

Bug Report

Bug Name:	Date Array Wrong size
Found By:	Adams Keefer
Description:	When generating a list of dates for the camp, the actual list of dates is not the same length as the expected list of dates, will require more testing to determine if this lack of inclusion comes at the beginning or the end.
Test Case:	TestDateConversion()
Location of error:	Camp class, getDates() method

Bug Name:	Date Array not inclusive for end date
Found By	Adams Keefer
Description:	When converting the start and end date to a list of dates containing both dates and every date between them, the actual array of dates does not include the end date. This bug coincides with the previous bug and after testing if the date list is inclusive on the lower boundary, it can be deduced that the array is not inclusive for the end date.
Test Case:	TestDateInclusiveLeft()
Location of error:	Camp class, getDates() method

Report:

```

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
src > CampTest.java > CampTest > testDateConversion()
1/2 tests passed (50.0%)
- testDateConversion() ✖
- testDateInclusiveLeft() ✔

@Test
public void testDateConversion()
{
    ArrayList<Cabin> cabins = new ArrayList<Cabin>();
    cabins.add(new Cabin(name: "Cabin 1", beds: 6));
    cabins.add(new Cabin(name: "Cabin 2", beds: 12));
    cabins.add(new Cabin(name: "Cabin 3", beds: 11));
    cabins.add(new Cabin(name: "Cabin 4", beds: 3));
    Director director = new Director(username: "director", password: "dpass", email: "director@email.com", firstName: "First", lastName: "Last", biography: "bio");
    Camp camp = new Camp(cabins, director, startDate: "01/20/2022", endDate: "01/24/2022", theme: "Christmas", description: "Happy Holidays");
    ArrayList<String> expectedList = new ArrayList<String>();
    expectedList.add("01/20/2022"); expectedList.add("01/21/2022"); expectedList.add("01/22/2022"); expectedList.add("01/23/2022"); expectedList.add("01/24/2022");
    ArrayList<String> actualList = camp.getDates();
    Object[] expected = expectedList.toArray();
    Object[] actual = actualList.toArray();
    assertEquals(expected, actual);
}

org.opentest4j.AssertionFailedError: array lengths differ, expected: [5] but was: [4] at src.CampTest.testDateConversion(CampTest.java:32)
at src.CampTest.testDateConversion(CampTest.java:32)
at java.base/java.util.ArrayList.forEach(ArrayList.java:1511)
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org.opentest4j.AssertionFailedError: array lengths differ, expected: [5] but was: [4]
at src.CampTest.testDateConversion(CampTest.java:32)
at java.base/java.util.ArrayList.forEach(ArrayList.java:1511)
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Test run at 11/13/2022, 3:28:07 PM
- testDateConversion() ✖
Expected [5] but was [4]
org.opentest4j.AssertionFailedError: array lengths differ, expected: [5] but was: [4]
Test run at 11/13/2022, 3:21:28 PM
Test run at 11/13/2022, 3:20:39 PM
Test run at 11/13/2022, 3:14:49 PM
Test run at 11/13/2022, 3:09:30 PM
Test run at 11/13/2022, 3:08:28 PM

33 }
34
35 @Test
36 public void testDateInclusiveLeft()
37 {
38     ArrayList<Cabin> cabins = new ArrayList<Cabin>();
39     cabins.add(new Cabin(name: "Cabin 1", beds: 6));
40     cabins.add(new Cabin(name: "Cabin 2", beds: 12));
41     cabins.add(new Cabin(name: "Cabin 3", beds: 11));
42     cabins.add(new Cabin(name: "Cabin 4", beds: 3));
43     Director director = new Director(username: "director", password: "dpass", email: "director@email.com", firstName: "First", lastName: "Last", biography: "bio");
44     Camp camp = new Camp(cabins, director, startDate: "01/20/2022", endDate: "01/24/2022", theme: "Christmas", description: "Happy Holidays");
45     ArrayList<String> expectedList = new ArrayList<String>();
46     expectedList.add("01/20/2022"); expectedList.add("01/21/2022"); expectedList.add("01/22/2022"); expectedList.add("01/23/2022"); expectedList.add("01/24/2022");
47     ArrayList<String> actualList = camp.getDates();
48     Object[] expected = expectedList.toArray();
49     Object[] actual = actualList.toArray();
50 }

```

Bug Name:	Load Registrations not working
Found By	Adams Keefer
Description:	The list returned when loading registrations from the json file is null.
Test Case:	testGetRegistrationSize() and testGetCamperID()
Location of error:	Data Loader class, loadRegistrations() method.

Report:

The screenshot shows an IDE with the following details:

- Test Results (Left Sidebar):** 34/37 tests passed (91.9%). Failed tests include:
 - testGetRegistrationSize() (Failed)
 - testGetCamperID() (Failed)
- Code Editor (Main):** Shows the `loadRegistrations()` method in the `DataLoader` class. The method returns `registrationList`, which is `null`.


```

      @Test
      public void testGetRegistrationSize()
      {
          registrationList = DataLoader.loadRegistrations();
          assertEquals(2, registrationList.size());
      }
      
```
- Error Details (Right Sidebar):**
 - Test run at 11/13/2022, 10:57:16 PM:**
 - testDateConversion() (Passed)
 - testGetRegistrationSize() (Failed): `org.opentest4j.AssertionFailedError: arr...`
 - testGetCamperID() (Failed): `java.lang.NullPointerException: Canno...`
 - Test run at 11/13/2022, 10:54:07 PM:** (Passed)
 - Test run at 11/13/2022, 10:53:59 PM:** (Passed)
 - Test run at 11/13/2022, 10:52:30 PM:** (Passed)

Bug Name:	Null Pointer Exception
Found By	Vu Nguyen
Description:	scheduleList ArrayList appears to be null so that adding Schedule object to the list can cause the error.
Test Case:	TestCreateSchedule
Location of error:	Schedules class, addSchedule method, scheduleList variable

Bug Name:	Null Pointer Exception
Found By	Vu Nguyen
Description:	scheduleList ArrayList appears to be null causing generateSchedule method fail to execute
Test Case:	TestRandomSchedule
Location of error:	Schedules class, addSchedule method, scheduleList variable