Appendix 1 - Scripts

1. Sprite Scripts

```
when clicked

Sprite moves to bottom of stage and player to go chosen randomly

set game to 0

set player to pick random 0 to 1

if player = 0

say Computer to go first for 2 secs
else

say You go first click on the pot to empty for 2 secs

broadcast move started
```

```
when I receive move -
                           Sprite moves clockwise |
     y position > 25
      x position < -155
                                                                    Sprite moves ant-clockwise
   set y to -50
                                         when I receive moveback▼
                                               y position < 0 and x position > -155
  change x by -75
                                         change x by -75
                                           set flag▼ to 1
      x position > 155
                                          broadcast score ▼
   set y to 50
                                                 y position > 0 and x position < 155
  change x by 75
                                           change x by 75
                                            set flag▼ to 1
broadcast drop▼
                                            broadcast score ▼
                                            broadcast ||ast▼
```

```
broadcast drop ▼
when I receive move started▼
  player = 1
 go to mouse-pointer▼
                      If player then move to clicked pot otherwise decide best computer move
set temp▼ to 7
 epeat 6
  set rank ▼ to 0
                                                                     for each
computer pot
  set temp2 to temp + item temp of seedCounts mod 12 - 12
                                                                                      find last pot to
drop seeds
    temp2 < 7 and temp2 > 0
    repeat until temp2 = 0
         item temp2 of seedCounts = 1 or item temp2 of seedCounts = 2
                                                                                         calculate score
       change rank ▼ by item temp2 of seedCounts ▼
       change temp2▼ by -1
       set temp2▼ to 0
  replace item temp - 6 of PotScores with rank
  change temp▼ by 1
  et temp v to 1
  et rank▼ to 0
 et highest to 0
 epeat 6
  if tem temp of PotScores > highest
                                             find pot with
highest score
   set highest▼ to item temp of PotScores▼
    set rank ▼ to temp
  change temp by 1
    rank = 0
  set temp to pick random 1 to 6
  repeat until not item temp + 6 of seedCounts = 0
                                                              or choose
   set temp to pick random 1 to 6
  set rank ▼ to temp
   t flag2▼ to 0
 et x to 192 - 75 * rank - 1
                                 move to pot
 set y to (50)
  oadcast computerGo v
```

```
when I receive [last▼
set game▼ to 1
    player = 1
                        Move finished. Check to see if next player can go
 set player▼ to 0
 set temp▼ to 7
set player▼ to 1
 set temp▼ to 1
repeat 6
      not item temp of seedCounts •
   set game ▼ to 0
 change temp▼ by 1
    game = 1
 broadcast Game Over▼
                          If next player cannot go
game finished
      player = 1
  say Your turn. Click on the pot to empty for 2 secs
broadcast move started▼
                          Start next player move
```

2 Pot Scripts

Start of game. This pot belongs to Player. Computer pots are 7 – 12 *place* is the only variable unique to each pots.

All player pots have the same scripts after place is set.

```
when clicked

set place to 1

go to x: -192 + 75 * place · 1 y: -50

replace item place of seedCounts with 4

show

switch to costume seed4 v

visible with 4

seeds
```

The pot object was created and all player pots pot1; pot2

```
when pot1 clicked
   player = 1
broadcast move started ▼
change color▼ effect by 50
                                                      player clicks and
set last▼ to 0
                                                      pot changes
                                                      colour
 repeat until (item place of seedCounts -
                                                                        repeat until no
                                                                        seeds left
   set flag ▼ to 0
  say item place of seedCounts .
                                    for 1 secs
  broadcast move▼
   wait until (flag = 1
  replace item place of seedCounts with item place of seedCounts
   switch to costume (costume #
                                                      redue seeds and
                                                      change
change color▼ effect by -50
                                                      costume
 set flag▼ to 1
 set last▼ to 1
 broadcast score -
                    call to calculate
                    score
```

The Computer pots start this method with

```
when I receive computerGo▼

if player = 0
```

```
when I receive drop

if touching Sprite2 ? and flag = 0

change flag by 1

replace item place of seedCounts with item place of seedCounts + 1

switch to costume costume # + 1
```

This method is identical for Computer pots

The difference with Computer pots is

```
if player = 1 and item place of seedCounts = 2 or item place of seedCounts = 3

change PlayerScore by item place of seedCounts = 3

when I receive Game Over = non visible and end of game
```

This is identical for both type of pots.

3. Stage Scripts

```
when clicked

set ComputerScore to 0

set PlayerScore to 0

set flag to 0

set last to 0

switch to background mancala to
```

Clear scores and set background colour

```
when I receive Game Overv

if PlayerScore > ComputerScore

switch to background player win v

if ComputerScore > PlayerScore

switch to background computer win v

if ComputerScore = PlayerScore

switch to background drawv
```

Check for a winner or a draw and change background accordingly.