Premier Charity Trust (PCT) is a NGO serving in the field of Health Care and Education. They have volunteers who serve at various Health Centers and Schools spread across India. To better manage their own operations and to deliver better services they are wanting help to develop following solutions

Use Case 1

Ability to have a real time view of how many schools or Health Centers they are serving across the nation. For this, they want a drill down view, preferably on map

1) On the map, for each state it should highlight
    a) # of Villages
    b) # of Gram Panchayats (GP)
    c) # of City
    d) # of Schools
    e) # of Students
    f) # of Teachers
    g) # of Volunteers
2) If you click on any state, it should drill down to next level - Region (group of districts) representing same 4 statistics of school
3) Region → District
4) District → City
5) City → Gram Panchayat
6) Gram Panchayat → Village

Illustrative representation of data

School	Village	GP	City	District	Region	State	Students	Teachers	Volunteers
S1	V1	GP1	C1	D1	R1	S1	50	5	2
S2	V2	GP1	C1	D1	R1	S1	100	10	5
S3	V3	GP2	C1	D1	R1	S1	20	3	1
S4	V4	GP3	C2	D2	R1	S1	200	20	5
S5			C3	D2	R1	S1	200	10	4
S6	V6	GP4	C4	D3	R2	S1	400	30	10
S7	V7	GP4	C4	D3	R2	S1	500	20	10

S8	V8	GP5	C5	D4	R3	S2	200	10	2
S9	V9	GP6	C6	D4	R3	S2	100	10	2
S10			C7	D5	R4	S2	500	30	10

On similar lines, they would also want to have a view for their presence in various health centers across the nation

1) # of Villages
2) # of GP
3) # of City
4) # of Health Centers
5) # of Hours Volunteered
6) Amount Invested so far (need to come from another detailed table having investment by center/date of entry of money)

Use Case 2

Volunteer are given an ID Card. On this card, their Photo and ID of PCT is printed. In health care centers, if they need to go into secured areas (Lab, CT Scan, etc), a lab technician scan their ID card using a mobile app. This app, from their ID Card, extracts the PCT ID on the card and provides following options to the technician

1) Search previous access records of the Volunteer. This will result in following records
    a) Lab 1 (This particular lab) accessed 10 times. Last on May 1, 2020
        i) Reason 1 - 3
        ii) Reason 2 - 2
        iii) Reason 3 - 4
        iv) Reason 4 - 1
    b) Other Labs
        i) Lab 2 - 20
        ii) Lab 3 - 30
        iii) Lab 4 - 15
    c) If no records found, should state
        i) Visiting this Lab for first time
        ii) If no other labs visited in the past, should also state, no other labs visited in the past
2) Allows entry for a new record for this PCT ID of the volunteer
    a) Auto filled fields
        i) Lab ID
        ii) PCT ID

iii) Date and time
iv) ID of Lab technician who has logged in the app

b) Technician updated fields
i) Reason - Dropdown from a list of reasons
ii) Authorized access for (minutes)
iii) Volunteer Phone Number (auto filled from previous history. But should be editable)

Use Case 3

Similar to Use Case 2. However, this time, PCT wants to provide facility in the app for health center reception to take image of the patient. Once this image is taken, app should

1) Look up for existence of this patient (using image recognition) record by searching for images in the repository of images.
2) If Image is found,
    a) Llook up for ID of the patient.
    b) For this ID, look up for additional details
        i) Hospital 1 (current hospital) visited last on May 3, 2020
            (1) Ailment 1 - 10
            (2) Ailment 2 - 20
            (3) Ailment 3 - 3
        ii) Hospital 2 - 20
        iii) Hospital 3 - 10
        iv) Hospital 4 - 2
    c) Provide for entry of new record
        i) Auto Populated Field
            (1) Patient ID
            (2) Health Center ID
            (3) Receptionist ID
            (4) Date and Time
        ii) Receptionist updated field
            (1) Ailment - dropdown
            (2) Doctor - dropdown (based on ailment, can you auto assign a doctor?)
            (3) Fees (Rs)
3) If Image is not found, provide for entry of new record
    a) Same as section 2.c of this use case
    b) Also automatically create a Patient ID in this case
    c) Map Patient ID with the image of patient
    d) Save image in the repository

Use Case 4

There are highly secure Labs in the nation and PCT has tie up with them to facilitate access to right people. For this PCT wants to develop an application to accept access requests and to approve those. They need a web version which should be highly responsive for good accessibility and experience on mobile also

<u>As an applicant user</u>
As an applicant, person should register

1) Either on the portal
2) Or on the mobile app
3) Must upload their photo, mobile number, home address, gender, age also

Once registered, they should

1) Sign in On portal
2) Or open mobile app, where their profile is already set at the time of registration, during setup

To apply for access, logged in user should provide

1) Lab to which access is needed
2) Address of the Lab
3) City of lab
4) State of lab (should select from drop down)
5) Access needed from which date to which date. ex May 1 - May 20
    a) Start Date
    b) End Date
6) Time during each day in which access is needed. Ex 11 AM - 4 PM
    a) Start Time
    b) End Time
7) Mode of entry into premise
    a) Select from list (4 Wheeler, 2 Wh, no vehicle, etc)
    b) Vehicle number
8) How many people visiting? Default to 1. Ability to configure maximum limit
9) On submitting, should get Access Request ID
10) Once they click on Access Request ID, should be able to go to Status Screen to check the status

Should be able to go to Status Screen,

1) Should see last 10 access request, along with status
2) Most recent request at the top
3) Ability to click on access request ID and go to details of access request
4) Ability to withdraw request, if status is not already visited
5) Ability to edit request, if status is not already submitted

6) Ability to delete saved requests
7) For Approved Request, should be able to generate Access Card

Access Card should have

1) Photo of user
2) Other details entered in the access entry request form

<u>As a PCT approver</u>

1) PCT approver should be able to create profile and be able to log in
2) Should see all the requests pending approval
3) For each request, should be able to see previous access requests by the requestor
    a) For this particular lab
    b) For any other lab listed in system
    c) Similar to section 2.1 of Use Case 2
    d) Ability to approve or reject the request
4) On visiting the lab, status should change to Visited