Internet Service Provider (ISP) APP

Goal:

To build an **Internet Service Provider (ISP) App** in Salesforce to manage **Customers, Internet Plans, Devices, Billing, and Payments**.

Standard Objects:

- **Account** → Stores customer (individual/organization) information.
- **Contact** → Stores contact person details related to an Account.
- **Product** → Represents Internet Plans (data, speed, price).
- **Price Book** → Holds different plan prices for Products.
- **Case** → Used for customer complaints/issues.
- **Opportunity** → Used for sales tracking when a customer buys a plan.

Custom Objects

1. **iNetwork_Device__c**
   a. Tracks devices (routers, modems, etc.) assigned to customers.
   b. Fields: Device Name, Type, Status, Installation Date, Linked Account.
2. **iBilling__c**
   a. Manages bills generated for customers.
   b. Fields: Bill Amount, Discount, Final Price, Bill Date, Payment Due Date, Related Account.
3. **iPayment__c**
   a. Tracks payments made by customers.
   b. Fields: Payment Amount, Payment Date, Mode of Payment, Related Billing.

Relationships:

- **Account -> Contact** = Standard (1:M).
- **Account -> Opportunity** = Standard (1:M).
- **Product -> Price Book** = Standard (M:M).
- **Account -> iBilling** = Lookup/Master-Detail (1:M).
- **iBilling -> iPayment** = Master-Detail (1:M).

- **Account -> iNetwork Device** = Master-Detail (1:M).

Order Standard Object (For Billing)

- **Account -> Order**: Every Order belongs to an Account (customer).
- **Order -> Price Book**: An Order must reference a Price Book.
- **Price Book <-> Product**: Products live inside a Price Book via **PricebookEntry**.
- **Order <-> OrderItem**: Order line items connect an Order to specific Products (through PricebookEntry).

Schema Builder (Overview)
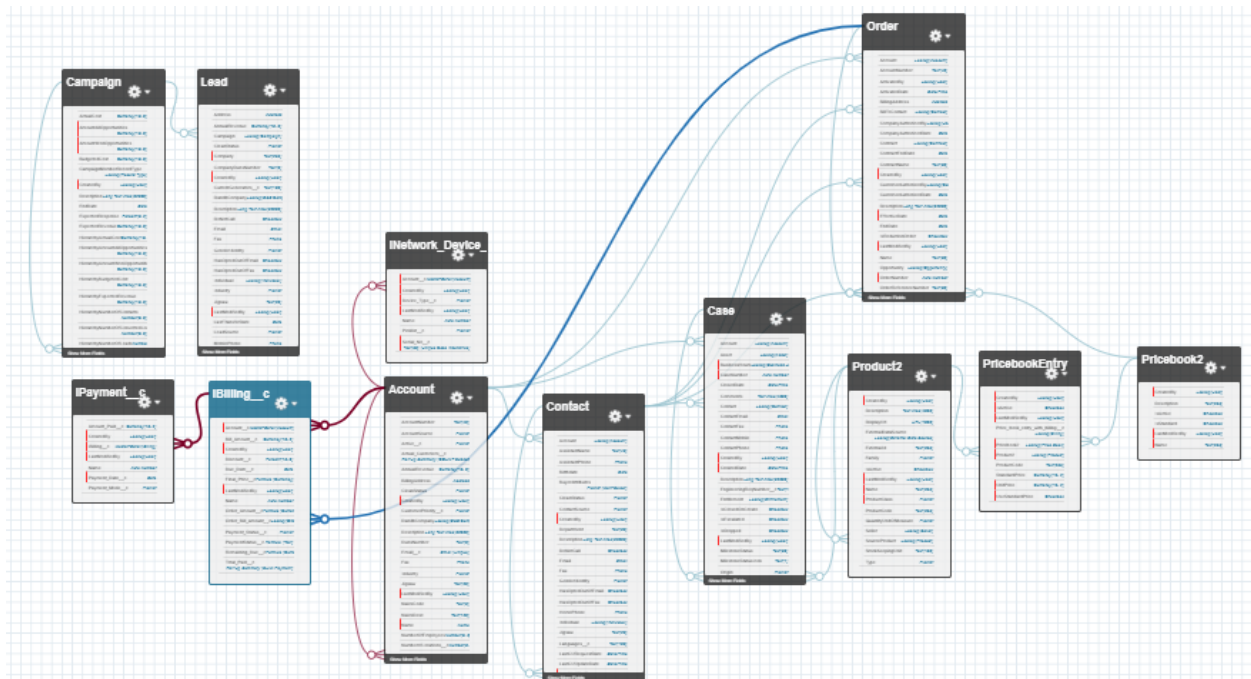
Rollup Summary Fields on (Account) Standard Object

- **Total_Billed_Amount__c**
- **Total_Discount__c**
- **Total_Final_Billed__c**
- **Total_Paid__c**

Rollup Summary Fileds on (iBilling) Custom Object

- **Total_Paid__c**
- **Remaining_Due__c**
- **PaymentStatus (**Based on Due amount)

Formula Field (Billing with Order):

- Order Amount -> fetching field amount from standard object order
- Order Bill amount -> lookup relationship with (Order -> iBilling)

This ISP App is handling:

- **Sales Process** - Lead -> Account -> Opportunity -> Product -> Billing.
- **Billing & Payments** - Bills with discounts, payments, due tracking.
- **Devices** - Which routers/modems are assigned to which customers.
- **Case Issues**- Cases linked to Accounts.

Validation Rules

Validation Rules (iBilling Object)

By default, when we create a lookup summary field that should be mandatory field on that object. It is required to select related billing account.

Fileds & validations:

Bill Amount:

- Amount fields should not be blank (field is required)
- Amount Negative values not allowed (required)

Discount:

- Discount should not be negative (not required)

Due Date:

- Past dates not allowed as a Due date.
- Billing day or future days allowed as a Due date.

- The date field should not be changed after payment is made (payment status = Paid).

Validation Rules (iPayment Object)

Fileds & validations:

Amount Paid:

- Filed Should not be blank
- The amount should not be negative.

Payment Mode:

- Filed is required
- From picklist (cash) is not accepting.

Payment Date:

- Once payment paid (payment date should not be changed)
- By default, formula field shows current date.
- Past & Future dates are not allowed as payment dates.

iBilling:

- Field is required (lookup relationship)

Validation Rules (iNetwork Device Object)

Fileds & validations:

Serial No:

- Unique
- Filed should not be blank
- Once Serial Number entered it should not be changed and unique.

Device Type:

- Required filed

Page Layouts

Created and customized page layouts based on user needs to make the layout structure easy to understand and use.

Global Action Button

Created a **Global Action button for Order** Standard object to create a new order using global action button.

Quick Action Button

Created a Quick Action button for iPayment and added it into the iBilling object for fast payment without changing the object from billing to payment. Using Billing object quick action button only we can pay bill.

Queues:

Queues in Salesforce are used to share workloads among a group of users. Records placed in a queue can be picked up and worked on by any member of that queue.

Note:

==We cannot delete queue until or unless to make queue records empty in queue. Because the owner field should not be empty.==

ISP: Created two queues to handle leads and cases.

Created a sample webpage related to ISP app using web-to-lead and web-to-case forms.
Weblink: https://parrotcodes.github.io/ISPWebAPp/

Created a public group named 'ISP Support Team' to handle ISP cases and added two users into the group.

Created a queue ISP Service case – added Queue memebers as ISP support Team

Assigned to users based on criteria:

- Case Priority high - > User1
- Case Reason -> feeback, other -> User2
- Case Reason other than feeback or other are directly assigned to Case Queue

Process Automation

1. **Workflows**
2. **Approval process**
3. **Process Builder**
4. **Flows**

1. Workflows

In ISP App i have implemented few automations using workflow rules. They are:

Actions:

a. Email Alert:
- Once Payment done email will be sent to the user and Payment Due details will be sent after every payment
- Remainder email alert sent 5 days before the due date. (based on Time trigger action)
- Bill Success if Payment completed success based on payment Status.

b. **Task:**
- **W**hen new order get created or updated automatically task is created assigned to User1

2. Approval Process:

Created an Approval process when the discount is more than 10% -> assigned to User check and approve to get the discount in billing custom object and on order.

3. Process Builder:

When a new Device is created

- picklist value type value is Router assigned – by default Status is automatically update filed even though we are not choosing any option while creating a device as **active**.

- Plan Expired or payment is Pending Custom Notification Alert sent to Assigned user to for follow via Custom Notification.

4. Flows:

Created a flow once a new lead is going to convert to an opportunity when a potential price amount added by lead converter. After converting lead to opportunity, the potential amount is directly created 0r updated once the lead converts.

Reports and Dashboards

Created related reports and dashboard then added to home dashboard page layout.

The ISP app can:

- Store **customer data** (Account, Contact).
- Manage **Internet plans & pricing** (Product, Price Book).
- Track **devices installed** at customer locations (Network Device).
- Generate **billing and payments** (Billing + Payment).
- Handle **Case issues** (Cases).

- full **customer finance related summary** via Rollup fields in Account and Billing.