

[7] Try it out! (10 minutes)

1. Continuing from the previous exercise, create a *players* package, and a **RandomPlayer** class within the *players* package.
2. This class should extend from the *Player* class and should have a matching constructor which calls the *super* constructor.
3. This class will implement the abstract *act()* method and return a random integer between 0 and 5 (hint: check the `Random.nextInt(int bound)` method).
4. In the *core* package, create a **Button** class. This will hold: position (integer), cooldown (integer), cooldownCounter (integer), currentlyActive (boolean). Additionally, it will implement the following methods:
 - `void tick() {...}`
 - This method will be called once every game tick. If the button is not currently active, the cooldownCounter is reduced until it reaches 0, at which point the button becomes active (and the cooldownCounter is reset to the cooldown value).
 - `void press(Player who) {...}`
 - This method will be called if a player steps on the button when it is active. It will call the player's `swapTeam()` method, set the button to inactive, increase the cooldown value by 2, and reset the cooldownCounter to the cooldown value.
 - **Constructor:**
 - Receives the button's position, sets currentlyActive to false, the cooldown and cooldownCounter to 10.