# Medical Clinic Appointment

**Business Scenario:**

Create a system In Lightening for managing a medical clinic with physicians working with different specializations.

When a patient calls to book an appointment the person taking the call must be able to see the appointment price and physicians availability on one screen (number of clicks for setting all this up for receptionist should be minimal) and after confirming the booking two actions must be executed:
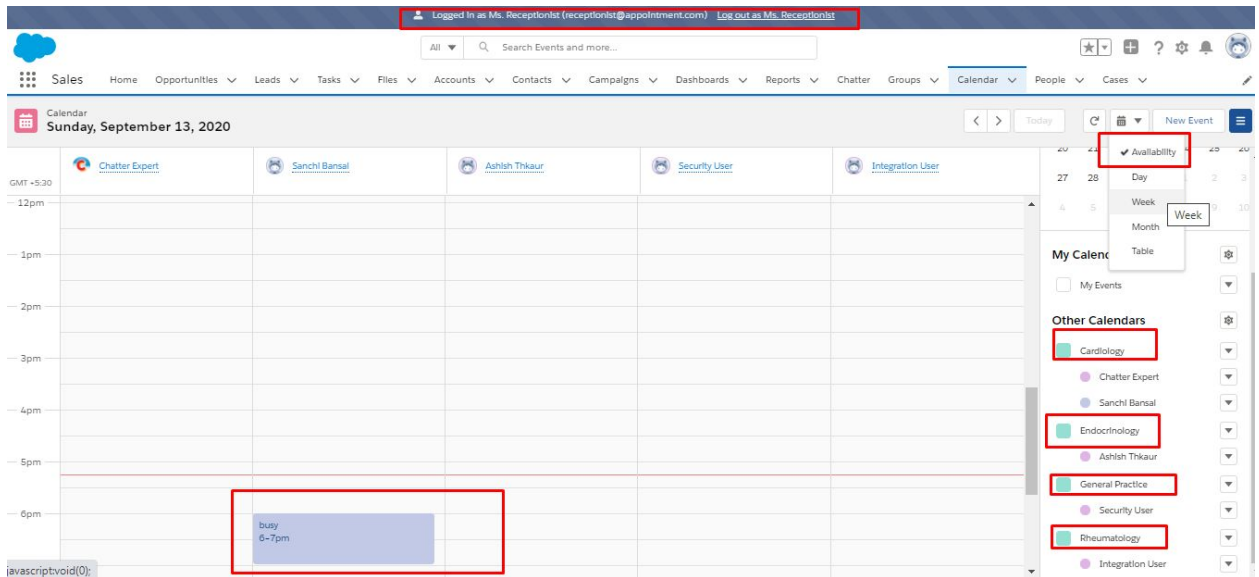
- Send the patient an email with the booking details

- Add the booking to the physician Google Calendar.
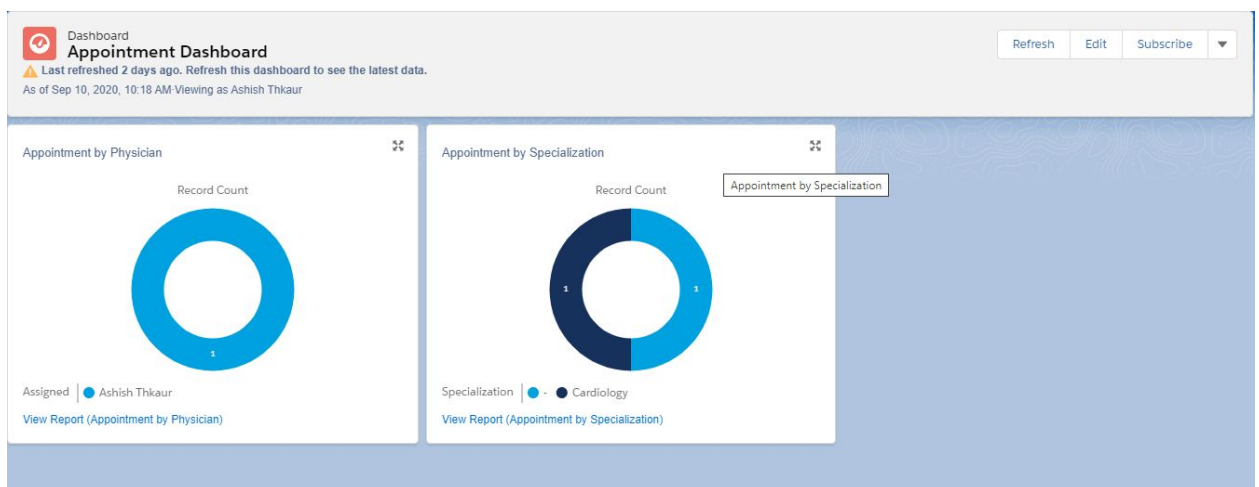
**Implementation :**

**Calendar :**

 To Implement the above business requirements , I used the standard lightning calendar.

- Sharing Setting : On the base level the settings have been set as **Hide Details and Add Events.** This would allow the receptionist to see the physician's availability and create an event(appointment)  but wont show the details of any user's events.
- For the receptionist to be able to see the physicians availability according to specialisations ,List views are created on the user and to access these userlist in the calendar enable the checkbox **Add user lists to calendar views in Lightning Experience** in the Activity Settings.

**Reports And Dashboard :**

- To be able to create a dashboard showing the number of appointments by physician and by specialization a field was created on the user to classify physicians on the basis of specialization.
- The reports are summary reports and are grouped by physicians and specializations.
- 

**Email Alert:**

- An email alert fires with the help of process builder named **Event email alert.**
- When a receptionist creates a new event(Appointment) , an alert is sent on contact's email that tells the appointment date and the physician details.

Hi ,
Appointment Confirmed! Please find the details of your appointment below:

**Appointment Details**

| Appointment Date | Physician Name | Location | Appointment Fees |
|---|---|---|---|
| 9/13/2020, 6:00 PM | Sanchi Bansal | | 500 |

-

**Add Google Event:**

- To add the google event the receptionist has to first authorise with her email address through a link which has been placed in the user detail page.This will Authenticate with google account and an access token will be generated.



- The  access token is stored in a custom setting known as google token through which all the google events will be added to the Physician calendar.
- The information that is needed to authenticate are stored in a custom settings known as Google Calendar.These information is sent as a header while making a HTTP callout from salesforce to Google.

**Components used for doing Authentication and integrate with google:**

- Auth Page(visualforce Page)
- Google API (Extension)

The access token expires after 3600 seconds after which a new access token has to be generated with the help of refresh token. For this a batch has been written which is scheduled to fire after an hour.

A Trigger is written on an Event object that fires when an event(Appointment) is created. Through this Trigger a batch fires that makes a callout to add a google event to the physician Calendar.

**Trigger Name**: EventTrigger

**Batch Name** : BatchToAddGoogleEvent