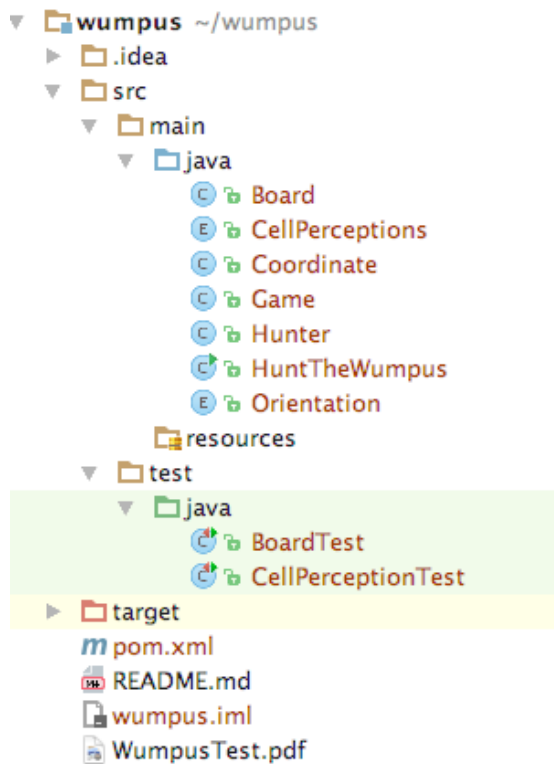


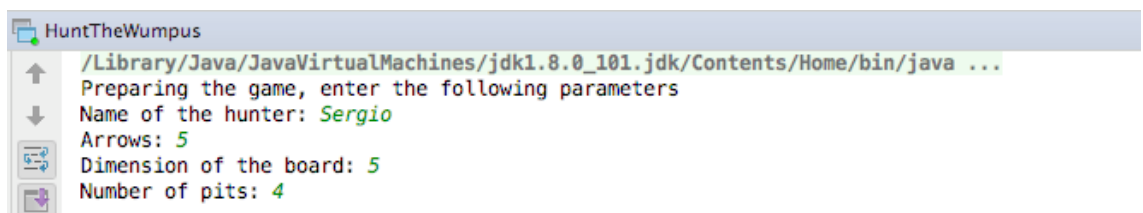
HUNT THE WUMPUS

Fuentes



Instrucciones de ejecución

Al iniciar la aplicación se solicita al jugador que introduzca 4 parámetros. Estos son **nombre**, **Nº de flechas**, **Dimensión del tablero** y **Nº de pozos**.



Una vez se introducen los parámetros el juego comienza mostrando una Bienvenida, el menú de acciones posibles y, además, se imprime por pantalla que está percibiendo el cazador en ese mismo instante a su alrededor.

```
HUNT THE WUMPUS
Welcome Sergio
Game start!!
```

```
Menu:
1: Move to the NORTH
2: Turn left
3: Turn righth
4: Shoot a arrow. You have 5 arrows
0: Exit
```

```
*****
The hunter is perceiving something . . .
  In the SOUTH I perceive a ... I do not perceive anything
  In the WEST I perceive a ... There is a wall
  In the NORTH I perceive a ... There is a wall
  In the EAST I perceive a ... I do not perceive anything
*****
Which option do you want to take? Option:
```

He tomado la decisión de darle al cazador la propiedad de orientación para saber en todo momento hacia donde está apuntado tanto para moverse como para realizar un disparo.

Como vemos en la captura el menú ofrece información acerca de la orientación de nuestro cazador por lo que si optamos por la opción **1** el cazador avanzara en la la dirección norte.

Para realizar giros y puesto que estoy haciendo uso de los puntos cardenales lo he montado de forma que con las opciones 3 y 4, el cazador lo que realice es un cambio de orientación para poder moverse o disparar en la nueva orientación.

A modo de debug el menú acepta la opción **-1** que imprime el tablero, mostrando como se han repartido de forma aleatoria los elementos.

```
Which option do you want to take? Option: -1
(1,1)START (1,2)EMPTY (1,3)WUMPUS (1,4)EMPTY (1,5)EMPTY
(2,1)EMPTY (2,2)EMPTY (2,3)EMPTY (2,4)EMPTY (2,5)EMPTY
(3,1)EMPTY (3,2)EMPTY (3,3)PIT (3,4)PIT (3,5)PIT
(4,1)PIT (4,2)GOLD (4,3)EMPTY (4,4)EMPTY (4,5)EMPTY
(5,1)EMPTY (5,2)EMPTY (5,3)EMPTY (5,4)EMPTY (5,5)EMPTY
```

Como vemos en la captura y, puesto que nuestro cazador parte de la casilla **START**, vemos que en dirección *este* tenemos al **wumpus** por lo que vamos a intentar matarlo.

Para ello primero haremos un disparo en dirección *norte* para mostrar que podemos fallar y que el numero de flechas decrementa.

```
Menu:
1: Move to the NORTH
2: Turn left
3: Turn righth
4: Shoot a arrow. You have 5 arrows
0: Exit

*****
The hunter is perceiving something . . .
  In the SOUTH I perceive a ... I do not perceive anything
  In the WEST I perceive a ... There is a wall
  In the NORTH I perceive a ... There is a wall
  In the EAST I perceive a ... I do not perceive anything
*****
Which option do you want to take? Option: 4
The hunter is preparing the bow and points NORTH
I fired and I have 4 arrows left. Have I hit him? ...
I do not hear any scream I will have missed the shot
```

Como vemos en la captura el cazador a realizado un disparo al norte donde lo único que hay es un **muro**. Por lo que ha errado en el disparo y ahora dispone de 4 flechas.

Vamos a cambiar la orientación del cazador para que apunte al *este* y poder matar al wumpus.

Which option do you want to take? Option: 3
The hunter has now turned righth points EAST

Menu:

1: Move to the EAST
2: Turn left
3: Turn righth
4: Shoot a arrow. You have 4 arrows
0: Exit

```
*****
The hunter is perceiving something . . .
  In the SOUTH I perceive a ... I do not perceive anything
  In the WEST I perceive a ... There is a wall
  In the NORTH I perceive a ... There is a wall
  In the EAST I perceive a ... I do not perceive anything
*****
Which option do you want to take? Option: 4
The hunter is preparing the bow and points EAST
I fired and I have 3 arrows left. Have I hit him? ...
I killed the wumpus I heard his scream
```

Vemos que ahora si que le acertamos pese a estar varias celdas de separación.
Utilizando el truco de imprimir el mapa vemos que ahora el **wumpus** no aparece.

```
Which option do you want to take? Option: -1
(1,1)START (1,2)EMPTY (1,3)EMPTY (1,4)EMPTY (1,5)EMPTY
(2,1)EMPTY (2,2)EMPTY (2,3)EMPTY (2,4)EMPTY (2,5)EMPTY
(3,1)EMPTY (3,2)EMPTY (3,3)PIT (3,4)PIT (3,5)PIT
(4,1)PIT (4,2)GOLD (4,3)EMPTY (4,4)EMPTY (4,5)EMPTY
(5,1)EMPTY (5,2)EMPTY (5,3)EMPTY (5,4)EMPTY (5,5)EMPTY
```

Ahora procedemos a recoger el **oro** y intentar volver a la casilla de salida. Para ello vemos en el mapa que tenemos que sortear un **pozo**, por lo que bajaremos dos casilla, nos desplazaremos una a la derecha y bajaremos una casilla más.

Menu:

- 1: Move to the EAST
- 2: Turn left
- 3: Turn righth
- 4: Shoot a arrow. You have 3 arrows
- 0: Exit

The hunter is perceiving something . . .

In the SOUTH I perceive a ... I do not perceive anything

In the WEST I perceive a ... There is a wall

In the NORTH I perceive a ... There is a wall

In the EAST I perceive a ... I do not perceive anything

Which option do you want to take? Option: 3

The hunter has now turned righth points SOUTH

Menu:

- 1: Move to the SOUTH
- 2: Turn left
- 3: Turn righth
- 4: Shoot a arrow. You have 3 arrows
- 0: Exit

The hunter is perceiving something . . .

In the SOUTH I perceive a ... I do not perceive anything

In the WEST I perceive a ... There is a wall

In the NORTH I perceive a ... There is a wall

In the EAST I perceive a ... I do not perceive anything

Which option do you want to take? Option: 1

Menu:

- 1: Move to the SOUTH
- 2: Turn left
- 3: Turn righth
- 4: Shoot a arrow. You have 3 arrows
- 0: Exit

The hunter is perceiving something . . .
In the SOUTH I perceive a ... I do not perceive anything
In the WEST I perceive a ... There is a wall
In the NORTH I perceive a ... There is a wall
In the EAST I perceive a ... I do not perceive anything

Which option do you want to take? Option: 1

Menu:

- 1: Move to the SOUTH
- 2: Turn left
- 3: Turn righth
- 4: Shoot a arrow. You have 3 arrows
- 0: Exit

The hunter is perceiving something . . .
In the SOUTH I perceive a ... There is a breeze there must be a pit near
In the WEST I perceive a ... There is a wall
In the NORTH I perceive a ... I do not perceive anything
In the EAST I perceive a ... I do not perceive anything

Which option do you want to take? Option: 2
The hunter has now turned left points EAST

Menu:

- 1: Move to the EAST
- 2: Turn left
- 3: Turn righth
- 4: Shoot a arrow. You have 3 arrows
- 0: Exit

The hunter is perceiving something . . .
In the SOUTH I perceive a ... There is a breeze there must be a pit near
In the WEST I perceive a ... There is a wall
In the NORTH I perceive a ... I do not perceive anything
In the EAST I perceive a ... I do not perceive anything

Which option do you want to take? Option: 1

Menu:

1: Move to the EAST
2: Turn left
3: Turn righth
4: Shoot a arrow. You have 3 arrows
0: Exit

The hunter is perceiving something . . .

In the SOUTH I perceive a ... There is a breeze there must be a pit near

In the WEST I perceive a ... I do not perceive anything

In the NORTH I perceive a ... I do not perceive anything

In the EAST I perceive a ... There is a breeze there must be a pit near

Which option do you want to take? Option: 3

The hunter has now turned righth points SOUTH

Menu:

1: Move to the SOUTH
2: Turn left
3: Turn righth
4: Shoot a arrow. You have 3 arrows
0: Exit

The hunter is perceiving something . . .

In the SOUTH I perceive a ... There is a breeze there must be a pit near

In the WEST I perceive a ... I do not perceive anything

In the NORTH I perceive a ... I do not perceive anything

In the EAST I perceive a ... There is a breeze there must be a pit near

Which option do you want to take? Option: 1

How much shine will be gold. I'll take it!!

Una vez que tenemos el oro es cuestión de llegar a la casilla de salida que es la misma que la de comienzo.

A modo de resumen los controles son:

- -1: Imprimir mapa
- 0: Sair del juego.
- 1: Moverte en dirección a la orientación del cazador.
- 2: Girar a la izquierda la orientación pero no moverte.
- 3: Girar a la derecha la orientación pero no moverte.
- 4: Realizar un disparo.

Conclusión

Me a parecido entretenida esta prueba, puesto que llevaba más de un años sin realizar estos pequeños juegos, que fueron los que me hicieron decidirme por el desarrollo software. No he podido invertir mucho tiempo por lo que la estructura del código es bastante caótica y ni siquiera he implementado interfaces. Estoy bastante liado y lo he hecho un poco rápido. No he invertido mucho tiempo en la creación de los test a la vista está.