


TEST CASES ON HW4

Test Case 1: Adding a New Balloon Twister

- **Input:**
 - name = "Joseph"
 - availability = ["2024-06-15", "2024-06-16"]
- **Expected Output:**
 - A new balloon twister named "Joseph" should be added to the list.
 - The availability should be set to ["2024-06-15", "2024-06-16"].
 - The output message should be "Balloon Twister Joseph added successfully."

Output:

Twister_Management_System > DataLayer >  twisters.csv

```
1  name,availability
2  John Doe,2024-01-17|2024-08-31
3  Jane Smith,2024-08-14
4  Tom Brown,2024-11-10|2024-08-12
5  Rani,2024-08-29|2024-08-27
6  Ranishree,2024-10-09
7  Sumanth,2024-08-07
8  jack,2024-10-23|2024-05-06
9  joseph,2024-06-15|2024-06-16
10
```


PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 1
Enter the name of the balloon twister: Joseph
Enter availability dates (YYYY-MM-DD)(comma separated): 2024-06-15,2024-06-16
Balloon Twister joseph added successfully.
```

Test Case 2: Updating Availability for an Existing Balloon Twister with Initial Availability

- **Setup:**
 - An existing balloon twister named "Alice Smith" is already in the list but has availability assigned.
- **Input:**
 - name = "Alice Smith"
 - availability = ["2024-08-10"]
- **Expected Output:**
 - The availability for "Alice Smith" should be updated to ["2024-08-10"].
 - The output message should be "Availability for Balloon Twister Alice Smith updated successfully."
 - Ensure no extra formatting (like trailing commas) is present in the CSV output.

Output:

Twister_Management_System > DataLayer >  twisters.csv

```
1  name,availability
2  John Doe,2024-01-17|2024-08-31
3  Jane Smith,2024-08-14
4  Tom Brown,2024-11-10|2024-08-12
5  Rani,2024-08-29|2024-08-27
6  Ranishree,2024-10-09
7  Sumanth,2024-08-07
8  jack,2024-10-23|2024-05-06
9  joseph,2024-06-15|2024-06-16
10 alice smith,2024-03-22|2024-08-10
```


PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 1
Enter the name of the balloon twister: Alice Smith
Enter availability dates (YYYY-MM-DD)(comma separated): 2024-08-10
Availability for Balloon Twister alice smith updated successfully.
```

Test Case 3: Adding Duplicate Availability for an Existing Balloon Twister

- **Setup:**
 - An existing balloon twister named "Charlie Green" is already in the list with availability ["2024-12-14"].
- **Input:**
 - name = "Charlie Green"
 - availability = ["2024-12-14"]
- **Expected Output:**
 - The availability for "Charlie Green" should remain unchanged as ["2024-12-14"].
 - The output message should be "Availability for Balloon Twister Charlie Green updated successfully."
 - No duplicates should be added.

Output:

Twister_Management_System > DataLayer >  twisters.csv

```
1  name,availability
2  John Doe,2024-01-17|2024-08-31
3  Jane Smith,2024-08-14
4  Tom Brown,2024-11-10|2024-08-12
5  Rani,2024-08-29|2024-08-27
6  Ranishree,2024-10-09
7  Sumanth,2024-08-07
8  jack,2024-10-23|2024-05-06
9  joseph,2024-06-15|2024-06-16
10 alice smith,2024-03-22|2024-08-10
11 charlie green,2024-12-14
12
```


PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 1
Enter the name of the balloon twister: Charlie Green
Enter availability dates (YYYY-MM-DD)(comma separated): 2024-12-14
Balloon Twister charlie green already has the provided availability dates.
```

Test Case 4: Attempting to Add a Holiday with a Different Occasion on the Same Date (New Year's Day)

- **Setup:**
 - An existing holiday on "2024-01-01" (e.g., New Year's Day) is already in the list.
- **Input:**
 - occasion = "Family Gathering"
 - date = "2024-01-01"
- **Expected Output:**
 - No new holiday should be added because a holiday already exists on "2024-01-01".
 - The output message should be "A holiday on 2024-01-01 already exists. Cannot add another holiday on the same date."

Output:

Twister_Management_System > DataLayer >  holidays.csv

```
1 occasion,date
2 New Year's Day,2024-01-01
3 Martin Luther King's Birthday,2024-01-15
4 Independence Day,2024-07-04
5 Labor Day,2024-09-02
6 Thanksgiving Day,2024-11-28
7
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Balloon Twister Scheduler

1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit

Enter your choice: 2

Enter the occasion: Family Gathering


Enter the date (YYYY-MM-DD): 2024-01-01

A holiday on 2024-01-01 already exists. Cannot add another holiday on the same date.

Test Case 5: Adding a New Holiday

- **Input:**
 - Occasion: "Thanksgiving"
 - Date: "2024-11-28"
- **Expected Output:**
 - A new holiday with the occasion "Thanksgiving" on "2024-11-28" should be added to the list.
 - The output message should be "Holiday 'Thanksgiving' on 2024-11-28 added successfully."
 - The holiday should be correctly saved to the CSV file.

Output:

Twister_Management_System > DataLayer >  holidays.csv

```
1 occasion,date
2 New Year's Day,2024-01-01
3 Martin Luther King's Birthday,2024-01-15
4 Independence Day,2024-07-04
5 Labor Day,2024-09-02
6 Thanks Giving Day,2024-11-28
7
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Balloon Twister Scheduler

1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit

Enter your choice: 2

Enter the occasion: Thanks Giving Day


Enter the date (YYYY-MM-DD): 2024-11-28

Holiday 'Thanks Giving Day' on 2024-11-28 added successfully.

Test Case 6: Adding a Holiday with an Invalid Date Format

- **Input:** Occasion: "My Birthday", Date: "156-22-2024"
- **Expected Output:** "Invalid date format or date is in the past: 156-22-2024"

Output:

Twister_Management_System > DataLayer >  holidays.csv

```
1 occasion,date
2 New Year's Day,2024-01-01
3 Martin Luther King's Birthday,2024-01-15
4 Independence Day,2024-07-04
5 Labor Day,2024-09-02
6 Thanks Giving Day,2024-11-28
7
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Balloon Twister Scheduler

1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit

Enter your choice: 2

Enter the occasion: My Birthday

Enter the date (YYYY-MM-DD): 156-22-2024

Invalid date format or date is in the past: 156-22-2024

Test Case 7: Making a New Reservation on a Valid Date

- **Input:**
 - Customer Name: "Alice Johnson"
 - Date: "2024-08-20"
 - Email: "alice.johnson@example.com"
- **Expected Output:**
 - A new reservation should be created for Alice Johnson on 2024-08-20.
 - The system should check if any balloon twister is available for this date.
 - If available, the reservation should be confirmed, and the output message should be "Reservation added."
 - The reservation should be saved to the list and the CSV file.

Output:

```
Twister_Management_System > DataLayer > reservations.csv
6 kairalli,2024-08-11,kairalli@example.com,Jane Smith,Confirmed,
7 Siran,2024-02-07,siran@example.com,Ranu,Confirmed,
8 reeya,2024-08-13,reeya@example.com,None,Waiting,2
9 Aarna,2024-09-01,aarna@example.com,Sumanth,Confirmed,
10 Sofia,2024-08-09,sofia@example.com,Rani,Confirmed,
11 Zina,2024-05-07,zina@example.com,,Waiting,1
12 Alice Johnson,2024-08-20,alice.johnson@example.com,jack,Confirmed,

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS [

PS C:\Users\rani\OneDrive\Desktop\Rani\Classes\SFBU\First_Semester\CS500_OOD_Python\HW4> cd c:/Users/rani/Classes/SFBU/First_Semester/CS500_OOD_Python/HW4/Twister_Management_System/PresentationLayer
PS C:\Users\rani\OneDrive\Desktop\Rani\Classes\SFBU\First_Semester\CS500_OOD_Python\HW4\Twister_Management_System> & C:/Python312/python.exe c:/Users/rani/OneDrive/Desktop/Rani/Classes/SFBU/First_Semester/CS500_OOD_Presentation_System/PresentationLayer/twister_scheduler_app.py

Balloon Twister Scheduler
1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 3
Enter the customer's name: Alice Johnson
Enter the reservation date (YYYY-MM-DD): 2024-08-20
Enter the email id: alice.johnson@example.com
Reservation added.
```

Test Case 8: Making a Reservation on a Holiday

- **Input:**
 - Customer Name: "Bob Smith"
 - Date: "2024-01-01"
 - Email: "bob.smith@example.com"
- **Expected Output:**
 - The system should detect that the date is a holiday.
 - The output message should be "Reservations cannot be made on holidays."
 - No reservation should be added to the system or saved to the CSV file.

Output:

```
Twister_Management_System > DataLayer > reservations.csv
8 reeya,2024-08-13,reeya@example.com,None,Waiting,2
9 Aarna,2024-09-01,aarna@example.com,Sumanth,Confirmed,
10 Sofia,2024-08-09,sofia@example.com,Rani,Confirmed,
11 Zina,2024-05-07,zina@example.com,,Waiting,1
12 Alice Johnson,2024-08-20,alice.johnson@example.com,jack,Confirmed,
13
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Python

6. View Holidays
7. Exit
Enter your choice: 3
Enter the customer's name: Bob Smith
Enter the reservation date (YYYY-MM-DD): 2024-01-01
Enter the email id: bob.smith@example.com
Invalid date format or date is in the past: 2024-01-01

Balloon Twister Scheduler
1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 3
Enter the customer's name: Bob Smith
Enter the reservation date (YYYY-MM-DD): 2024-01-01
Enter the email id: bob.smith@example.com
Reservations cannot be made on holidays.

Test Case 9: Making a Reservation on a Fully Booked Date

- **Input:**
 - Customer Name: "Charlie Brown"
 - Date: "2024-08-20" (Assuming all balloon twisters are already booked on this date)
 - Email: "charlie.brown@example.com"
- **Expected Output:**
 - The system should detect that all balloon twisters are booked on this date.
 - The reservation should be added to the waiting list with a status of "Waiting."
 - The output message should be "Reservation added."
 - The reservation should be saved to the list and the CSV file, marked as "Waiting."

Output:

```
Twister_Management_System > DataLayer > 📄 reservations.csv
1  customer_name,reservation_date,email,assigned_twister,status,priority
2  Bob Williams,2024-08-10,bob.williams@example.com,None,Waiting,1
3  werw,2024-08-15,werw@example.com,Tom Brown,Confirmed,
4  shd,2024-08-13,shd@example.com,None,Waiting,1
5  ritu,2024-09-09,ritu@example.com,None,Waiting,1
6  kairalli,2024-08-11,kairalli@example.com,Jane Smith,Confirmed,
7  Siran,2024-02-07,siran@example.com,Ranuu,Confirmed,
8  reeya,2024-08-13,reeya@example.com,None,Waiting,2
9  Aarna,2024-09-01,aarna@example.com,Sumanth,Confirmed,
10 Sofia,2024-08-09,sofia@example.com,Rani,Confirmed,
11 Zina,2024-05-07,zina@example.com,,Waiting,1
12 Alice Johnson,2024-08-20,alice.johnson@example.com,jack,Confirmed,
13 Charlie Brown,2024-08-15,charlie.brown@example.com,,Waiting,1
14

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

3. Make Reservation
4. Cancel Reservation
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 3
Enter the customer's name: Charlie Brown
Enter the reservation date (YYYY-MM-DD): 2024-08-15
Enter the email id: charlie.brown@example.com
Reservation added.
```

Test Case 10: Canceling a Reservation


- **Input:**
 - Email: "alice.johnson@example.com" (Assuming this reservation exists)
- **Expected Output:**
 - The system should locate the reservation for Alice Johnson.
 - The user should be prompted whether they want to reschedule the reservation.
 - If rescheduled, the old reservation should be canceled, and a new one should be made on the new date.
 - If not rescheduled, the reservation should be removed from the system.
 - The output message should indicate successful cancellation or rescheduling.

Output:

Twister_Management_System > DataLayer >  reservations.csv

```
1  customer_name,reservation_date,email,assigned_twister,status,priority
2  Bob Williams,2024-08-10,bob.williams@example.com,None,Waiting,1
3  werw,2024-08-15,werw@example.com,Tom Brown,Confirmed,
4  shd,2024-08-13,shd@example.com,None,Waiting,1
5  ritu,2024-09-09,ritu@example.com,None,Waiting,1
6  kairalli,2024-08-11,kairalli@example.com,Jane Smith,Confirmed,
7  Siran,2024-02-07,siran@example.com,Ranuu,Confirmed,
8  reeya,2024-08-13,reeya@example.com,None,Waiting,2
9  Aarna,2024-09-01,aarna@example.com,Sumanth,Confirmed,
10 Sofia,2024-08-09,sofia@example.com,Rani,Confirmed,
11 Zina,2024-05-07,zina@example.com,,Waiting,1
12 Charlie Brown,2024-08-15,charlie.brown@example.com,,Waiting,1
13
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

 Python +

Reservation added.

Balloon Twister Scheduler

1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit

Enter your choice: 4

Enter the email id: alice.johnson@example.com

Would you like to reschedule your reservation for Alice Johnson? (yes/no): no

Reservation for alice.johnson@example.com cancelled successfully.

Test Case 11: Rescheduling a Reservation

Input:

- **Email:** "alice.johnson@example.com" (Assuming this reservation exists)
- **New Date:** "2024-06-16" (Assuming this is a valid and available date for rescheduling)

Expected Output:

- The system should locate the reservation for Alice Johnson using the provided email.
- The user should be prompted to enter a new date for the reservation.
- The system should validate the new date format and check its availability.
- The old reservation should be canceled:
 - Any assigned balloon twister should have their availability updated.
 - The reservation should be removed from the system.
- A new reservation should be created with the same customer details but on the new specified date.
- If the new reservation is confirmed, it should be assigned a balloon twister, if available, and moved out of the waiting list if it was initially in the waiting state.
- The output message should confirm the successful rescheduling of the reservation.

Output:

Ranishree Anegundi

ID # 20205

```
Twister_Management_System > DataLayer > reservations.csv
1  customer_name,reservation_date,email,assigned_twister,status,priority
2  Bob Williams,2024-08-10,bob.williams@example.com,None,Waiting,1
3  werw,2024-08-15,werw@example.com,Tom Brown,Confirmed,
4  shd,2024-08-13,shd@example.com,None,Waiting,1
5  ritu,2024-09-09,ritu@example.com,None,Waiting,1
6  kairalli,2024-08-11,kairalli@example.com,Jane Smith,Confirmed,
7  Siran,2024-02-07,siran@example.com,Ranu,Confirmed,
8  reeya,2024-08-13,reeya@example.com,None,Waiting,2
9  Aarna,2024-09-01,aarna@example.com,Sumanth,Confirmed,
10 Sofia,2024-08-09,sofia@example.com,Rani,Confirmed,
11 Zina,2024-05-07,zina@example.com,,Waiting,1
12 Charlie Brown,2024-08-15,charlie.brown@example.com,,Waiting,1
13 Alice Johnson,2024-06-16,alice.johnson@example.com,joseph,Confirmed,
14
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
Balloon Twister Scheduler
1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 4
Enter the email id: alice.johnson@example.com
Would you like to reschedule your reservation for Alice Johnson? (yes/no): yes
Please provide a new date for your reservation: 2024-06-16
Reservation for alice.johnson@example.com rescheduled to 2024-06-16 successfully.
```

Test Case 12: Making a Reservation on a Date Already in the Waiting List

- **Input:**
 - Customer Name: "Eve Harris"
 - Date: "2024-08-15" (Assuming this date has other reservations in the waiting list)
 - Email: "eve.harris@example.com"
- **Expected Output:**
 - The reservation should be added to the waiting list with an incremented priority.
 - The output message should be "Reservation added."
 - The reservation should be saved to the list and the CSV file, marked as "Waiting."

Output:

Ranishree Anegundi

ID # 20205

Twister_Management_System > DataLayer >  reservations.csv

```
1 customer_name,reservation_date,email,assigned_twister,status,priority
2 Bob Williams,2024-08-10,bob.williams@example.com,None,Waiting,1
3 werw,2024-08-15,werw@example.com,Tom Brown,Confirmed,
4 shd,2024-08-13,shd@example.com,None,Waiting,1
5 ritu,2024-09-09,ritu@example.com,None,Waiting,1
6 kairalli,2024-08-11,kairalli@example.com,Jane Smith,Confirmed,
7 Siran,2024-02-07,siran@example.com,Ranuu,Confirmed,
8 reeya,2024-08-13,reeya@example.com,None,Waiting,2
9 Aarna,2024-09-01,aarna@example.com,Sumanth,Confirmed,
10 Sofia,2024-08-09,sofia@example.com,Rani,Confirmed,
11 Zina,2024-05-07,zina@example.com,,Waiting,1
12 Charlie Brown,2024-08-15,charlie.brown@example.com,,Waiting,1
13 Alice Johnson,2024-06-16,alice.johnson@example.com,joseph,Confirmed,
14 Eve Harris,2024-08-15,eve.haris@example.com,,Waiting,2
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Balloon Twister Scheduler

1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit

Enter your choice: 3

Enter the customer's name: Eve Harris

Enter the reservation date (YYYY-MM-DD): 2024-08-15

Enter the email id: eve.haris@example.com

Reservation added.

Test Case 13: Viewing All Holidays

Input:

No input required (the method should be called to display all holidays).

Expected Output:

- The system should retrieve and display a list of all holidays.
- If there are holidays in the system:
 - The output should include details such as occasion name and date.
- If there are no holidays:
 - The output should be "No holidays found!"

Ranishree Anegundi

ID # 20205

Output:

```
Twister_Management_System > DataLayer > holidays.csv
```

```
1  occasion,date
2  New Year's Day,2024-01-01
3  Martin Luther King's Birthday,2024-01-15
4  Independence Day,2024-07-04
5  Labor Day,2024-09-02
6  Thanks Giving Day,2024-11-28
7
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
1. Add Balloon Twister
2. Add Holiday
3. Make Reservation
4. Cancel Reservation
5. View Reservations
6. View Holidays
7. Exit
Enter your choice: 6
Holiday: New Year's Day on 2024-01-01
Holiday: Martin Luther King's Birthday on 2024-01-15
Holiday: Independence Day on 2024-07-04
Holiday: Labor Day on 2024-09-02
Holiday: Thanks Giving Day on 2024-11-28
```

Test Case 14: Viewing All Reservations

Input:

No input required (the method should be called to display all reservations).

Expected Output:

- The system should retrieve and display a list of all existing reservations.
- If there are reservations in the system:
 - The output should include details such as customer name, date, email, status (Confirmed), and assigned balloon twister.
- If there are no reservations:

Ranishree Anegundi

ID # 20205


- The output should be "No reservations found!"

Output:

Twister_Management_System > DataLayer >  reservations.csv

```
1  customer_name,reservation_date,email,assigned_twister,status,priority
2  Bob Williams,2024-08-10,bob.williams@example.com,None,Waiting,1
3  werw,2024-08-15,werw@example.com,Tom Brown,Confirmed,
4  shd,2024-08-13,shd@example.com,None,Waiting,1
5  ritu,2024-09-09,ritu@example.com,None,Waiting,1
6  kairalli,2024-08-11,kairalli@example.com,Jane Smith,Confirmed,
7  Siran,2024-02-07,siran@example.com,Ranuu,Confirmed,
8  reeya,2024-08-13,reeya@example.com,None,Waiting,2
9  Aarna,2024-09-01,aarna@example.com,Sumanth,Confirmed,
10 Sofia,2024-08-09,sofia@example.com,Rani,Confirmed,
11 Zina,2024-05-07,zina@example.com,,Waiting,1
12 Charlie Brown,2024-08-15,charlie.brown@example.com,,Waiting,1
13 Alice Johnson,2024-06-16,alice.johnson@example.com,joseph,Confirmed,
14 Eve Harris,2024-08-15,eve.haris@example.com,,Waiting,2
15
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

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5. View Reservations

6. View Holidays

7. Exit

Enter your choice: 5

Reservation for werw on 2024-08-15, Status: Confirmed, Assigned Twister: Tom Brown

Reservation for kairalli on 2024-08-11, Status: Confirmed, Assigned Twister: Jane Smith

Reservation for Siran on 2024-02-07, Status: Confirmed, Assigned Twister: Ranuu

Reservation for Aarna on 2024-09-01, Status: Confirmed, Assigned Twister: Sumanth

Reservation for Sofia on 2024-08-09, Status: Confirmed, Assigned Twister: Rani

Reservation for Alice Johnson on 2024-06-16, Status: Confirmed, Assigned Twister: joseph