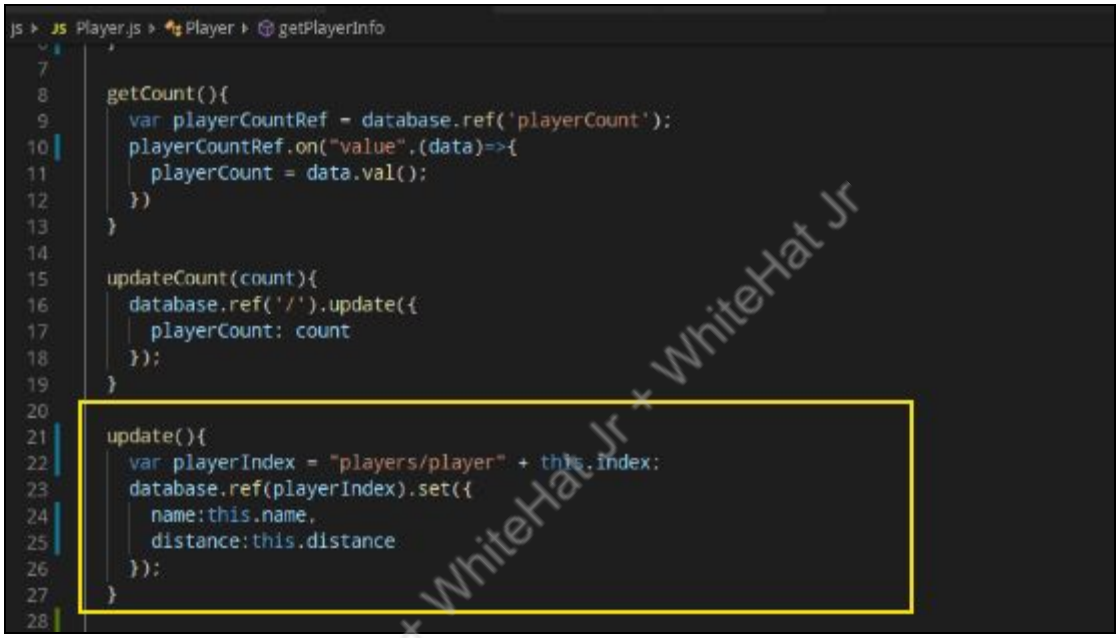
How did we DO the activities?

1. Add the firebase configuration and make the necessary changes in the firebase database structure as shown below:

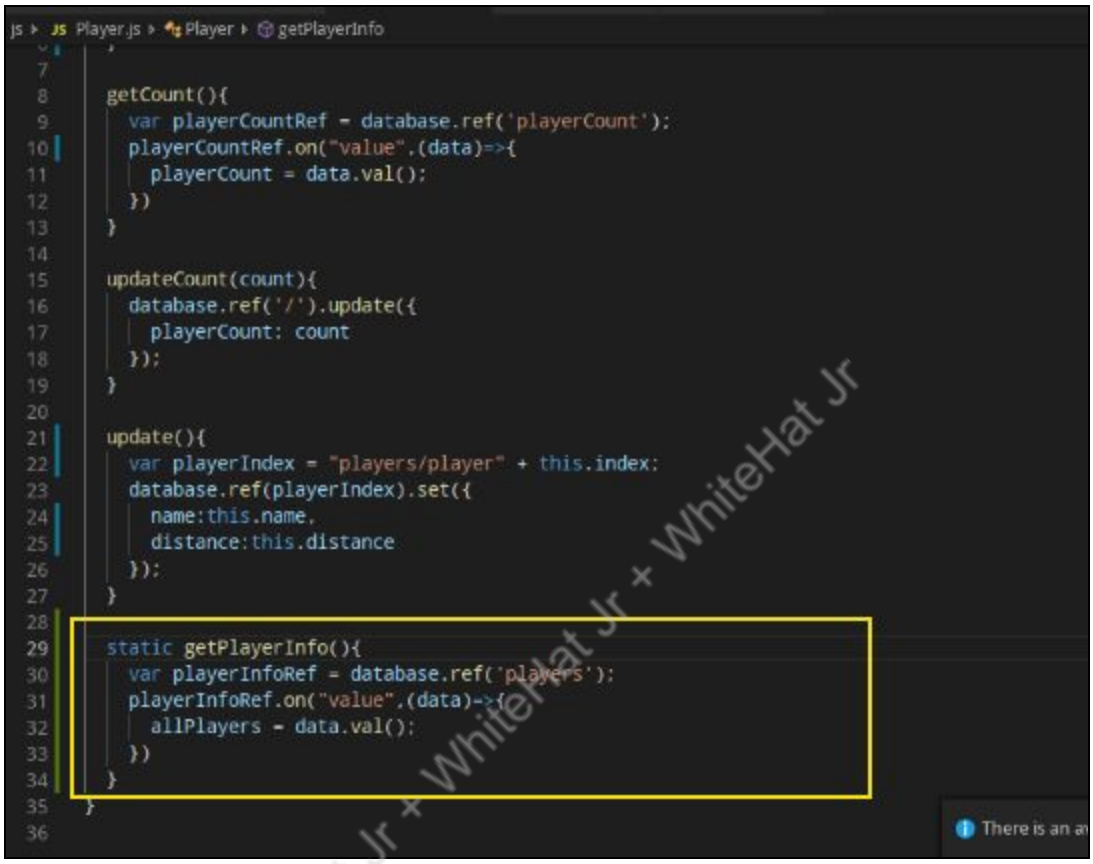




2. Use the update() function to update both name and distance of the player.



3. Store the player information inside the **getPlayerInfo** function and add a static keyword in front of the function.



4. Get all the players' data and display them on the screen and change the distance and update it in the database when an 'UP' arrow key is pressed.
    - **Note:** we used 'plr' because the player is already defined.

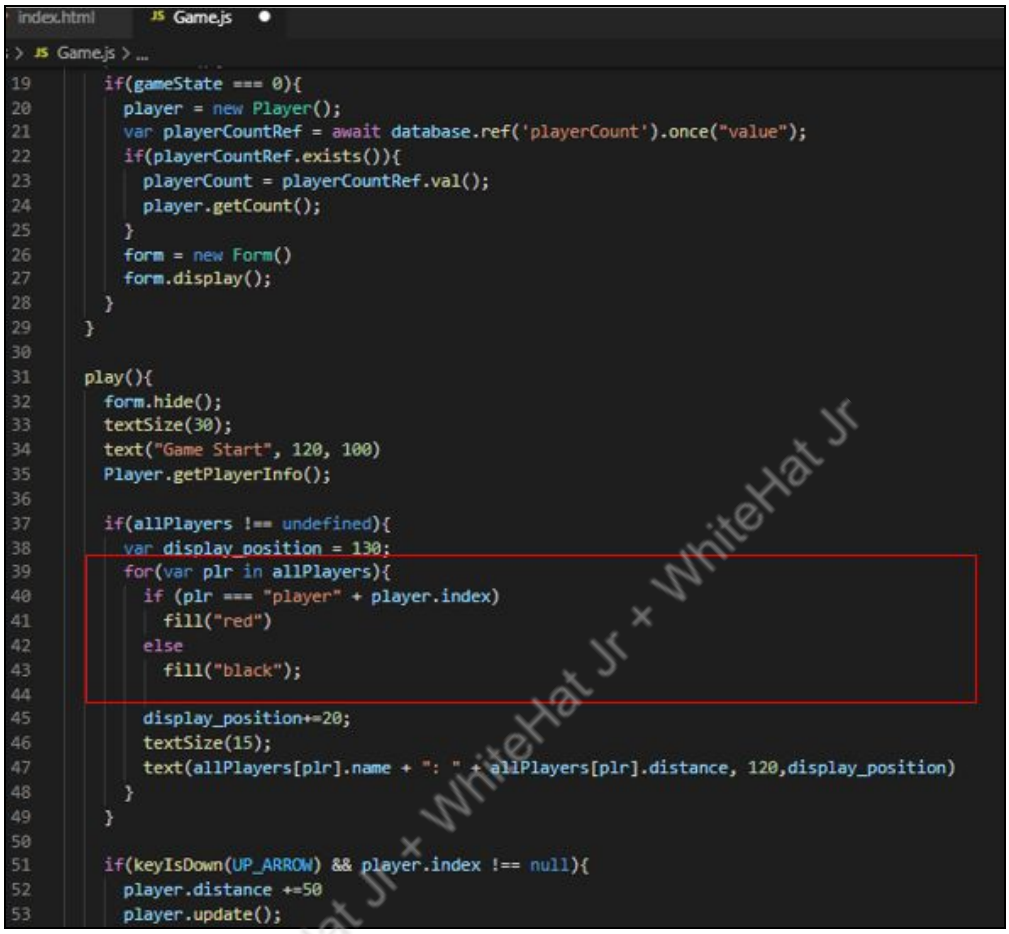
```
    form = new Form()
    form.display();
  }
}

play(){
  form.hide();
  textSize(30);
  text("Game Start", 120, 100)
  Player.getPlayerInfo();

  if(allPlayers !== undefined){
    var display_position = 130;
    display_position+=20;
    textSize(15);
    text(allPlayers[plr].name + ": " + allPlayers[plr].distance, 120,display_position)
  }
}

if(keyIsDown(UP_ARROW) && player.index !== null){
  player.distance +=50
  player.update();
}
}
}
```

5. Write the code to make the current player 'red'.



```
index.html   Game.js
> Game.js > ...
19      if(gameState === 0){
20        player = new Player();
21        var playerCountRef = await database.ref('playerCount').once("value");
22        if(playerCountRef.exists()){
23          playerCount = playerCountRef.val();
24          player.getCount();
25        }
26        form = new Form()
27        form.display();
28      }
29    }
30
31    play(){
32      form.hide();
33      textSize(30);
34      text("Game Start", 120, 100)
35      Player.getPlayerInfo();
36
37      if(allPlayers !== undefined){
38        var display_position = 130;
39        for(var plr in allPlayers){
40          if (plr === "player" + player.index)
41            fill("red")
42          else
43            fill("black");
44
45          display_position+=20;
46          textSize(15);
47          text(allPlayers[plr].name + ": " + allPlayers[plr].distance, 120,display_position)
48        }
49      }
50
51      if(keyIsDown(UP_ARROW) && player.index !== null){
52        player.distance +=50
53        player.update();
```


What's NEXT?

In the next class, you will be learning about game camera and display size.

EXTEND YOUR KNOWLEDGE:

1. Learn about firebase from the official docs: https://firebase.google.com/docs/firestore.