Open Source Telemedicine

Dispatch Layer

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Dispatch Layer

- Acts as both client and server.
- Connects local application components.
- (Internal and external).
- Acts as a client for communicating with upstream services.
Dispatch Services

- Procedure
  - Instruction Set
  - Instruction
  - Education Resource
  - Concept

- Encounter
  - Observation Set
  - Observation

- Worker
- Authentication
- Fetch new procedures
  Pass Instructions
- Upload
  Fetch Prior patient Encounters
- Subject
- Register New Patients
  Look up existing patients
Implementing on Android Client

Two primary domains we need to connect to:

1. Internal: within the Android device and sub domains therein.

2. External: connected to something outside of the Android environment
Connections within the Sana application between its components. Connections between Sana components and other Applications.
External Connections

Connections to services outside of the domain of the device. Sana access indirectly through a device system Service or capabilities.
Launching an Activity and getting a result:

```java
public void pick(){
    Intent i = new Intent(Intent.ACTION_PICK);
    i.setType(String);
    i.setData(Uri);
    startActivityForResult(i, PICK_CODE);
}

public void onActivityResult(int request, int result, Intent data){
    if(request == RESULT.OK && request == PICK_CODE){
        Intent I = new Intent(Intent.ACTION_VIEW,
                                data.getData());
        startActivityForResult(I, RUN_CODE);
    }
}
```
Activity Lifecycle

Example

Starting a service:
Service be bound, unbound,

```java
public void service(){
    Intent i = new Intent(this, MyService.class);
    if(!isBound)
        startService(i);
    Else
        bindService(i,new ServiceConnection(){
            //TODO
        });
}
```
Service Lifecycle

Sana Mobile Client

Dispatcher
Network Layer
Procedure
Engine
Android APIs
Plugins

Client
User Interaction
3rd party apps

Data Store
SQLite
Files
External App
ContentProviders