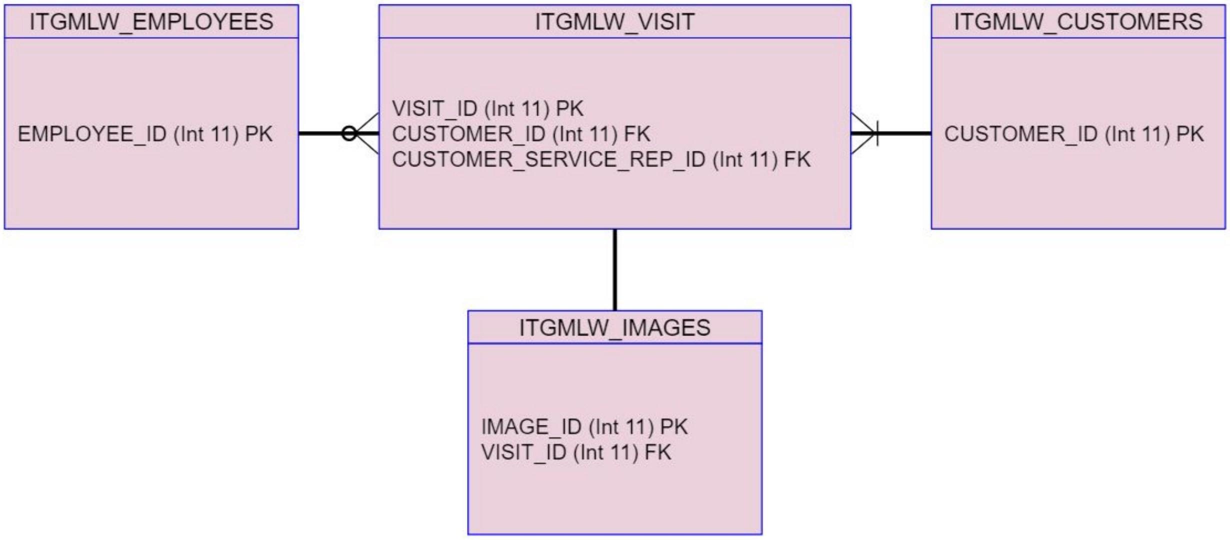
Next GEN CRM Appian Design Document

Data Structure:

The application is an entity system, relying on four main tables tables.

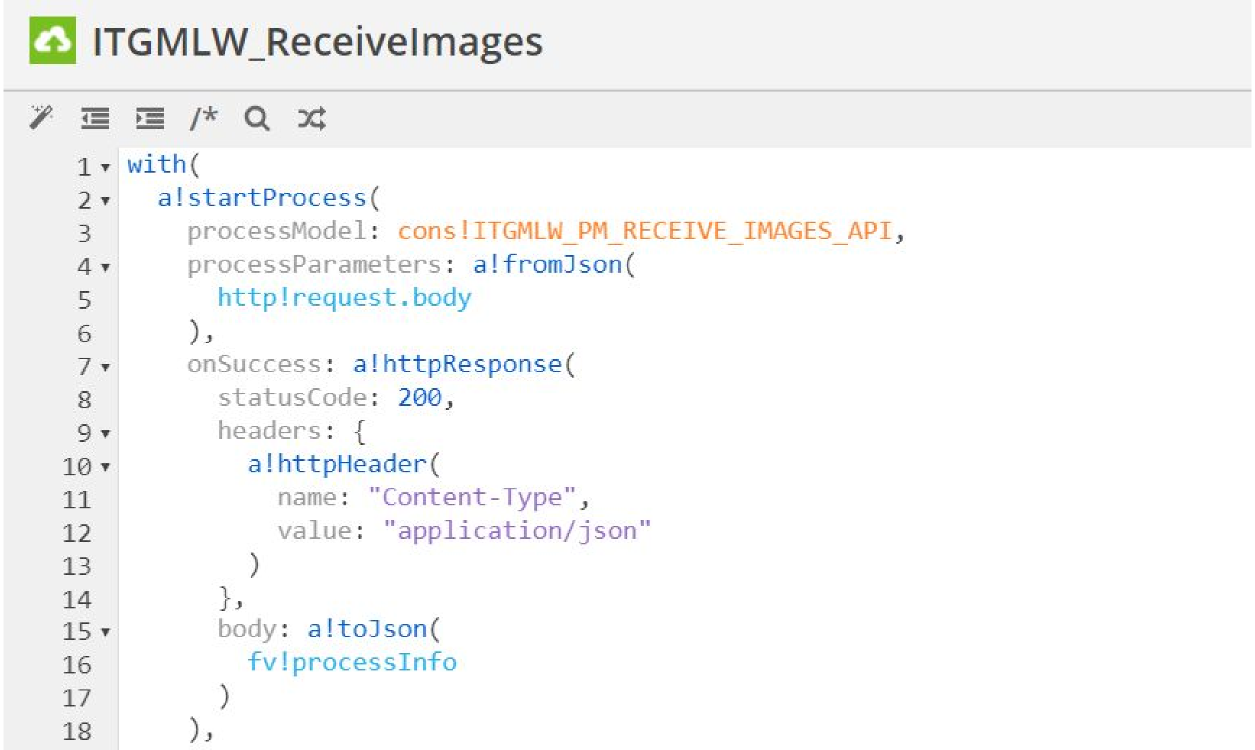
Application ERD



Visits are the main backbone of the application, and drive most of the workflow. Every visit is associated with a single image (and vice versa), and has a single employee and customer. Employees and customers can each be associated to many visits. Every customer must have at least one visit, while employees can have zero, one, or many visits associated to them. The application also has several reference tables and views used for data integrity and display purposes. The image table does not store images directly, but instead stores the URLs for the images which are then displayed using the a!webimage SAIL component.

Web API:

The application's primary workflow is a process triggered by an API. The API object is ITGMLW_ReceiveImages, which can be called by a post request. The API extracts a *customer number* and an *image URL* from the body of the incoming http request, which are then passed to the main process model of the application, ITGMLW_Receive_Images_API.

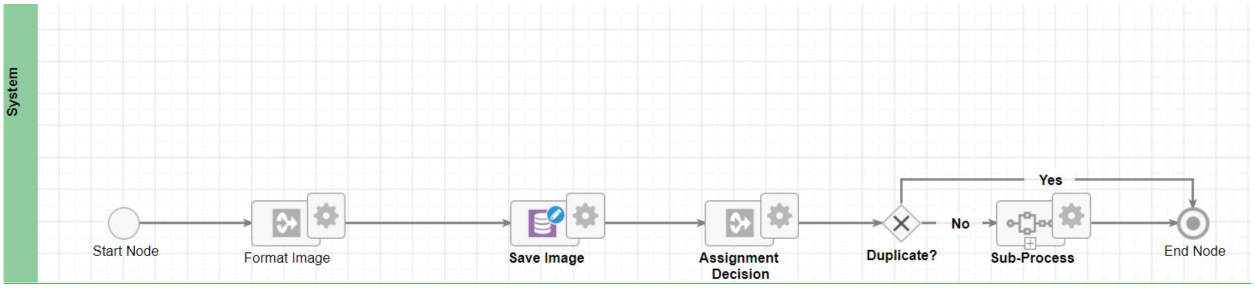


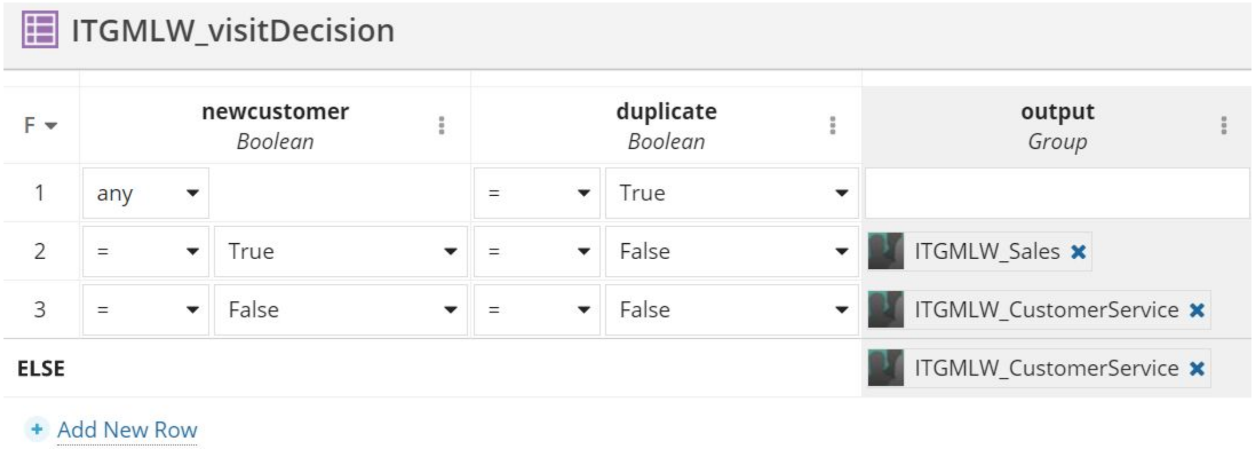
ITGMLW_ReceiveImages

```
with(
  a!startProcess(
    processModel: cons!ITGMLW_PM_RECEIVE_IMAGES_API,
    processParameters: a!fromJson(
      http!request.body
    ),
    onSuccess: a!httpResponse(
      statusCode: 200,
      headers: {
        a!httpHeader(
          name: "Content-Type",
          value: "application/json"
        )
      },
      body: a!toJson(
        fv!processInfo
      )
    ),
```

Process:

Once called from the Web API, ITGMLW_Receive_Images_API saves the received image to the database, and a **decision object**, ITGMLW_visitDecision , is called to determine the assignee for the next stage of the workflow. Requests for new customers are routed to the sales group, and requests for existing customers are routed to the customer representative group. Duplicate requests are given no assignee and the process terminates.





ITGMLW_visitDecision

F	newcustomer *Boolean*		duplicate *Boolean*		output *Group*
1	any		=	True	
2	=	True	=	False	ITGMLW_Sales
3	=	False	=	False	ITGMLW_CustomerService
ELSE					ITGMLW_CustomerService

Once the appropriate assignee is selected, a subprocess is called within a SAIL form allowing the user to enter customer and visit information. Sales users will create a new customer record and a new visit record, while customer representative users will edit a customer record and create a new visit record.

Site and Tabs:

The front end of the application is based around the site ITGMLW Customer Service Site. The site has five tabs: three records, one task report, and one SAIL report.

1) Visits - The visits tab is an entity backed record, which is built on a view joining the visit table to the image table.
2) Employees - An entity backed record, built on a view joining the Employees table the employee type reference table (ITGMLW_REF_EMPLOYEE_TYPE).
3) Customers - An entity backed record, built on the customers table.
4) My Tasks - A task report interface, backed by a process report accessed using a!queryProcessAnalytics.
5) Trends - A SAIL report with a bar, pie, and line chart. These charts use a!queryAggregation to group data together for display.