

Project Task 1: Modeling the Board

By Carrie Corcoran

This is the first task for my semester-long project of creating heuristic Mancala players. In this task, I establish the spaces on the board and a visual representation.

Code:

```
;Heuristic Mancala Player by Carrie Corcoran
;-----
;Part 1- Create the board
;-----Universal Constants and variables
(setf *side-A* '(4 4 4 4 4 4))
(setf *side-B* '(4 4 4 4 4 4))
(setf *home-A* 0)
(setf *home-B* 0)

(defun B6 ()
  (nth 0 *side-B*)
)

(defun B5()
  (nth 1 *side-B*)
)

(defun B4 ()
  (nth 2 *side-B*)
)

(defun B3 ()
  (nth 3 *side-B*)
)

(defun B2 ()
  (nth 4 *side-B*)
)

(defun B1 ()
  (nth 5 *side-B*)
)

(defun A6()
  (nth 5 *side-A*)
)

(defun A5()
  (nth 4 *side-A*)
```

```

)

(defun A4()
  (nth 3 *side-A*)
)

(defun A3()
  (nth 2 *side-A*)
)

(defun A2()
  (nth 1 *side-A*)
)

(defun A1()
  (nth 0 *side-A*)
)

(defun draw-board()
  (format t " ~%" )
  (format t "| HB  B6  B5  B4  B3  B2  B1  | ~%" )
  (format t "|  _  _  _  _  _  _  _  | ~%" )
  (format t "|| ~2A||~2A||~2A||~2A||~2A||~2A||  || ~%" )
  (B6) (B5) (B4) (B3) (B2) (B1) )
  (format t "||~2A||_||_||_||_||_||_||  || ~%" *home-B*)
  (format t "||  |  _  _  _  _  _  _  |~2A|| ~%" *home-A*)
  (format t "||  ||~2A||~2A||~2A||~2A||~2A||~2A||  || ~%" )
  (A1) (A2) (A3) (A4) (A5) (A6) )
  (format t "||_||_||_||_||_||_||_||_|| ~%" )
  (format t "|  _  A1  A2  A3  A4  A5  A6  HA  | ~%" )
  (format t "|  _  _  _  _  _  _  _  | ~%" )
)

```

Demo:

```
[1]> (draw-board)
```

```

| HB  B6  B5  B4  B3  B2  B1  |
|  _  _  _  _  _  _  _  |
|| 4 ||4 ||4 ||4 ||4 ||4 || | | | |
||0 ||_||_||_||_||_||_||
||  |  _  _  _  _  _  _  |0 ||
||  ||4 ||4 ||4 ||4 ||4 ||4 ||
||_||_||_||_||_||_||_||_||
|  _  A1  A2  A3  A4  A5  A6  HA  |
|  _  _  _  _  _  _  _  |

```

NIL