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Software Methodology

**className: Date**

**method signature: isValid();**

| **Test Case #** | **Requirement** | **Test Description and Input Data** | **Expected Result/output** |
| --- | --- | --- | --- |
| 1 | This test should return false because December 32nd 1989 is not a valid calendar date. | * The method takes in an instance of a date, and calls the .isValid() method * Test input: 12/32/1989, sees that this is not a valid date in the calendar. | Returns false |
| 2 | Since the .isValid() method also sees if we can schedule an appointment on the day of, this test case checks if that is a valid day to schedule an appointment | * The method takes in an instance of a date, and calls the .isValid() method * This returns not valid because we cannot schedule an appointment on the day of the appointment. * Test input: 9/30/2024 | Returns false |
| 3 | Since the .isValid() method checks if you can schedule within 6 months, we want to see if this date allows us to do that. | * The method takes in an instance of a date, and calls the .isValid() method * This returns true because the date of the appointment of January 13th, 2025 is within 6 months so you can schedule an appointment. * Test input: 1/13/2025 | Returns true |
| 4 | Since the .isValid() method checks to ensure that we can’t schedule appointments on the weekend, this case accounts for that. | * The method takes in an instance of a date, and calls the .isValid() method * This returns false because 9/29/24, was a Sunday, meaning that we shouldn’t be able to schedule an appointment then. * Test input: 9/29/2024 | Returns false |
| 5 | Since the .isValid() method checks if you can schedule an appointment before today (which you cannot), this test case checks for that. | * The method takes in an instance of a date, and calls the .isValid() method * This returns false because the date of the appointment is April 2nd 2022, which is before today, therefore this isn’t a valid date to schedule an appointment . * Test input:4/2/222 | Returns false |
| 6 | Since the .isValid() method checks to make sure we can schedule an appointment on a valid calendar date, the last test case shows us that we can indeed do that. | * The method takes in an instance of a date, and calls the .isValid() method * This returns true because the date of the appointment is October 11th 2024, which is a valid calendar date to schedule an appointment, it's not a weekend, it's not in the past, it's not over 6 months in, it's not today, and it is a valid calendar date. * Test input:10/11/2024 | Returns true |

**className: profile**

**method signature: compareTo();**

| **Test Case #** | **Requirement** | **Test Description and Input Data** | **Expected Result/output** |
| --- | --- | --- | --- |
| 1 | This test should return 0 because the two profiles are indeed equal to each other, meaning the first and the last name, the dob are all equal. | * The method takes in an instance of 2 profiles, and calls the .compareTo() method on both of them. 2 dates, 2 first names, and 2 last names are read in. * Test input:   Profile1: Mary,Smith, 11/19,2020  Profile 2: Mary, Smith, 11/19,2020 | Returns true |
| 2 | This test should return -1 because the two profiles are not equal to each other. The first name of profile 1 is alphabetically before the first name of profile 2. | * The method takes in an instance of 2 profiles, and calls the .compareTo() method on both of them. 2 dates, 2 first names, and 2 last names are read in. * Test input:   Profile1: Amy,Smith, 11/19,2020  Profile 2: Bob, Smith, 11/19,2020 | Returns -1 |
| 3 | This test should return -1 because the two profiles are not equal to each other. The last name of profile 1 is alphabetically before the last name of profile 2. | * The method takes in an instance of 2 profiles, and calls the .compareTo() method on both of them. 2 dates, 2 first names, and 2 last names are read in. * Test input:   Profile1: Amy, Adam, 11/19,2020  Profile 2: Bob, Smith, 11/19,2020 | Returns -1 |
| 4 | This test should return -1 because the two profiles are not equal to each other. The dob of the first profile is chronologically before the dob of the second profile. | * The method takes in an instance of 2 profiles, and calls the .compareTo() method on both of them. 2 dates, 2 first names, and 2 last names are read in. * Test input:   Profile1: Amy, Adam, 7/19,2020  Profile 2: Bob, Smith, 11/19,2020 | Returns -1 |
| 5 | . This test should return 1 because the two profiles are not equal to each other. The first name of the first profile is chronologically before the first name of the second profile. | * The method takes in an instance of 2 profiles, and calls the .compareTo() method on both of them. 2 dates, 2 first names, and 2 last names are read in. * Test input:   Profile1: Belle,Smith, 7/19,2020  Profile 2: Anne, Smith, 11/19,2020 | Returns 1 |
| 6 | . This test should return 1 because the two profiles are not equal to each other. The last name of the first profile is chronologically before the last name of the second profile. | * The method takes in an instance of 2 profiles, and calls the .compareTo() method on both of them. 2 dates, 2 first names, and 2 last names are read in. * Test input:   Profile1: Belle,Smith, 7/19,2020  Profile 2: Belle, Adam, 11/19,2020 | Returns 1 |
| 7 | This test should return 1 because the two profiles are not equal to each other. The dob of the first profile is chronologically before the dob of the second profile. | * The method takes in an instance of 2 profiles, and calls the .compareTo() method on both of them. 2 dates, 2 first names, and 2 last names are read in. * Test input:   Profile1: Belle,Smith, 11/19,2020  Profile 2: Belle, Smith, 7/19,2020 | Returns 1 |