Acceptance Test Example

Normal Scenarios

Show score

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 1)
- 3. Screen displays "Enter student ID"
- 4. User inputs student ID
- 5. Screen Displays Scores/ Unsuccessful message(user-input error)
- 6. Screen Displays Function menu

Show grade letter

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 2)
- 3. Screen displays "Enter student ID"
- 4. User inputs student ID
- 5. Screen Displays Grade Letter/Unsuccessful message(user-input error)
- 6. Screen Displays Function menu

Show average

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 3)
- 3. Screen displays "Enter student ID"
- 4. User inputs student ID
- 5. Screen Displays Weighted average score/Unsuccessful message(user-input error)
- 6. Screen Displays Function menu

Show rank (equal final scores have the same rank)

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 4)
- 3. Screen displays "Enter student ID"
- 4. User inputs student ID
- 5. Screen Displays Rank/Unsuccessful message(user-input error)
- 6. Screen Displays Function menu

Show distribution

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 5)
- 3. Screen displays show distribution
- 4. Screen Displays Function menu

Filter by score

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 6)
- 3. Screen displays "Enter a certain score to filter students"
- 4. User inputs certain score to filter students by final score
- 5. Screen Displays filtered students
- 6. Screen Displays Function menu

Add student

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 7)
- 3. Screen displays add student format
- 4. User inputs student to add by format
- 5. Screen Displays successfully added message if successful
- 6. Screen Displays data (To let the user see that the data is added successful)
- 7. Screen Displays Function menu

Update grade

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 8)
- 3. Screen displays option to search by student name or ID
- 4. User inputs student name or ID
- 5. Screen Displays student name/ID and ask for new grades
- 6. User inputs new grades
- 7. Screen Displays Successful or Unsuccessful message
- 8. Screen Displays Function menu

Update grade weight

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 9)
- 3. Screen displays format of input to update grade weight
- 4. User inputs new grade weight
- 5. Screen Displays Successful/Unsuccessful message(user-input error)
- 6. Screen Displays data with final score
- 7. Screen Displays Function menu

Exit program

- 1. Screen displays Function menu
- 2. User inputs the command to show the score (command 10)
- 3. Screen displays exiting message

Exceptional scenarios

Enter wrong ID / ID is not on the list

- 1. Please enter the student's student number
- 2. User entered incorrect student number
- 3. Screen displays the wrong student number "Student ID not found."
- 4. Return to Function menu

Enter wrong command

- 1. Screen displays Function menu
- 2. User inputs command to execute
- 3. Screen display error command "Invalid command. Please enter a number between 1 and 10."
- 4. Return to Function menu

Upgrade Grade Weight

The total of the 5 grade weights input are not equal to 100

- 1. Screen displays Function menu
- 2. User inputs command ("9")
- 3. User inputs (ex: 10,10,10,10,10) total grade weight = 50
- 4. Screen display error command "The total of the grade weights must equal 100."
- 5. Failed to update the current grade weight
- 6. Return to Function menu

Acceptance Test Cases Design

(red Represents user input, blue means Screen display)

You can refer to "user-manual-example" to write an acceptance test case. If there are newly developed functions, you need to add the corresponding test case.

To note: The function menu is like this, to save space and make the report structured [Function Menu]

- 1) show score
- 2) show grade letter
- 3) show average
- 4) show rank
- 5) show distribution
- 6) filter by score
- 7) add student
- 8) update grade
- 9) update grade weight
- 10) exit program

What do you want to do (1-10):

Test Case 1

Screen display:

[Display start screen]

Welcome to the Grade System.

- 1) Show grade
- 2) Show grade letter
- 3) Show average
- 4) Show rank
- 5) Show distribution
- 6) Filtering
- 7) Add student
- 8) Update grade
- 9) Update weights
- 10) Exit

What do you want to do(1-10):

PS C:\Users\btuud\Downloads\DS_ Welcome to the grading system 1) show score 2) show grade letter 3) show average 4) show rank 5) show distribution 6) filter by score 7) add student 8) update grade 9) update grade weight 10) exit program What do you want to do (1-10):

User input: 1

```
Screen display: "Enter Student ID:"
User input: 12
Screen display: "Student ID not found."
What do you want to do (1-10): 1
Enter Student ID: 12
Student ID not found.
Screen display: [Function menu]
User input: 2
Screen display: "Enter Student ID:"
User input: 985002036
Screen display: "Grade: A+"
What do you want to do (1-10): 2
Enter Student ID: 985002036
Grade: A+
Screen display: [Function menu]
User input: 3
Screen display: "Enter Student ID:"
User input: 985002017
Screen display: "Weighted average score: 89.75"
What do you want to do (1-10): 3
Enter Student ID: 985002017
Weighted average score: 89.75
Screen display: [Function menu]
```

```
User input: 4
Screen display: "Enter Student ID:"
User input: 985002005
Screen display: "Rank: 35"
What do you want to do (1-10): 4
Enter Student ID: 985002005
Rank: 35
Screen display: [Function menu]
User input: 5
Screen display: "Grade Distribution:"
Screen display:
\geq 90 85-89 80-84 77-79 73-76 70-72 67-69 63-66 60-62 50-59
                                                                              < 50
                               В
                                     B-
                                           C+
                                                   \mathbf{C}
                                                         C-
                                                                D
                                                                      E
   A+
           Α
                       B+
                          1
                                        0
   31
          31
                 2
                       0
                                   0
                                           0
                                                    0
                                                          0
                                                                0
what do you want to do (1-10): 5
Grade Distribution:
   ≥ 90
          85-89
                  80-84
                           77-79
                                   73-76
                                           70-72
                                                   67-69
                                                           63-66
                                                                    60-62
                                                                            50-59
                                                                                     < 50
                             B+
                                      В
                                                      C+
                                                                               D
                                              B-
     31
             31
                                                                       0
                                                                               0
                                                                                        0
Screen display: [Function menu]
User input: 6
Screen display: "Enter a certain score to filter students:"
```

User input: 90

Screen display: [print data]

```
what do you want to do (1-10): 6
Enter a certain score to filter students:
90
StudentID: Name: Scores: Final Score:
955002056 許文馨 88 92 88 98 91 92.00
975002039 許琇筑 97 84 87 99 89 91.65
```

Screen display: [Function menu]

User input: 7

Screen display: "Enter Student ID, Name, Lab1, Lab2, Lab3, Midterm, Final scores:"

User input: 32 Tim 88 89 98 78 78

Screen display: "Student added successfully."

```
What do you want to do (1-10): 7
Enter Student ID, Name, Lab1, Lab2, Lab3, Midterm, Final scores: 109006271 Tuguldur 100 100 100 100 100 Student added successfully.

StudentID: Name: Scores: Final Score: 955002056 許文馨 88 92 88 98 91 92.00 962001044 凌宗廷 87 86 98 88 87 88.75
```

Screen display: [print data with new student]

Alice	90 85 92 88 95	90.55
Test	85 90 95 88 92	90.10
Tim	88 89 98 78 78	84.15
	Test	Test 85 90 95 88 92

Screen display: [Function menu]

User input: 8

Screen display: "Enter Student ID or Name to search for:"

```
User input: 32
Screen display: "Enter new grades for Tim:"
User input: 90 90 90 90 90
Screen display: "Grades updated successfully."
What do you want to do (1-10): 8
Enter Student ID or Name to search for: 32
Enter new grades for Tim: 90 90 90 90 90
Grades updated successfully.
Screen display: [Function menu]
User input: 9
Screen display: "Enter the new grade weights separated by commas (e.g., 15,15,15,25,30):"
User input: 0,0,0,0,0
Screen display: "The total of the grade weights must equal 100."
Screen display: [print data with grade weight]
```

```
What do you want to do (1-10): 9
Enter the new grade weights separated by commas (e.g., 15,15,15,25,30): 0,0,0,0,0
The total of the grade weights must equal 100.
StudentID: Name: Scores: Final Score:
955002056 許文馨 88 92 88 98 91 92.00
962001044 凌宗廷 87 86 98 88 87 88.75
962001051 李威廷 81 32 50 90 93 74.85
```

Screen display: [Function menu]

User input: 5

Screen display: "Grade Distribution:"

Screen display:

```
\geq 90 85-89
             80-84 77-79
                            73-76 70-72 67-69 63-66
                                                            60-62
                                                                    50-59
                                                                             < 50
   A+
                       B+
                              В
                                    B-
                                           C+
                                                  \mathbf{C}
                                                        C-
                                                               D
                                                                     E
          Α
                Α-
                                       0
         31
                2
                      0
                            1
                                  0
                                             0
                                                   0
                                                         0
                                                               0
   31
What do you want to do (1-10): 5
Grade Distribution:
                          77-79
   ≥ 90
          85-89
                  80-84
                                  73-76
                                          70-72
                                                  67-69
                                                          63-66
                                                                  60-62
                                                                          50-59
                                                                                   < 50
     A+
                             B+
                                     В
                                             B-
                                                                              D
                                                                                     Ε
             31
                                                                      0
     32
                                                                              0
                                                                                      0
Screen display: [Function menu]
User input: 10
Screen display: "Exiting Program"
What do you want to do (1-10): 10
Exiting Program
Test Case 2
Screen display:
             [Display start screen]
              Welcome to the Grade System.
              1) Show grade
              2) Show grade letter
             3) Show average
             4) Show rank
              5) Show distribution
```

- 6) Filtering
- 7) Add student
- 8) Update grade
- 9) Update weights
- 10) Exit

What do you want to do(1-10):

```
PS C:\Users\btuud\Downloads\DS_Welcome to the grading system
1) show score
2) show grade letter
3) show average
4) show rank
5) show distribution
6) filter by score
7) add student
8) update grade
9) update grade weight
10) exit program
What do you want to do (1-10):
```

User input: 1

Screen display: "Enter Student ID:"

User input: 90000001

Screen display: "Scores: 85 90 95 88 92"

What do you want to do (1-10): 1 Enter Student ID: 900000001 Scores: 85 90 95 88 92

Screen display: [Function menu]

User input: 2

```
Screen display: "Enter Student ID:"
User input: 987654321
Screen display: "Grade: A+"
 What do you want to do (1-10): 2
 Enter Student ID: 987654321
 Grade: A+
Screen display: [Function menu]
User input: 3
Screen display: "Enter Student ID:"
User input: 995002901
Screen display: "Weighted average score: 87.45"
What do you want to do (1-10): 3
Enter Student ID: 995002901
Weighted average score: 87.45
Screen display: [Function menu]
User input: 4
Screen display: "Enter Student ID:"
User input: 985002513
Screen display: "Rank: 53"
What do you want to do (1-10): 4
Enter Student ID: 985002513
Rank: 53
Screen display: [Function menu]
```

User input: 5

Screen display: "Grade Distribution:"

Screen display:

```
\geq 90 85-89 80-84 77-79 73-76 70-72 67-69 63-66 60-62
                                                             50-59
                                                                     < 50
                                B-
                                                        D
                                                              E
   A+
                     B+
                           B
                                    0
   31
         31
               2
                    0
                         1
                              0
                                         0
                                              0
                                                   0
                                                         0
```

```
what do you want to do (1-10): 5
Grade Distribution:

≥ 90 85-89 80-84 77-79 73-76 70-72 67-69 63-66 60-62 50-59 < 50

A+ A A- B+ B B- C+ C C- D E

31 31 2 0 1 0 0 0 0 0 0
```

Screen display: [Function menu]

User input: 6

Screen display: "Enter a certain score to filter students:"

User input: 99

Screen display: "StudentID: Name: Scores: Final Score:"

Screen display: [Function menu]

User input: 7

Screen display: "Enter Student ID, Name, Lab1, Lab2, Lab3, Midterm, Final scores:"

User input: 109006271 Tuguldur 100 100 100 100 100

Screen display: "Student added successfully."

What do you want to do (1-10): 7

Enter Student ID, Name, Lab1, Lab2, Lab3, Midterm, Final scores: 109006271 Tuguldur 100 100 100 100

Student added successfully.

 StudentID:
 Name:
 Scores:
 Final Score:

 955002056
 許文馨
 88 92 88 98 91
 92.00

 962001044
 凌宗廷
 87 86 98 88 87
 88.75

Screen display: [print data with new student]

987654321 Alice 90 85 92 88 95 90.55 900000001 Test 85 90 95 88 92 90.10 109006271 Tuguldur 100 100 100 100 100.00

Screen display: [Function menu]

User input: 6

Screen display: "Enter a certain score to filter students:"

User input: 99

Screen display:

[print data]

"StudentID: Name: Scores: Final Score:

109006271 Tuguldur 100 100 100 100 100 100 100.00

,,

What do you want to do (1-10): 6

Enter a certain score to filter students:

99

StudentID: Name: Scores: Final Score:

109006271 Tuguldur 100 100 100 100 100 100 100.00

Screen display: [Function menu]

User input: 8

Screen display: "Enter Student ID or Name to search for:"

User input: 109006271

Screen display: "Enter new grades for Tuguldur: "

User input: 80 80 80 50 60

Screen display: "Grades updated successfully."

```
What do you want to do (1-10): 8
Enter Student ID or Name to search for: 109006271
Enter new grades for Tuguldur: 80 80 80 50 60
Grades updated successfully.
```

Screen display: [Function menu]

User input: 9

Screen display: "Enter the new grade weights separated by commas (e.g., 15,15,15,25,30):"

User input: 20,20,20,20,20

Screen display: "Grade weights updated successfully."

Screen display: [print data with grade weight]

```
What do you want to do (1-10): 9
Enter the new grade weights separated by commas (e.g., 15,15,25,30): 20,20,20,20,20
Grade weights updated successfully.
StudentID: Name:
                    Scores:
                                                 Final Score:
955002056 許文馨
                       88 92 88 98 91
                                                    91.40
962001044 凌宗廷
                       87 86 98 88 87
                                                    89.20
962001051 李威廷
                       81 32 50 90 93
                                                    69.20
965002038 蘇亨玠
                       95 89 93 81 83
                                                    88.20
965002044 商揚夏
                       85 86 80 81 88
                                                    84.00
966002031 陳建豪
                       91 95 85 83 90
                                                    88.80
975002021 楊祺賢
                       81 97 90 82 84
                                                    86.80
```

Screen display: [Function menu]

User input: 10

Screen display: "Exiting Program"

What do you want to do (1-10): 10 Exiting Program