Requisitos de Mastermind. Versión 1.

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	• **Wiki**: :hide-uri-scheme: https://en.wikipedia.org/wiki/ Mastermind_(board_game) • **Youtube**: :hide-uri-scheme: https://www.youtube.com/watch?v=2-hTeg2M6GQ

Requisitos

- *Funcionalidad: **Básica***
- *Interfaz: **Texto***
- *Distribución: **Standalone***
- *Persistencia: **No***

Vista de Casos de Uso

Diagrama de Actores y Casos de Uso

```
actor Player
usecase Start
usecase ProposeCombination
usecase Resume

Player --> Start
Player --> ProposeCombination
Player --> Resume
```

Diagrama de Contexto

```
[*] --> State0
State0 --> State1 : Start
State1 --> State1 : ProposeCombination
State1 --> State2 : [isWinner || isLooser]Resume
State2 --> State0 : [isResumed]
State2 --> [*] : [else]
```

Prototipo de Interfaz

```
----- MASTERMIND -----
****
 Propose a combination: hybo
Wrong colors, they must be: rbygop
Propose a combination: rrbo
Repeated colors
Propose a combination: rybog
Wrong proposed combination length
Propose a combination: rybo
1 attempt(s):
****
rybo --> 1 blacks and 2 whites
Propose a combination: pybo
2 attempt(s):
****
rybo --> 1 blacks and 2 whites
pybo --> 1 blacks and 1 whites
Propose a combination: gybo
3 attempt(s):
****
rybo --> 1 blacks and 2 whites
pybo --> 1 blacks and 1 whites
gybo --> 1 blacks and 2 whites
Propose a combination: rgbo
4 attempt(s):
****
```

```
rybo --> 1 blacks and 2 whites
pybo --> 1 blacks and 1 whites
gybo --> 1 blacks and 2 whites
rgbo --> 0 blacks and 3 whites
Propose a combination: rygo
5 attempt(s):
****
rybo --> 1 blacks and 2 whites
pybo --> 1 blacks and 1 whites
gybo --> 1 blacks and 2 whites
rgbo --> 0 blacks and 3 whites
rygo --> 1 blacks and 3 whites
Propose a combination: oyrg
6 attempt(s):
****
rybo --> 1 blacks and 2 whites
pybo --> 1 blacks and 1 whites
gybo --> 1 blacks and 2 whites
rgbo --> 0 blacks and 3 whites
rygo --> 1 blacks and 3 whites
oyrg --> 4 blacks and 0 whites
You've won!!! ;-)
Do you want to continue? (s/n): s
----- MASTERMIND -----
****
Propose a combination: rybo
1 attempt(s):
****
rybo --> 0 blacks and 2 whites
Propose a combination: pybo
2 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
Propose a combination: gybo
3 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
gybo --> 1 blacks and 2 whites
Propose a combination: gbpo
4 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
gybo --> 1 blacks and 2 whites
gbpo --> 1 blacks and 2 whites
Propose a combination: gpbo
5 attempt(s):
****
rybo --> 0 blacks and 2 whites
```

```
pybo --> 0 blacks and 3 whites
gybo --> 1 blacks and 2 whites
gbpo --> 1 blacks and 2 whites
gpbo --> 2 blacks and 1 whites
Propose a combination: bygo
6 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
gybo --> 1 blacks and 2 whites
gbpo --> 1 blacks and 2 whites
gpbo --> 2 blacks and 1 whites
bygo --> 0 blacks and 3 whites
Propose a combination: byro
7 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
gybo --> 1 blacks and 2 whites
gbpo --> 1 blacks and 2 whites
gpbo --> 2 blacks and 1 whites
bygo --> 0 blacks and 3 whites
byro --> 0 blacks and 2 whites
Propose a combination: gryo
8 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
gybo --> 1 blacks and 2 whites
gbpo --> 1 blacks and 2 whites
gpbo --> 2 blacks and 1 whites
bygo --> 0 blacks and 3 whites
byro --> 0 blacks and 2 whites
gryo --> 1 blacks and 2 whites
Propose a combination: yorb
9 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
gybo --> 1 blacks and 2 whites
gbpo --> 1 blacks and 2 whites
gpbo --> 2 blacks and 1 whites
bygo --> 0 blacks and 3 whites
byro --> 0 blacks and 2 whites
gryo --> 1 blacks and 2 whites
yorb --> 0 blacks and 2 whites
Propose a combination: broy
10 attempt(s):
****
rybo --> 0 blacks and 2 whites
pybo --> 0 blacks and 3 whites
```

```
gybo --> 1 blacks and 2 whites
gbpo --> 1 blacks and 2 whites
gpbo --> 2 blacks and 1 whites
bygo --> 0 blacks and 3 whites
byro --> 0 blacks and 2 whites
gryo --> 1 blacks and 2 whites
yorb --> 0 blacks and 2 whites
broy --> 2 blacks and 0 whites
You've lost!!! :-(
Do you want to continue? (s/n): n
```

Vista de Desarrollo/Implementación

```
package "  "  as mastermind {
}
package "  "  as mastermind.utils {
}
package "  "  as java.io {
}
package "  "  as java.util {
}


[mastermind.jar] as jar

jar *--> mastermind
jar *--> mastermind.utils
jar *--> java.io
jar *--> java.util
```

Vista de Despliegue/Física

```
node node #DDDDDD [
<b>Personal Computer</b>
----
memory : xxx Mb
cpu : xxx GHz
]


[ masterming.jar ] as component

node *--> component
```

Vista de Procesos

- No hay concurrencia