



INFORMATICS INSTITUTE OF
TECHNOLOGY
In collaboration with
UNIVERSITY OF WESTMINSTER
Programming Principles II
4COSC010C

CW1 - Pseudocode

Module Leader's Name – Mr. Guhanathan Poravi

Dinuka Piyadigama
UoW ID – 17421047
IIT ID – 2018373

Dinuka Piyadigama

UOW ID - w17421047

IIT ID - 2018373

PSEUDOCODE for PP02 Assignment-1

GOLF CLUB

*delete, restore options included in Pseudocode.

undo, redo options aren't included in Pseudocode,

but included in code*

BEGIN

```
1.SET input=0, name="", arrLength=0
2.SET playerRecords = <name,result>, playerResults=[]
2.SET deletedRecords = <name,result>, playerResults=[]
3.DISPLAY "Welcome to Springfield Golf Club"
4.DISPLAY "Select Option:
    1) Enter Scores
    2) Find Golfer
    3) Display Scoreboard
    4) Exit Program"
5.PROMPT input
6.GET input
7.inputValidation
8.DO WHILE input!=4:
9.  IF input == number
10.   SET input == 0
11.   DO WHILE input<=0:
12.     PROMPT input
13.     GET input
14.     Sort playerResults in ascending order
15.     playerNames=[]
```

```

16.     SET i=0
17.     DO WHILE i<arrLength:
18.         p = playerResults[i]
19.         SET t=0
20.         DO WHILE t<arrLength;
21.             (Map.Entry)
22.             IF p==Value of entry
23.                 Key of entry in playerNames[i]
24.             END IF
25.             t=t+1
26.         END DO
27.         playerRecords<p,> in playerNames
28.         i=i+1
29.     END DO

27.     IF input == 1:
28.         enterScores
29.     ELSE IF input == 2:
30.         findGolfer
31.     ELSE IF input == 3:
32.         displayScores
33.     ELSE IF input ==4:
34.         DISPLAY "We hope you enjoyed your Golf session at Springfield Golf Club.
35.             Looking forward to assist you in your next session.
36.             Exiting Program..."
37.     ELSE:
38.         DISPLAY Invalid input!!! Reenter..."
39.     END IF
40. END IF
41. END IF
42. END IF
43. END IF

```

```

        END DO
37. ELSE:
38.     DISPLAY "Only numeric characters are accepted. Please provide a valid input"
        END IF
    END DO
END

```

-----methods-----

-----main menu methods-----

enterScores

1.DISPLAY "Enter Scores:

- 1) Enter Details
- 2) Edit Records
- 3) Delete Records
- 4) Restore Records
- 5) Exit Program"

2.PROMPT input

3.GET input

4.inputValidation

5.DO WHILE (input<1 OR input>5):

6. IF input == number

7. IF input == 1:

8. enterDetails

9. ELSE IF input == 2:

10. editData

11. ELSE IF input == 3:

```

12.          deleteData
13.          ELSE IF input ==4:
14.              restoreData
15.          ELSE:
16.              DISPLAY Invalid input!!! Reenter..."
              END IF
          END IF
      END IF
  END IF
END DO

```

findGolfer

```

1.PROMPT name
2.GET name
3.IF name in playerRecords:
4.  DISPLAY "Score: " + playerRecords<name, >
5.ELSE:
6.  DISPLAY "There is no recorded entry related to this name."
  END IF

```

displayScores

```

1.SET index[i] = 0

```

```
2.DO WHILE i<arrLength:
3.  DISPLAY playerNames[i]"    "+ playerResults[i]
4.  i = i + 1
   END DO
```

inputValidation

```
1.DO WHILE scanInput != INTEGER:
2.  DISPLAY "Only integer numbers are allowed! Please try again."
3.  CLEAR scanInput
   END DO
```

changeScore

```
17.SET result=0
18.SET position = 0
19.SET n=0
```

```
20.DO WHILE n<arrLength:
21.  IF playerNames[n] = name:
22.    position = n
    END IF
23.  n = n+1
   .END DO
```

```
24.playerResults[position] = 0
```

25.DO WHILE result<18 OR result>108:

26. PROMPT result

27. inputValidation

28. GET result

END DO

29.result, name in playerRecords<name,result>

30.result in playerResults[i]

-----sub menu methods-----

enterDetails

1.SET numOfGolfers=0

2.DO WHILE numOfGolfers=0 OR numOfGolfers != number:

3. PROMPT numOfGolfers

4. inputValidation

5. GET numOfGolfers

END DO

7.DO WHILE numOfGolfers>0:

8. SET result = 0

9. SET alter == "

10. PROMPT for name

11. GET name

```

12. IF name in playerRecords<,name>:

13.     DO WHILE name in playerRecords<,name>:
14.         PROMPT alter: "This Golfer has a previous entry! Do you wish to over-write this?"
15.         GET alter

16.         IF alter == 'yes' OR alter == 'y':
            changeScore

31.     ELSE IF alter == 'no' OR alter == 'n':
32.         DISPLAY "The new record for Golfer, "+name+" wasn't changed."
33.     ELSE:
34.         DISPLAY "Invalid input."
            END IF
        END IF
    END DO

35. ELSE:
36.     SET result=0
37.     DO WHILE result<18 OR result>108:
38.         PROMPT result
39.         inputValidation
40.         GET result
            END DO
41.     arrLength = arrLength + 1
42.     name, result in playerRecords<name,result>
43.     result in playerResults[i]
        END IF
44.     numOfGolfers -= 1
    END DO

```

editData

```
1.displayScores
2.DISPLAY "Enter a name that you want to edit the score of: "
3.PROMPT name
4.GET name
. IF name in playerRecords:
.   changeScore
. ELSE:
.   DISPLAY "There is no record related to this name."
END IF
```

deleteData

```
1.displayScores
2.DISPLAY "Enter a name that you want to delete the record of: "
3.IF name in playerRecords:
4.  name, playerRecords<name,result> in deletedRecords<name, result>
5.  < , > in playerRecords<name, >
6.  DO WHILE n<arrLength:
7.    IF playerNames[n] == name
8.      position = n
9.      n = n+1
      END IF
    END DO
```

10. playerResults[position] = 0

11. DISPLAY "The record for, " + name + " was deleted"

12.ELSE:

13. DISPLAY "There is no record related to this name."

END IF

restoreData

1.DISPLAY "Enter a name that you want to restore the record of: "

2.PROMPT name

3.GET name

4.IF <name , > in deletedRecords<, >

5. playerRecords<name, > remove from playerResults[]

6. deletedRecords<name, > in playerResults[]

7. <name, deletedRecords<name, >> in playerRecords<, >

8. <,> in deletedRecords <name,>

9. DISPLAY "The record for player, " + name + " was restored."

10.ELSE

11. DISPLAY "There is no deleted record related to this name."