Test Case #	Requirement	Test Description & Input Data	Expected Result/Output
1	Scheduling or canceling an appointment (first tab) when some data fields are left blank should return an error pop-up	• *Schedule an appointment where timeslot is left blank* • **test input**: Provider File Input providers.txt Schedule Input: Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: NULL Provider: RACHAEL LIM Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006	Error: Invalid Input "Missing Data Tokens"
2	Scheduling or canceling an appointment (first tab) with invalid dates entered for either the appointment date or dob should result in an error pop-up	• *Appointment date entered is invalid as it is before today's date* • **test input**: Provider File Input providers.txt Schedule Input: Appointment Type: Office Visit Appointment Date: 10/27/2024 Appointment Timeslot: 10:00 AM Provider: RACHAEL LIM Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006	Error: Invalid Input "Appointment Date Is Invalid"
3	Scheduling an appointment with a provider that is not available at the specific time slot and date should result in an error pop-up	• *Schedule an appointment at a date and time slot in which the provider already has another appointment scheduled* • **test input**: Provider File Input providers.txt Schedule Input 1 Appointment Type: Office Visit Appointment Date: 10/27/2024 Appointment Timeslot: 10:00 AM Provider: RACHAEL LIM	Output 1 Appointment Scheduled "Appointment Type: Office Visit" Output 2 Error: Invalid Input "Provider Not Available"

		Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 <u>Schedule Input 2</u> Appointment Type: Office Visit Appointment Date: 10/27/2024 Appointment Timeslot: 10:00 AM Provider: RACHAEL LIM Patient First Name: Sarah Patient Last Name: Johnson Patient DOB: 10/20/2006	
4	Trying to reschedule or cancel an appointment that does not exist should result in an error pop-up	• *Reschedule an appointment when it does not exist in the appointment calendar* • **test input**: <u>Provider File Input</u> providers.txt <u>Reschedule Input</u> Old Appointment Date: 1/15/2025 Old Appointment Timeslot: 11:00 AM New Appointment Timeslot: 11:30 AM Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006	Error: Invalid Input "Appointment Does Not Exist"
5	Trying to schedule or reschedule an appointment where the patient is not available at the time slot should result in an error pop-up	• *Rescheduling an appointment for a patient to a new timeslot in which they are not available (they have another appointment at the new timeslot date)* • **test input**: <u>Provider File Input</u> providers.txt <u>Schedule Input 1</u> Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: 11:00 AM Provider: RACHAEL LIM Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 <u>Schedule Input 2</u> Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: 11:00 AM	<u>Output 1</u> Appointment Scheduled "Appointment Type: Office Visit" <u>Output 2</u> Error: Invalid Input "Patient Not Available"

		Provider: ANDREW PATEL Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006	
6	Cannot schedule, cancel, or reschedule any appointments until provider text is loaded in	• *Schedule an imaging appointment when no provider text was loaded in yet will result in an error* • **test input**: Provider File Input NULL Schedule Input Appointment Type: Imaging Appointment Date: 1/1/2025 Appointment Timeslot: 11:00 AM Provider: CATSCAN Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006	Error: Provider File Needed "Need to Upload List of Providers"
7	Trying to reschedule an appointment when there are no more available technicians for that date and time slot.	• *Scheduling ultrasound appointments until there are no more available technicians to perform ultrasound for that time slot.* • **test input**: Provider File Input providers.txt Schedule Input 1 Appointment Type: Imaging Appointment Date: 1/1/2025 Appointment Timeslot: 11:00 AM Provider: ULTRASOUND Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 2 Appointment Type: Imaging Appointment Date: 1/1/2025 Appointment Timeslot: 11:00 AM Provider: ULTRASOUND Patient First Name: Sarah Patient Last Name: Johnson Patient DOB: 10/20/2006 Schedule Input 3 Appointment Type: Imaging Appointment Date: 1/1/2025	Output 1 Appointment Scheduled "Appointment Type: Imaging Service" Output 2 Appointment Scheduled "Appointment Type: Imaging Service" Output 3 Error: Invalid Input "Technician Not Available"

		Appointment Timeslot: 11:00 AM Provider: ULTRASOUND Patient First Name: Cooper Patient Last Name: Logan Patient DOB: 10/20/2006	
8	Trying to reschedule an imaging appointment should result in an error pop-up.	• *Scheduling an imaging appointment then attempting to reschedule that appointment with a new appointment time slot.* • **test input**: Schedule Input 1 Appointment Type: Imaging Appointment Date: 1/1/2025 Appointment Timeslot: 11:00 AM Provider: ULTRASOUND Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Reschedule Input 2 Old Appointment Date: 1/1/2025 Old Appointment Timeslot: 11:00 AM New Appointment Timeslot: 11:30 AM Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006	Output 1 Appointment Scheduled "Appointment Type: Imaging Service" Output 2 Error: Invalid Input "Cannot Reschedule Imaging Appt"
9	Accurately display the provider credits for all providers.	• *Entering imaging and office appointments into the calendar should correctly calculate the associated provider credits and output it in the "View Provider Cred" tab* • **test input**: Schedule Input 1 Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: 10:00 AM Provider: RACHAEL LIM Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 2 Appointment Type: Imaging Appointment Date: 1/1/2025 Appointment Timeslot: 2:30 PM Provider: ULTRASOUND Patient First Name: John Patient Last Name: Smith	Output 1 Appointment Scheduled "Appointment Type: Office Visit" Output 2 Appointment Scheduled "Appointment Type: Imaging Service" View Provider Cred Output RACHAEL LIM - $300.00 GARY JOHNSON - $110.00

		Patient DOB: 10/20/2006	
10	Clicking "PS" in "View Patient Billing" should update the patient billing and clear the appointment calendar and provider credits.	• *Schedule appointments then check the patient billing is correct. After checking the patient billing, the appointments should be cleared from both "View Appts" and "View Provider Cred".* • **test input**: Schedule Input 1 Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: 10:00 AM Provider: RACHAEL LIM Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 2 Appointment Type: Imaging Appointment Date: 1/1/2025 Appointment Timeslot: 2:30 PM Provider: ULTRASOUND Patient First Name: John Patient Last Name: Smith	Output 1 Appointment Scheduled "Appointment Type: Office Visit" Output 2 Appointment Scheduled "Appointment Type: Office Visit" View Appts Output ** List of appointments, ordered by date/time/provider. 1/1/2025 10:00 AM John Smith 10/20/2006 [RACHAEL LIM 11/30/1975, BRIDGEWATER, Somerset 08807][PEDIATRICIAN, #23] 1/1/2025 2:30 PM John Smith 10/20/2006 [GARY JOHNSON 11/14/1987, PISCATAWAY, Middlesex 08854][rate: $110.00][ULTRASOUND] ** end of list ** View Provider Cred Output RACHAEL LIM - $300.00 GARY JOHNSON - $110.00 View Patient Billing "PS" Output John Smith - 10/20/2006 - $410.00 View Appts Output (After "PS") Schedule calendar is empty. View Provider Cred (After "PS") All providers contain $0.00 Credit Amount ($).
11	Display appointments sorted by appointment date, time, then provider's name.	• *Schedule appointments with different providers for office visits and imaging services, and different date/times, then displaying them, sorting by PA (date, time, then provider).* • **test input**: Schedule Input 1 Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: 9:00 AM Provider: TOM KAUR	Output 1 Appointment Scheduled "Appointment Type: Office Visit" Output 2 Appointment Scheduled "Appointment Type: Office Visit" Output 3 Appointment Scheduled "Appointment Type: Imaging Service"

| | | Patient First Name: John
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 2
Appointment Type: Office Visit
Appointment Date: 1/8/2025
Appointment Timeslot: 10:30 AM
Provider: JOHN HARPER
Patient First Name: John
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 3
Appointment Type: Imaging
Appointment Date: 1/16/2025
Appointment Timeslot: 9:30 AM
Provider: XRAY
Patient First Name: Sarah
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 4
Appointment Type: Imaging
Appointment Date: 1/13/2025
Appointment Timeslot: 9:30 AM
Provider: ULTRASOUND
Patient First Name: Sarah
Patient Last Name: Smith
Patient DOB: 10/20/2006 | Output 4
Appointment Scheduled
"Appointment Type: Imaging Service"

View Appts "PA" Output
** List of appointments, ordered by date/time/provider.
1/1/2025 9:00 AM John Smith 10/20/2006 [TOM KAUR 11/5/1972, PRINCETON, Mercer 08542][ALLERGIST, #54]

1/8/2025 10:30 AM John Smith 10/20/2006 [JOHN HARPER 3/1/1981, CLARK, Union 07066][FAMILY, #32]

1/13/2025 9:30 AM Sarah Smith 10/20/2006 [BEN JERRY 9/28/1987, PISCATAWAY, Middlesex 08854][rate: $150.00][ULTRASOUND]

1/16/2025 9:30 AM Sarah Smith 10/20/2006 [GARY JOHNSON 11/14/1987, PISCATAWAY, Middlesex 08854][rate: $110.00][XRAY]
** end of list ** |
| 12 | Display appointments sorted by the patient (by last name, first name, date of birth, then appointment date and time). | • *Schedule appointments with different providers for office visits and imaging services, and different date/times, then displaying them, sorting by PP (last name, first name, dob, then appointment date and time).*
• **test input**:

Schedule Input 1
Appointment Type: Office Visit
Appointment Date: 1/1/2025
Appointment Timeslot: 9:00 AM
Provider: TOM KAUR
Patient First Name: John
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 2
Appointment Type: Office Visit
Appointment Date: 1/8/2025 | Output 1
Appointment Scheduled
"Appointment Type: Office Visit"

Output 2
Appointment Scheduled
"Appointment Type: Office Visit"

Output 3
Appointment Scheduled
"Appointment Type: Imaging Service"

Output 4
Appointment Scheduled
"Appointment Type: Imaging Service"

View Appts "PP" Output
** List of appointments, ordered by date/time/provider.
1/1/2025 9:00 AM John Smith |

| | | Appointment Timeslot: 10:30 AM
Provider: JOHN HARPER
Patient First Name: John
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 3
Appointment Type: Imaging
Appointment Date: 1/16/2025
Appointment Timeslot: 9:30 AM
Provider: XRAY
Patient First Name: Sarah
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 4
Appointment Type: Imaging
Appointment Date: 1/13/2025
Appointment Timeslot: 9:30 AM
Provider: ULTRASOUND
Patient First Name: Sarah
Patient Last Name: Smith
Patient DOB: 10/20/2006 | 10/20/2006 [TOM KAUR 11/5/1972, PRINCETON, Mercer 08542][ALLERGIST, #54]

1/8/2025 10:30 AM John Smith 10/20/2006 [JOHN HARPER 3/1/1981, CLARK, Union 07066][FAMILY, #32]

1/13/2025 9:30 AM Sarah Smith 10/20/2006 [BEN JERRY 9/28/1987, PISCATAWAY, Middlesex 08854][rate: $150.00][ULTRASOUND]

1/16/2025 9:30 AM Sarah Smith 10/20/2006 [GARY JOHNSON 11/14/1987, PISCATAWAY, Middlesex 08854][rate: $110.00][XRAY]
** end of list ** |
| 13 | Display appointments sorted by the county name, then the appointment date and time. | • *Schedule appointments with different providers for office visits and imaging services, and different date/times, then displaying them, sorting by PL (county name, then appointment date/time).*
• **test input**:

Schedule Input 1
Appointment Type: Office Visit
Appointment Date: 1/1/2025
Appointment Timeslot: 9:00 AM
Provider: TOM KAUR
Patient First Name: John
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 2
Appointment Type: Office Visit
Appointment Date: 1/8/2025
Appointment Timeslot: 10:30 AM
Provider: JOHN HARPER
Patient First Name: John
Patient Last Name: Smith
Patient DOB: 10/20/2006

Schedule Input 3
Appointment Type: Imaging
Appointment Date: 1/16/2025 | Output 1
Appointment Scheduled
"Appointment Type: Office Visit"

Output 2
Appointment Scheduled
"Appointment Type: Office Visit"

Output 3
Appointment Scheduled
"Appointment Type: Imaging Service"

Output 4
Appointment Scheduled
"Appointment Type: Imaging Service"

View Appts "PL" Output
** List of appointments, ordered by county/date/time.
1/1/2025 9:00 AM John Smith 10/20/2006 [TOM KAUR 11/5/1972, PRINCETON, Mercer 08542][ALLERGIST, #54]

1/13/2025 9:30 AM Sarah Smith 10/20/2006 [BEN JERRY 9/28/1987, PISCATAWAY, Middlesex 08854][rate: |

		Appointment Timeslot: 9:30 AM Provider: XRAY Patient First Name: Sarah Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 4 Appointment Type: Imaging Appointment Date: 1/13/2025 Appointment Timeslot: 9:30 AM Provider: ULTRASOUND Patient First Name: Sarah Patient Last Name: Smith Patient DOB: 10/20/2006	$150.00][ULTRASOUND] 1/16/2025 9:30 AM Sarah Smith 10/20/2006 [GARY JOHNSON 11/14/1987, PISCATAWAY, Middlesex 08854][rate: $110.00][XRAY] 1/8/2025 10:30 AM John Smith 10/20/2006 [JOHN HARPER 3/1/1981, CLARK, Union 07066][FAMILY, #32] ** end of list **
14	Display office appointments, sorted by the county name, then date and time.	• *Schedule appointments with different providers for office visits, and different date/times, then displaying them, sorting by PO (county name, then date/time).* • **test input**: Schedule Input 1 Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: 9:00 AM Provider: TOM KAUR Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 2 Appointment Type: Office Visit Appointment Date: 1/8/2025 Appointment Timeslot: 10:30 AM Provider: JOHN HARPER Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 3 Appointment Type: Imaging Appointment Date: 1/16/2025 Appointment Timeslot: 9:30 AM Provider: XRAY Patient First Name: Sarah Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 4 Appointment Type: Imaging Appointment Date: 1/13/2025 Appointment Timeslot: 9:30 AM	Output 1 Appointment Scheduled "Appointment Type: Office Visit" Output 2 Appointment Scheduled "Appointment Type: Office Visit" Output 3 Appointment Scheduled "Appointment Type: Imaging Service" Output 4 Appointment Scheduled "Appointment Type: Imaging Service" View Appts "PO" Output ** List of office appointments ordered by county/date/time. 1/1/2025 9:00 AM John Smith 10/20/2006 [TOM KAUR 11/5/1972, PRINCETON, Mercer 08542][ALLERGIST, #54] 1/8/2025 10:30 AM John Smith 10/20/2006 [JOHN HARPER 3/1/1981, CLARK, Union 07066][FAMILY, #32] ** end of list **

		Provider: ULTRASOUND Patient First Name: Sarah Patient Last Name: Smith Patient DOB: 10/20/2006	
15	Display the list of radiology appointments, sorted by the county name, then date and time.	• *Schedule imaging appointments with different imaging services, and different date/times, then displaying them, sorting by PI (only showing imaging appointments sorted by county name, then date/time).* • **test input**: Schedule Input 1 Appointment Type: Office Visit Appointment Date: 1/1/2025 Appointment Timeslot: 9:00 AM Provider: TOM KAUR Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 2 Appointment Type: Office Visit Appointment Date: 1/8/2025 Appointment Timeslot: 10:30 AM Provider: JOHN HARPER Patient First Name: John Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 3 Appointment Type: Imaging Appointment Date: 1/16/2025 Appointment Timeslot: 9:30 AM Provider: XRAY Patient First Name: Sarah Patient Last Name: Smith Patient DOB: 10/20/2006 Schedule Input 4 Appointment Type: Imaging Appointment Date: 1/13/2025 Appointment Timeslot: 9:30 AM Provider: ULTRASOUND Patient First Name: Sarah Patient Last Name: Smith Patient DOB: 10/20/2006	Output 1 Appointment Scheduled "Appointment Type: Office Visit" Output 2 Appointment Scheduled "Appointment Type: Office Visit" Output 3 Appointment Scheduled "Appointment Type: Imaging Service" Output 4 Appointment Scheduled "Appointment Type: Imaging Service" View Appts "PI" Output ** List of radiology appointments ordered by county/date/time. 1/13/2025 9:30 AM Sarah Smith 10/20/2006 [BEN JERRY 9/28/1987, PISCATAWAY, Middlesex 08854][rate: $150.00][ULTRASOUND] 1/16/2025 9:30 AM Sarah Smith 10/20/2006 [GARY JOHNSON 11/14/1987, PISCATAWAY, Middlesex 08854][rate: $110.00][XRAY] ** end of list **