Computer Programming II — Final Exam

2020/6/21

Design an Object Oriented Zuo Zhe Zuo Sushi Wo Shou Si Reservation System

(坐著做。壽司本館)

Grading rule

Output correct:

```
7 points MakeReservation::inputDate
7 points MakeReservation::inputTimeCode
9 points AvailSeatsDatabase::SeatsDatabase
7 points AvailSeatsDatabase::decreaseAvailSeats
7 points AvailSeatsDatabase::availableTimes( Date date, int requiredSeats )
7 points AvailSeatsDatabase::availableTimes( Date date, int timeCode,
                                              int requiredSeats )
7 points AvailSeatsDatabase:: searchAvailSeats
7 points AvailSeatsDatabase::load AvailSeats
  points ReservationDatabase::loadReservations
7 points AvailSeatsDatabase::storeAvailSeats
  points ReservationDatabase:: storeReservations
7 points ReservationDatabase::exist
7 points ReservationDatabase::displayReservationInfo
7 points Reservation::displayReservationInfo
7 points Date::operator-
7 points Date::operator+
```

Output incorrect:

```
6 points MakeReservation::inputDate
6 points MakeReservation::inputTimeCode
8 points AvailSeatsDatabase::SeatsDatabase
6 points AvailSeatsDatabase::decreaseAvailSeats
6 points AvailSeatsDatabase::availableTimes( Date date, int requiredSeats )
```

```
6 points AvailSeatsDatabase::availableTimes( Date date, int timeCode,
                                                    int requiredSeats )
6 points AvailSeatsDatabase:: searchAvailSeats
6 points AvailSeatsDatabase::load AvailSeats
   points ReservationDatabase::loadReservations
6 points AvailSeatsDatabase::storeAvailSeats
   points ReservationDatabase:: storeReservations
6 points ReservationDatabase::exist
6 points ReservationDatabase::displayReservationInfo
6 points Reservation::displayReservationInfo
6 points Date::operator-
6 points Date::operator+
Sample screen dialog #1
Welcome to Zuo Zhe Zuo Sushi Wo Shou Si
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 0
7 4
? 2
Enter phone Number: 99
No reservations!
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 1
Enter the party size (1~6): ? 0
? 7
? 6
Choose a date
 1. 2020/06/22
                2. 2020/06/23
                               3. 2020/06/24
                                              4. 2020/06/25
 5. 2020/06/26
                6. 2020/06/27
                               7. 2020/06/28
                                              8. 2020/06/29
 9. 2020/06/30
               10. 2020/07/01
                              11. 2020/07/02
                                             12. 2020/07/03
               14. 2020/07/05
                                             16. 2020/07/07
13. 2020/07/04
                              15. 2020/07/06
 17. 2020/07/08
              18. 2020/07/09
                              19. 2020/07/10
                                             20. 2020/07/11
```

```
21. 2020/07/12 22. 2020/07/13 23. 2020/07/14 24. 2020/07/15
25. 2020/07/16 26. 2020/07/17 27. 2020/07/18 28. 2020/07/19
29. 2020/07/20 30. 2020/07/21
? 0
? 31
? 9
Choose a time:
1. 11:30
2. 13:30
3. 17:45
4. 19:45
? 0
? 5
? 1
Enter name: 99
Enter phone Number: 99
Choose a menu:
1. NT$ 1080
2. NT$ 1680
3. NT$ 2280
? 0
? 4
? 1
6 guests 2020/06/30 11:30
Reservation Completed
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 2
Enter phone Number: 99
1. 6 guests 2020/06/30 11:30
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
```

3. End Program

Thank you. Goodbye.

請按任意鍵繼續 . . .

? 3

Sample screen dialog #2

```
Welcome to Zuo Zhe Zuo Sushi Wo Shou Si
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 2
Enter phone Number: 99
 1. 6 guests 2020/06/30
                         11:30
 2. 6 guests 2020/06/30
                         11:30
                         11:30
 3. 6 guests 2020/06/30
 4. 6 guests 2020/06/30 13:30
 5. 6 guests 2020/06/30 13:30
 6. 6 guests 2020/06/30
                         17:45
 7. 6 guests 2020/06/30 17:45
8. 6 guests 2020/06/30 17:45
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 1
Enter the party size (1~6): ? 6
Choose a date
                          displayed in MakeReservation::inputDate
 1. 2020/06/22
               2. 2020/06/23 3. 2020/06/24 4. 2020/06/25
5. 2020/06/26
              6. 2020/06/27 7. 2020/06/28 8. 2020/06/29
9. 2020/06/30
              10. 2020/07/01 11. 2020/07/02 12. 2020/07/03
              14. 2020/07/05 15. 2020/07/06 16. 2020/07/07
13. 2020/07/04
17. 2020/07/08
              18. 2020/07/09 19. 2020/07/10 20. 2020/07/11
21. 2020/07/12 22. 2020/07/13 23. 2020/07/14 24. 2020/07/15
25. 2020/07/16 26. 2020/07/17 27. 2020/07/18 28. 2020/07/19
29. 2020/07/20 30. 2020/07/21
? 9
Choose a time: displayed in MakeReservation::inputTimeCode
2. 13:30
4. 19:45
? 1
 3
 2
Enter name: 99
Enter phone Number: 99
Choose a menu:
```

```
1. NT$ 1080
2. NT$ 1680
3. NT$ 2280
? 1
6 guests 2020/06/30 13:30
Reservation Completed
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 1
Enter the party size (1~6): ? 6
Choose a date
                2. 2020/06/23
 1. 2020/06/22
                                3. 2020/06/24 4. 2020/06/25
 5. 2020/06/26 6. 2020/06/27 7. 2020/06/28 8. 2020/06/29
9. 2020/06/30 10. 2020/07/01 11. 2020/07/02 12. 2020/07/03
13. 2020/07/04 14. 2020/07/05 15. 2020/07/06 16. 2020/07/07
17. 2020/07/08 18. 2020/07/09 19. 2020/07/10 20. 2020/07/11
21. 2020/07/12 22. 2020/07/13 23. 2020/07/14 24. 2020/07/15
25. 2020/07/16 26. 2020/07/17 27. 2020/07/18 28. 2020/07/19
29. 2020/07/20 30. 2020/07/21
? 9
Choose a time:
4. 19:45
? 4
Enter name: 99
Enter phone Number: 99
Choose a menu:
1. NT$ 1080
2. NT$ 1680
3. NT$ 2280
? 1
6 guests 2020/06/30 19:45
Reservation Completed
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
```

3. End Program

? 1

```
Enter the party size (1~6): ? 6
Choose a date
 1. 2020/06/22
                2. 2020/06/23
                                3. 2020/06/24
                                                4. 2020/06/25
              6. 2020/06/27
5. 2020/06/26
                                7. 2020/06/28 8. 2020/06/29
9. 2020/06/30 10. 2020/07/01 11. 2020/07/02 12. 2020/07/03
13. 2020/07/04 14. 2020/07/05 15. 2020/07/06 16. 2020/07/07
17. 2020/07/08 18. 2020/07/09 19. 2020/07/10 20. 2020/07/11
21. 2020/07/12 22. 2020/07/13 23. 2020/07/14 24. 2020/07/15
25. 2020/07/16 26. 2020/07/17 27. 2020/07/18 28. 2020/07/19
29. 2020/07/20 30. 2020/07/21
? 9
Choose a time:
4. 19:45
? 4
Enter name: 99
Enter phone Number: 99
Choose a menu:
1. NT$ 1080
2. NT$ 1680
3. NT$ 2280
? 1
6 guests 2020/06/30 19:45
Reservation Completed
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 1
Enter the party size (1~6): ? 6
Choose a date
 1. 2020/06/22
                2. 2020/06/23
                                3. 2020/06/24 4. 2020/06/25
 5. 2020/06/26
               6. 2020/06/27
                                7. 2020/06/28 8. 2020/06/29
9. 2020/06/30 10. 2020/07/01 11. 2020/07/02 12. 2020/07/03
13. 2020/07/04 14. 2020/07/05 15. 2020/07/06 16. 2020/07/07
17. 2020/07/08 18. 2020/07/09 19. 2020/07/10 20. 2020/07/11
21. 2020/07/12 22. 2020/07/13 23. 2020/07/14 24. 2020/07/15
25. 2020/07/16 26. 2020/07/17 27. 2020/07/18 28. 2020/07/19
29. 2020/07/20 30. 2020/07/21
? 9
Choose a time:
```

4. 19:45

```
Enter name: 99
Enter phone Number: 99
Choose a menu:
1. NT$ 1080
2. NT$ 1680
3. NT$ 2280
? 1
6 guests
         2020/06/30 19:45
Reservation Completed
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 2
Enter phone Number: 99
 1. 6 guests 2020/06/30
                         11:30
 2. 6 guests 2020/06/30
                         11:30
 3. 6 guests 2020/06/30
                         11:30
 4. 6 guests 2020/06/30
                         13:30
 5. 6 guests 2020/06/30
                         13:30
 6. 6 guests 2020/06/30
                         17:45
 7. 6 guests 2020/06/30
                         17:45
 8. 6 guests 2020/06/30
                         17:45
9. 6 guests 2020/06/30 13:30
10. 6 guests 2020/06/30 19:45
11. 6 guests 2020/06/30
                         19:45
12. 6 guests 2020/06/30
                         19:45
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 1
Enter the party size (1~6): ? 6
Choose a date
 1. 2020/06/22
                2. 2020/06/23
                                3. 2020/06/24
                                                4. 2020/06/25
 5. 2020/06/26
              6. 2020/06/27
                                7. 2020/06/28 8. 2020/06/29
10. 2020/07/01 11. 2020/07/02 12. 2020/07/03 13. 2020/07/04
14. 2020/07/05 15. 2020/07/06 16. 2020/07/07 17. 2020/07/08
18. 2020/07/09 19. 2020/07/10
                               20. 2020/07/11
                                               21. 2020/07/12
22. 2020/07/13 23. 2020/07/14
                               24. 2020/07/15
                                               25. 2020/07/16
```

? 4

```
26. 2020/07/17 27. 2020/07/18 28. 2020/07/19 29. 2020/07/20
30. 2020/07/21
? 9
? 8
Choose a time:
1. 11:30
2. 13:30
3. 17:45
4. 19:45
? 1
Enter name: 99
Enter phone Number: 99
Choose a menu:
1. NT$ 1080
2. NT$ 1680
3. NT$ 2280
? 1
6 guests 2020/06/29 11:30
Reservation Completed
Enter Your Choice
1. Make Reservation
2. Reservation Enquiry
3. End Program
? 3
Thank you. Goodbye.
請按任意鍵繼續 . . .
```