***FOODCONNECT: TO SUPPLYLEFTOVERFOOD TO POOR***

|  |  |
| --- | --- |
|  |  |
|  |  |

KRISHAN KUMAR YADAV

[ky3823717@gmail.com](https://mail.google.com/mail/u/0/#inbox)

**ABSTRACT:**

The Salesforce-based project aims to create a sustainable solutionforredistributingsurplusfood tothoseinneed,addressingbothfoodwasteandhunger.Thisinitiativeconnectsfood donors—such as restaurants, hotels, andeventorganizers—withNGOs,shelters,andcommunity kitchens thatservetheunderprivileged.UsingSalesforce'srobustCRMandautomationtools,the platform allows donors to easily register leftover food, which is then efficiently matched with nearby recipients based on real-time demand and logistical factors.

Key features of the project include automated notifications to both donors and recipients, intelligent scheduling to ensure food is picked up and delivered promptly, and tracking tomonitor the food’s journey from donor to beneficiary. The system also integrates with mapping and route optimization tools to minimize transportation time and reduce carbon footprints.

To support continuous improvement, the platform provides detailedanalyticsonfooddonations, recipient needs, and operational efficiency. These insights help refine the distribution network, identify areas with the highest demand, and foster stronger relationships with food donors. Additionally, the platform includes community engagement features, such as recognition programs for donors and impact reports that highlight the benefits of their contributions.

By integrating these capabilities, the Salesforce project not only addresses immediate food insecurity but also builds a replicable model for communities worldwide to tackle hunger and food waste in a more organized and impactful manner.

## 

## INDEX:

1. Introduction
2. Object
3. Tabs
4. Thelighteningapp
5. Fields
6. Flows
7. Trigger
8. Profiles
9. Creationofusers
10. Publicgroup
11. Reporttypes
12. Reports
13. Dashboards
14. Sharingrules
15. Homepage
16. Conclusion

## INTRODUCTION:

Food waste is a significant global issue, with millions of tons of edible food discarded every year,whilemillionsofpeoplefacehungerandfoodinsecurity.Thisdisparityhighlightstheneed forinnovativesolutionsthatcanbridgethegapbetweenfoodsurplusandhunger.TheSalesforce project, designed to supply leftover food to the poor, addresses this challenge by creating an organized, efficient, and scalable platform for food redistribution.

The project leverages Salesforce's comprehensive CRM and automation capabilities to connect food donors—such as restaurants, hotels, and event venues—with organizations that serve the underprivileged,includingNGOs,shelters,andcommunitykitchens.Theplatformsimplifiesthe process of donating surplus food, ensuring that it reaches those in need promptly and safely. By automating notifications, optimizing logistics, and providing real-time tracking, the system minimizes food spoilage and ensures that surplus food is distributed where it can have the most impact.

This introduction sets the stage for a solution that not only reduces food waste but also contributestosocialwelfarebyfeedingthehungry.TheSalesforce-basedplatformaimstocreate a sustainable, replicable model that can be adapted by communities worldwide, ultimately fostering a more equitable distribution of resources and addressing the critical issue of food insecurity.

## OBJECT:

SalesforceobjectsarekeycomponentsusedtostoreandmanagedatawithintheSalesforce platform. There are two main types:

1. **Standard Objects:** Pre-built objects provided by Salesforce, such as:
   1. **Account:**Storesinformationaboutorganizationslikefooddonorsorrecipient NGOs.
   2. **Contact:**Holds details about individuals associated with these organizations.
   3. **Opportunity:**Trackspotentialfooddonationsthroughvariousstages.
   4. **Case:**Manages issues that arise during the food distribution process.
2. **CustomObjects:**User-defined objectstailored tospecific needs,such as:
3. **Venue:**Storesinformationaboutlocationswheresurplusfoodisavailable,suchas restaurants, hotels, or event sites.

1. **DropoffPoint:**Capturesdetailsoflocationswherefoodwillbedelivered,suchas shelters, NGOs, or community kitchens.

1. **Task:**Managesspecificactionsorstepsneededinthefoodredistributionprocess,like scheduling pickups, coordinating with volunteers, or confirming deliveries.

1. **Volunteer:**Tracksdetailsaboutindividualswhoarehelpingwiththefooddistribution, including their availability, assigned tasks, and contact information.

1. **ExecutionDetails:**Holdsinformationontheactualimplementationoffooddistribution activities, including logistics, timing, and any issues encountered during the process.

1. **CreateCustomerDetailsObject**

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>CustomerDetails Plural label name >>Customer Details

EnterRecordNameLabelandFormat Record Name >>Customer Name Data Type >> Text

ClickonAllowreportsandTrackFieldHistory, Allow search >> Save

#### CreateVenueObject

Tocreateanobject:

From thesetuppage>>ClickonObjectManager>>ClickonCreate>>ClickonCustom Object.

Enterthelabelname>>Venue Plural label name >> Venues

EnterRecord Name Label andFormat

RecordName>>VenueName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities.

Allow search >>Save.

#### CreateDrop-OffPointObject

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>Drop-OffPoint Plural label name>> Drop-Off Points Enter Record Name Label and Format RecordName>>Drop-OffpointName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities Allow search >> Save.

#### CreateTaskObject

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>Task Plural label name>> Tasks

EnterRecord Name Label andFormat

RecordName>>TaskName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities

Allow search >>Save.

#### CreateVolunteerObject

Tocreateanobject:

From thesetuppage>>ClickonObjectManager>>ClickonCreate>>ClickonCustom Object.

Enterthelabelname>>Volunteer Plural label name>> Volunteers

EnterRecordNameLabelandFormat Record Name >> Volunteer Name Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities Allow search >> Save.

#### CreateExecutionDetailsObject

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>ExecutionDetail Plural label name >> Execution Details Enter Record Name Label and Format RecordName>>ExecutionDetailName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities Allow search >> Save.

0,Searer!Setup

|  |  |
| --- | --- |
|  |  |
|  |  |

:::Setup ObjectManager

## TABS

Atabislikeauserinterfacethatisusedtobuildrecordsforobjectsandtoviewtherecordsin the objects.

##### **CreatingaCustomTab**

TocreateaTab:(Venue)

1. Gotosetuppage>>typeTabsinQuickFindbar>>clickontabs>>New(undercustom object tab)
2. SelectObject(Venue)>>Selectthetabstyle>>Next(Addtoprofilespage)keep it as default >> Next (Add to Custom App)uncheck the include tab .
3. MakesurethattheAppendtabtousers'existingpersonalcustomizationsis checked.
4. Click save

|  |  |
| --- | --- |
|  |  |
|  |  |

##### **CreatingRemainingTabs**

1. NowcreatetheTabsfortheremainingObjects,theyare“Drop-OffPoint,Task, Volunteer, Execution Details”.
2. Follow the same steps as mentioned above

## THE LIGHTNING APP

|  |  |
| --- | --- |
|  |  |
|  |  |

An app is a collection of items that work together to serve a particular function. In Lightning Experience,Lightningappsgiveyourusersaccesstosetsofobjects,tabs,andotheritemsallin one convenient bundle in the navigation bar.

##### **CreateaLightningApp**

**Tocreatealightningapppage:**

1. Gotosetuppage>>search“appmanager”inquickfind>>select“appmanager”>> click on New lightning App.

1. Filltheappnameinappdetailsandbrandingasfollow App Name : FoodConnect

Developer Name : This will auto populated

Image:optional(ifyouwanttogiveanyimageyoucanotherwisenotmandatory) Primary color hex value : keep this default.

1. ThenclickNext>>(Appoptionpage)SetNavigationStyleasStandardNavigation>>Next.

1. (Utility Items) keep it as default >>Next.

1. ToAddNavigationItems:

Searchfortheiteminthe(Home,Venue,Drop-OffPoint,Task,Volunteer,Execution Details,Reports)fromthesearchbarandmoveitusingthearrowbutton>>Next>>Next.

1. ToAddUserProfiles:

Searchprofiles(Systemadministrator)inthesearchbar>>clickonthearrowbutton>> save & finish.

|  |  |
| --- | --- |
| |  | | --- | | - | |

f- iiLightningAppBrnlder $ App Settings 111Pages v FoodConnect

AppSettings

AppDetails&BrandingAppOptions

NavigationItems

Choosetheitems toinclude in theapp,andarrange theorderinwhichtheyappear.Userscanperson.,lize thenavigation toadd ormoveitems,butusersc:m'tremoveorrenametheitemsthat youadd.Somenavigation itemsareavailableonly forphoneor only fordesktop.Theseitemsaredropped fromthe navigationbar whentheapp isviewed ina formatthat theitem doesn't support.

UtilityItems(DesktopOnly)

AvailableItems

SelectedItems

i

|  |  |
| --- | --- |
| |  | | --- | | ti | |

NavigationItems

UserPrnfiles q,....-

mAccounts

Ii:)All Sites

mAlternativePayment Methods

ImAnalytics

IiAppLauncher

El AppointmentCategoriesmAppointmentInvitationsn

DVenues

mTasks

ElVolunteers

|  |  |
| --- | --- |
| |  | | --- | | Q | |

l!IDrop-OffPoints

ClEll'.ecutionDetails

### Q

f- ii L1ghlnmgAppBrnlder $App Settings

AppSettings

App Details&.BrandingAppOptions

UtilityItems(DesktopOnly)

AppDetails&Branding

GiveyourLightningappanameand description,Uploadanimageandchoosethehighlightcolorforitsnaviga1ionbar.

AppDetails AppBranding

AppName0 ImageO PrimaryColorHexValueO

NavigationItemsUserProfiles

[FoodConnect

\*DeveloperName0[FoodConnect

i:tUpload

I■..II

,0070D2I

|  |  |
| --- | --- |
| |  | | --- | | I | |

Description0

Eete,adesc,iptioo...

|  |  |
| --- | --- |
| |  | | --- | | ] | |

0rgThemeOptions

DUse theapp'sImageandcolor insteadoftheerg'scustomtheme

|  |  |
| --- | --- |
| |  | | --- | | ■ | |

AppLauncherPreview

l FoodConnect

**f- ji**L1ghtnmgAppBLI1lder $AppSettings**hflifi**FoodConnect ?Help

**AppSettings**

AppDetails&BrandingAppOptions

UtilityItems{DesktopOnly)

UserProfiles

Choose theuserprofiles thatcanaccessthisapp.

AvailableProfiles SelectedProfiles

|  |  |
| --- | --- |
|  |  |
|  |  |

SystemAdministrator

NavigationItems

UserProfiles AnalyticsCloudIntegrationUserAnalyticsCloud Security UserALithentic.,tedWebsite

ALithentic.,tedWebsite

B2BReorderingPortalBuyerProfileContractMan,3ger

Custom:M.3rketingProfileCustom:SalesProfile

## FIELDS

##### **CreationofLookupRelationshipFieldonVolunteerObject:**

1. Gotosetup>>clickonObjectManager>> type object name(Volunteer) in the search bar >> click on the object.
2. Now click on “Fields &Relationships”>>New
3. Select MasterDetail relationship
4. Selecttherelatedobject“Drop-Offpoint”andclick next.
5. Field Name :Drop\_Off\_point
6. Field label :Auto generated
7. Next>>Next>>Save.

Next>> Next>>Save.

|  |  |
| --- | --- |
|  |  |
|  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |

|  |  |
| --- | --- |
|  |  |
|  |  |

## FLOWS

##### **CreateFlowtocreatearecordinVenueobject**

1. Gotosetup>>typeFlowinquickfind box >> Click on the Flow and Select the New Flow.
2. SelecttheScreenflow.Clickon create.
3. Clickon the ‘+’icon inbetweenstart andend,andclick on screen element.
4. UndertheScreenProperties: Label : Venue Details

API Name : Venue\_Details

1. Nowletsaddcomponentsinthisflow.ClickonTextComponentandnameitas: Label : Venue Name

API Name : Venue\_Name

1. ClickonEmailComponentandnameitas: Label : Email

API Name : Contact\_Email

1. ClickonPhoneComponentandnameitas: Label : Phone

API Name : Contact\_Phone

1. ClickonTextComponentandnameitas: Label : Venue Location

API Name : Venue\_Location

1. ClickonNumberComponentandnameitas: Label : Latitude

API Name : Latitude

1. ClickonNumberComponentandnameitas: Label : longitude

API Name : longitude

1. Nextclick on Done. Thiswould likebelow
2. Clickonthe‘+’iconinbetweenVenuedetailsandend,andclickoncreaterecord element.
3. Now label it as

Label:CreateVenueRecord

API Name : Create\_Venue\_Record How Many Records to Create : One

HowtoSettheRecordFields:Useseparateresources,andliteralvalues Object : Venue

SetFieldValuesfortheVenue:Clickon‘AddField’5times Field : Value = Contact\_Emailc : {!Contact\_Email.value} Field:Value=Contact\_Phonec:{!Contact\_Phone.value} Field : Value = Name : {!Venue\_Name}

Field : Value = Venue\_Locationc : {!location} Field:Value=LocationLatitudes:{!latitude}

Field:Value=LocationLongitudes:{!longitude}

1. Thiswould looklike:
2. Click on Save as:

Flow Label : Venue Form FlowAPIName:Venue\_Form

'f

VenueFormVI ---, r-- ?•

IAut:i- yout•IVerion1:Actrve----1.;istmodified3monthago[RunIDebug]Iactivatej

|  |  |
| --- | --- |
| |  | | --- | | O | |

ScH"enflow

Sbrt

II

|  |  |
| --- | --- |
| |  | | --- | | li;il | |

mvcnueDetails

rttn

I I

Create*Venue*Record

l:.ICrcatcRcc::irds

I

|  |  |
| --- | --- |
| |  | | --- | | I | |

O'"'

## TRIGGERS

|  |  |
| --- | --- |
|  |  |
|  |  |

##### **Createa Trigger**

1. Loginto the trailhead account, navigate to the gear icon in the top right corner.

1. Clickon developer console and you will be navigated to a new console window.

1. ClickontheFilemenu inthetoolbar,and clickonnew>>Trigger.

1. Enter the trigger name and the object to be triggered.

1. EnterName:DropOffTrigger sObject: Drop-Off Point
2. Click on Submit.

|  |  |
| --- | --- |
|  |  |
|  |  |

TocreateamatchingruletoanCustomerdetailsObject

1. Gotoquick findbox insetupandsearch for matchingRule.
2. Clickon matchingrule >> click on NewRule.
3. Select the object as Customer details andclick Next.
4. Givethe Rule name:Matchingcustomerdetails
5. Uniquename:is auto populated
6. Define the matchingcriteria as
7. Field MatchingMethod
   1. Gmail Exact
   2. Phone Number Exact

1. Clicksave.
2. Aftersavingclick on activate

## PROFILES

1. Go to setup page >> type Profiles in Quick Find bar >> click on Profiles >> click on ‘S’
2. Click on Clone beside Standard Platform User.
3. Under Clone Profile: ProfileName:NGOsProfile
4. Then click on Save

## CREATIONOFUSERS

|  |  |
| --- | --- |
|  |  |
|  |  |

In our Project we consider them as NGO’s

##### **Creationof User1**

1. Goto setup page >> type users in Quick Find bar >> click on users>> New user.
2. InGeneralInformationgivedetailsas:(Note:createusersasperyourwishNGO’s) First Name : Iksha Foundation

Last Name : Iksha\_Foundation

Alias : iiksh

Email:GiveYourEmail

Username:[ikshafoundation@sb.com](mailto:ikshafoundation@sb.com)(givetheusernamedifferent) Nickname : Auto Populated

UserLicense:SalesforcePlatform Profile : NGOs Profile

Active : Check

1. Click on Save

|  |  |
| --- | --- |
|  |  |
|  |  |

**CreationofUser2,User3**

1. CreateanotherTwoUsersbyfollowingstepsinActivity-1withsimilarUserLicense and Profile.
2. GiveDifferentFirstName,LastNamebasedonDifferentNGO’s.

|  |  |
| --- | --- |
|  |  |
|  |  |

## PUBLIC GROUPS

|  |  |
| --- | --- |
|  |  |
|  |  |

Creation of Public Group 1

1. Gotosetuppage>>typePublicGroupsinQuickFindbar>>clickonPublic Groups >>click on New.
2. UnderGroupInformation: Label : Iksha

Group Name : Iksha

Grant Access Using Hierarchies : Check

1. In Search, Select Users.
2. In Selected Members Add Iksha Foundation and System Administrator

|  |  |
| --- | --- |
|  |  |
|  |  |

Creation of Public Group 2

1. ByFollowingStepsinActivity1,CreateothertwoPublicGroupsforothertwo users.
2. After Saving this would look like this.

# REPORTTYPES

|  |  |
| --- | --- |
|  |  |
|  |  |

CreationofReportTypes

1. Go to setup page>>type Report Types in Quick Find bar>> click on Report Types>>click on Continue >>ClickonNewCustomReport Type.
2. InDefinetheCustomReportType: Primary Object : Select Venues

ReportTypeLabel:VenuewithDropOffwithVolunteer

ReportTypeName:Venue\_with\_DropOff\_with\_Volunteer Description : Venue with DropOff with Volunteer

StoreinCategory:SelectOtherReports Deployment Status : Deployed

1. ClickonNext
2. NearClicktorelateanotherObjectSelectDrop-OffPoints.
3. Andalsoselect"A"recordsmayormaynothaverelated"B"records.
4. NowagainNearClicktorelateanotherObjectSelectVolunteers.
5. NowclickonSave

|  |  |
| --- | --- |
|  |  |
|  |  |

## REPORTS

#### CreationofReportonVenuewithDropOffwithVolunteer

1. Gototheapp(FoodConnect)>>clickonthereportstab
2. ClickonNewFolder.

FolderLabel:CustomReports

FolderUniqueName:CustomReports

1. OpenCustomReportsandclickonNewReport
2. SelectReportType:VenuewithDropOffwithVolunteer
3. ThenclickonStartReport.
4. InGROUPROWS:AddVolunteerName
5. InColumns:AddVenueName,Drop-OffpointName,Distance.
6. NowclickonSave&Run.
7. GiveLabelas:
8. ReportName:venueandDropOffpoint
9. ReportUniqueName:AutoPopulated
10. ClickonSelectFolderandselectCustomReport,thenclickonSave.

|  |  |
| --- | --- |
|  |  |
|  |  |

#### CreationofReportonVolunteerswithExecutionDetailsandTasks

1. Gototheapp(FoodConnect)>>clickonthereportstab
2. ClickonCustomReportsFolderandclickonNewReport
3. SelectReportType:VolunteerswithExecutionDetailsandTasks.
4. ThenclickonStartReport.
5. InGROUPROWS:VolunteerID
6. In Columns : Add Volunteer : Volunteer Name, Task : Task Name, Execution Detail : Execution Detail Name, Volunteer: Owner Name, Task: Date, Task : Rating.
7. NowclickonSave&Run.
8. GiveLabelas:

ReportName:VolunteerTask

ReportUniqueName:AutoPopulated

1. ClickonSelectFolderandselectCustomReport,thenclickonSave.

•:::FoodConnectl-klrr.•VotNJoO,vr1<1c,vVolLm,Mr<vDsc,p-DffJar,--.,v2<«vticnD•c1il1v vD1<hM1rt1<v

V:iluntccrT11sk,/Volunwilllh=tionlmail'I.IMTasls I**11•'""**11,.••,.**lB-**

)ai:Oulline T'Filter,;Q Oi'f,...l."Wingaimited,..,..,t,erolr,mrdRJ.oi:!,e,.po,trosee"''..-,,.:hi,g

-----------j1VoluntN'IIOt•1]Volurll1'ffN.Jme•utiooIN....,•**-TH:T.ast:Nam,,**•

**Groop,**

LIJ:<l.,.ePreviewkJromaiuilyC.

lsJGO.OOPR-OWs.

Norwa>m<mu...... tinpm,;.w.':"ryn.,Ming1N"""'"orriringr.po!tlt...\_

l!llGl'.OIJPCOUJWIS •Editothl,rlttminthetil'".erp.ll'HILAdrlgroup **0.**

**G**

**0.**

# DASHBOARDS

|  |  |
| --- | --- |
|  |  |
|  |  |

AddingvenueandDropOffpointReporttotheDashboard

1. Gototheapp(FoodConnect)>>clickontheDashboardstab.
2. ClickonNewFolder.

Folder Label : Custom Dashboards FolderUniqueName:AutoPopulated

1. OpenCustomDashboardsandclickonNewDashboards
2. Name:OrganizationDetails
3. ClickonWidgetandselectChartorTable
4. InSelectReport:SelectvenueandDropOffpointReport.
5. Thenclickon select
6. InAdd Component:

Display As : Select Lightning Table ComponentTheme:SelectDark(Optional)

1. Nowclickon save.

# SHARINGRULES

#### Creationofsharingrules

1. Go to setup>>type Sharing Settings in quick find box>>Click on theSharing Settings.
2. ScrolldownandfindDrop-OffpointSharingRules.
3. ClickonnewnearDrop-OffpointSharingRulesandNameitas: Label : Rule 1

RuleName:Rule\_1

1. Selectyourruletype:SelectBasedoncriteria.
2. Selectwhichrecordstobeshared:

Field:Operator:Value=Distance:lessthan:15

1. Selecttheuserstosharewith:NearShareWith

PublicGroups:Iksha

1. Clickon Save.
2. ClickonnewnearDrop-OffpointSharingRulesandNameitas:

Label:Rule2

RuleName:Rule\_2

1. Selectyourruletype:SelectBasedoncriteria.
2. Selectwhichrecordstobeshared:

Field:Operator:Value=Distance:greaterthan:15 Field:Operator:Value=Distance:lessorequal:30

1. Selecttheuserstosharewith:NearShareWith

PublicGroups:NSS

1. Clickon Save.
2. ClickonnewnearDrop-OffpointSharingRulesandNameitas: Label : Rule 3

RuleName:Rule\_3

1. Selectyourruletype:SelectBasedoncriteria.
2. Selectwhichrecordstobeshared:

Field:Operator:Value=Distance:greaterthan:30 Field:Operator:Value=Distance:lessorequal:50

1. Selecttheuserstosharewith:NearShareWith

PublicGroups:StreetCause

1. Clickon Save.

## HOME PAGE

|  |  |
| --- | --- |
|  |  |
|  |  |

CreationofHome Page

1. Go to setup >> type Lightning App Builder in quick find box>>Click on the Lightning App Builder and Select the New.
2. SelectHomePageandgiveLabelasHOMEPage.
3. SelectStandardHomePage.
4. NearComponentssearchforFlowandDragandDropinRightSide Section..
5. Ontherighthandside: Flow : Venue Flow
6. NearComponentssearchforDashboard,thenDragandDropitinfirst Section.
7. ClickonSaveandActivation,thenclickonAppDefault,thenAdd Assignments.
8. AddFoodConnectAppandthenSave.
9. FoodConnectHomePagewouldLookLikethis.

|  |  |
| --- | --- |
|  |  |
|  |  |

# CONCLUSION

The Salesforce-based food redistribution project effectively addressesthe dual challenges of food waste and hunger by creating a streamlined, organized system for managing surplus food. Through the use ofcustom objects such as Venue, Dropoff Point, Task, Volunteer, and Execution Details, the platform ensures that all aspects of the food donation and distribution process are meticulously tracked and managed.

By automating key tasks, optimizing logistics, and providing real-time data insights, the project not only improves operational efficiency but also maximizes the impact of food donations. Volunteers are better coordinated, food is delivered promptly and safely, and the system adapts to the needs of both donors and recipients.

Ultimately, this project demonstrates the power of Salesforce in creating scalable, sustainable solutions that benefit both communities and the environment. It sets a precedent for how technology can be leveraged to tackle pressing social issues, offering a replicable model that can be adapted by other communities worldwide to address food insecurity.

***FOODCONNECT: TO SUPPLYLEFTOVERFOOD TO POOR***

|  |  |
| --- | --- |
|  |  |
|  |  |

KRISHAN KUMAR YADAV

[ky3823717@gmail.com](https://mail.google.com/mail/u/0/#inbox)

**ABSTRACT:**

The Salesforce-based project aims to create a sustainable solutionforredistributingsurplusfood tothoseinneed,addressingbothfoodwasteandhunger.Thisinitiativeconnectsfood donors—such as restaurants, hotels, andeventorganizers—withNGOs,shelters,andcommunity kitchens thatservetheunderprivileged.UsingSalesforce'srobustCRMandautomationtools,the platform allows donors to easily register leftover food, which is then efficiently matched with nearby recipients based on real-time demand and logistical factors.

Key features of the project include automated notifications to both donors and recipients, intelligent scheduling to ensure food is picked up and delivered promptly, and tracking tomonitor the food’s journey from donor to beneficiary. The system also integrates with mapping and route optimization tools to minimize transportation time and reduce carbon footprints.

To support continuous improvement, the platform provides detailedanalyticsonfooddonations, recipient needs, and operational efficiency. These insights help refine the distribution network, identify areas with the highest demand, and foster stronger relationships with food donors. Additionally, the platform includes community engagement features, such as recognition programs for donors and impact reports that highlight the benefits of their contributions.

By integrating these capabilities, the Salesforce project not only addresses immediate food insecurity but also builds a replicable model for communities worldwide to tackle hunger and food waste in a more organized and impactful manner.

## INDEX:

1. Introduction
2. Object
3. Tabs
4. Thelighteningapp
5. Fields
6. Flows
7. Trigger
8. Profiles
9. Creationofusers
10. Publicgroup
11. Reporttypes
12. Reports
13. Dashboards
14. Sharingrules
15. Homepage
16. Conclusion

## INTRODUCTION:

Food waste is a significant global issue, with millions of tons of edible food discarded every year,whilemillionsofpeoplefacehungerandfoodinsecurity.Thisdisparityhighlightstheneed forinnovativesolutionsthatcanbridgethegapbetweenfoodsurplusandhunger.TheSalesforce project, designed to supply leftover food to the poor, addresses this challenge by creating an organized, efficient, and scalable platform for food redistribution.

The project leverages Salesforce's comprehensive CRM and automation capabilities to connect food donors—such as restaurants, hotels, and event venues—with organizations that serve the underprivileged,includingNGOs,shelters,andcommunitykitchens.Theplatformsimplifiesthe process of donating surplus food, ensuring that it reaches those in need promptly and safely. By automating notifications, optimizing logistics, and providing real-time tracking, the system minimizes food spoilage and ensures that surplus food is distributed where it can have the most impact.

This introduction sets the stage for a solution that not only reduces food waste but also contributestosocialwelfarebyfeedingthehungry.TheSalesforce-basedplatformaimstocreate a sustainable, replicable model that can be adapted by communities worldwide, ultimately fostering a more equitable distribution of resources and addressing the critical issue of food insecurity.

## OBJECT:

SalesforceobjectsarekeycomponentsusedtostoreandmanagedatawithintheSalesforce platform. There are two main types:

1. **Standard Objects:** Pre-built objects provided by Salesforce, such as:
   1. **Account:**Storesinformationaboutorganizationslikefooddonorsorrecipient NGOs.
   2. **Contact:**Holds details about individuals associated with these organizations.
   3. **Opportunity:**Trackspotentialfooddonationsthroughvariousstages.
   4. **Case:**Manages issues that arise during the food distribution process.
2. **CustomObjects:**User-defined objectstailored tospecific needs,such as:
3. **Venue:**Storesinformationaboutlocationswheresurplusfoodisavailable,suchas restaurants, hotels, or event sites.

1. **DropoffPoint:**Capturesdetailsoflocationswherefoodwillbedelivered,suchas shelters, NGOs, or community kitchens.

1. **Task:**Managesspecificactionsorstepsneededinthefoodredistributionprocess,like scheduling pickups, coordinating with volunteers, or confirming deliveries.

1. **Volunteer:**Tracksdetailsaboutindividualswhoarehelpingwiththefooddistribution, including their availability, assigned tasks, and contact information.

1. **ExecutionDetails:**Holdsinformationontheactualimplementationoffooddistribution activities, including logistics, timing, and any issues encountered during the process.

1. **CreateCustomerDetailsObject**

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>CustomerDetails Plural label name >>Customer Details

EnterRecordNameLabelandFormat Record Name >>Customer Name Data Type >> Text

ClickonAllowreportsandTrackFieldHistory, Allow search >> Save

#### CreateVenueObject

Tocreateanobject:

From thesetuppage>>ClickonObjectManager>>ClickonCreate>>ClickonCustom Object.

Enterthelabelname>>Venue Plural label name >> Venues

EnterRecord Name Label andFormat

RecordName>>VenueName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities.

Allow search >>Save.

#### CreateDrop-OffPointObject

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>Drop-OffPoint Plural label name>> Drop-Off Points Enter Record Name Label and Format RecordName>>Drop-OffpointName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities Allow search >> Save.

#### CreateTaskObject

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>Task Plural label name>> Tasks

EnterRecord Name Label andFormat

RecordName>>TaskName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities

Allow search >>Save.

#### CreateVolunteerObject

Tocreateanobject:

From thesetuppage>>ClickonObjectManager>>ClickonCreate>>ClickonCustom Object.

Enterthelabelname>>Volunteer Plural label name>> Volunteers

EnterRecordNameLabelandFormat Record Name >> Volunteer Name Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities Allow search >> Save.

#### CreateExecutionDetailsObject

Tocreateanobject:

Fromthesetuppage>>ClickonObjectManager>>ClickonCreate>>Clickon Custom Object.

Enterthelabelname>>ExecutionDetail Plural label name >> Execution Details Enter Record Name Label and Format RecordName>>ExecutionDetailName Data Type >> Text

ClickonAllowreportsandTrackFieldHistory,AllowActivities Allow search >> Save.

0,Searer!Setup

|  |  |
| --- | --- |
|  |  |
|  |  |

:::Setup ObjectManager

## TABS

Atabislikeauserinterfacethatisusedtobuildrecordsforobjectsandtoviewtherecordsin the objects.

##### **CreatingaCustomTab**

TocreateaTab:(Venue)

1. Gotosetuppage>>typeTabsinQuickFindbar>>clickontabs>>New(undercustom object tab)
2. SelectObject(Venue)>>Selectthetabstyle>>Next(Addtoprofilespage)keep it as default >> Next (Add to Custom App)uncheck the include tab .
3. MakesurethattheAppendtabtousers'existingpersonalcustomizationsis checked.
4. Click save

|  |  |
| --- | --- |
|  |  |
|  |  |

##### **CreatingRemainingTabs**

1. NowcreatetheTabsfortheremainingObjects,theyare“Drop-OffPoint,Task, Volunteer, Execution Details”.
2. Follow the same steps as mentioned above

## THE LIGHTNING APP

|  |  |
| --- | --- |
|  |  |
|  |  |

An app is a collection of items that work together to serve a particular function. In Lightning Experience,Lightningappsgiveyourusersaccesstosetsofobjects,tabs,andotheritemsallin one convenient bundle in the navigation bar.

##### **CreateaLightningApp**

**Tocreatealightningapppage:**

1. Gotosetuppage>>search“appmanager”inquickfind>>select“appmanager”>> click on New lightning App.

1. Filltheappnameinappdetailsandbrandingasfollow App Name : FoodConnect

Developer Name : This will auto populated

Image:optional(ifyouwanttogiveanyimageyoucanotherwisenotmandatory) Primary color hex value : keep this default.

1. ThenclickNext>>(Appoptionpage)SetNavigationStyleasStandardNavigation>>Next.

1. (Utility Items) keep it as default >>Next.

1. ToAddNavigationItems:

Searchfortheiteminthe(Home,Venue,Drop-OffPoint,Task,Volunteer,Execution Details,Reports)fromthesearchbarandmoveitusingthearrowbutton>>Next>>Next.

1. ToAddUserProfiles:

Searchprofiles(Systemadministrator)inthesearchbar>>clickonthearrowbutton>> save & finish.

|  |  |
| --- | --- |
| |  | | --- | | - | |

f- iiLightningAppBrnlder $ App Settings 111Pages v FoodConnect

AppSettings

AppDetails&BrandingAppOptions

NavigationItems

Choosetheitems toinclude in theapp,andarrange theorderinwhichtheyappear.Userscanperson.,lize thenavigation toadd ormoveitems,butusersc:m'tremoveorrenametheitemsthat youadd.Somenavigation itemsareavailableonly forphoneor only fordesktop.Theseitemsaredropped fromthe navigationbar whentheapp isviewed ina formatthat theitem doesn't support.

UtilityItems(DesktopOnly)

AvailableItems

SelectedItems

i

|  |  |
| --- | --- |
| |  | | --- | | ti | |

NavigationItems

UserPrnfiles q,....-

mAccounts

Ii:)All Sites

mAlternativePayment Methods

ImAnalytics

IiAppLauncher

El AppointmentCategoriesmAppointmentInvitationsn

DVenues

mTasks

ElVolunteers

|  |  |
| --- | --- |
| |  | | --- | | Q | |

l!IDrop-OffPoints

ClEll'.ecutionDetails

### Q

f- ii L1ghlnmgAppBrnlder $App Settings

AppSettings

App Details&.BrandingAppOptions

UtilityItems(DesktopOnly)

AppDetails&Branding

GiveyourLightningappanameand description,Uploadanimageandchoosethehighlightcolorforitsnaviga1ionbar.

AppDetails AppBranding

AppName0 ImageO PrimaryColorHexValueO

NavigationItemsUserProfiles

[FoodConnect

\*DeveloperName0[FoodConnect

i:tUpload

I■..II

,0070D2I

|  |  |
| --- | --- |
| |  | | --- | | I | |

Description0

Eete,adesc,iptioo...

|  |  |
| --- | --- |
| |  | | --- | | ] | |

0rgThemeOptions

DUse theapp'sImageandcolor insteadoftheerg'scustomtheme

|  |  |
| --- | --- |
| |  | | --- | | ■ | |

AppLauncherPreview

l FoodConnect

**f- ji**L1ghtnmgAppBLI1lder $AppSettings**hflifi**FoodConnect ?Help

**AppSettings**

AppDetails&BrandingAppOptions

UtilityItems{DesktopOnly)

UserProfiles

Choose theuserprofiles thatcanaccessthisapp.

AvailableProfiles SelectedProfiles

|  |  |
| --- | --- |
|  |  |
|  |  |

SystemAdministrator

NavigationItems

UserProfiles AnalyticsCloudIntegrationUserAnalyticsCloud Security UserALithentic.,tedWebsite

ALithentic.,tedWebsite

B2BReorderingPortalBuyerProfileContractMan,3ger

Custom:M.3rketingProfileCustom:SalesProfile

## FIELDS

##### **CreationofLookupRelationshipFieldonVolunteerObject:**

1. Gotosetup>>clickonObjectManager>> type object name(Volunteer) in the search bar >> click on the object.
2. Now click on “Fields &Relationships”>>New
3. Select MasterDetail relationship
4. Selecttherelatedobject“Drop-Offpoint”andclick next.
5. Field Name :Drop\_Off\_point
6. Field label :Auto generated
7. Next>>Next>>Save.

Next>> Next>>Save.

|  |  |
| --- | --- |
|  |  |
|  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |

|  |  |
| --- | --- |
|  |  |
|  |  |

## FLOWS

##### **CreateFlowtocreatearecordinVenueobject**

1. Gotosetup>>typeFlowinquickfind box >> Click on the Flow and Select the New Flow.
2. SelecttheScreenflow.Clickon create.
3. Clickon the ‘+’icon inbetweenstart andend,andclick on screen element.
4. UndertheScreenProperties: Label : Venue Details

API Name : Venue\_Details

1. Nowletsaddcomponentsinthisflow.ClickonTextComponentandnameitas: Label : Venue Name

API Name : Venue\_Name

1. ClickonEmailComponentandnameitas: Label : Email

API Name : Contact\_Email

1. ClickonPhoneComponentandnameitas: Label : Phone

API Name : Contact\_Phone

1. ClickonTextComponentandnameitas: Label : Venue Location

API Name : Venue\_Location

1. ClickonNumberComponentandnameitas: Label : Latitude

API Name : Latitude

1. ClickonNumberComponentandnameitas: Label : longitude

API Name : longitude

1. Nextclick on Done. Thiswould likebelow
2. Clickonthe‘+’iconinbetweenVenuedetailsandend,andclickoncreaterecord element.
3. Now label it as

Label:CreateVenueRecord

API Name : Create\_Venue\_Record How Many Records to Create : One

HowtoSettheRecordFields:Useseparateresources,andliteralvalues Object : Venue

SetFieldValuesfortheVenue:Clickon‘AddField’5times Field : Value = Contact\_Emailc : {!Contact\_Email.value} Field:Value=Contact\_Phonec:{!Contact\_Phone.value} Field : Value = Name : {!Venue\_Name}

Field : Value = Venue\_Locationc : {!location} Field:Value=LocationLatitudes:{!latitude}

Field:Value=LocationLongitudes:{!longitude}

1. Thiswould looklike:
2. Click on Save as:

Flow Label : Venue Form FlowAPIName:Venue\_Form

'f

VenueFormVI ---, r-- ?•

IAut:i- yout•IVerion1:Actrve----1.;istmodified3monthago[RunIDebug]Iactivatej

|  |  |
| --- | --- |
| |  | | --- | | O | |

ScH"enflow

Sbrt

II

|  |  |
| --- | --- |
| |  | | --- | | li;il | |

mvcnueDetails

rttn

I I

Create*Venue*Record

l:.ICrcatcRcc::irds

I

|  |  |
| --- | --- |
| |  | | --- | | I | |

O'"'

## TRIGGERS

|  |  |
| --- | --- |
|  |  |
|  |  |

##### **Createa Trigger**

1. Loginto the trailhead account, navigate to the gear icon in the top right corner.

1. Clickon developer console and you will be navigated to a new console window.

1. ClickontheFilemenu inthetoolbar,and clickonnew>>Trigger.

1. Enter the trigger name and the object to be triggered.

1. EnterName:DropOffTrigger sObject: Drop-Off Point
2. Click on Submit.

|  |  |
| --- | --- |
|  |  |
|  |  |

TocreateamatchingruletoanCustomerdetailsObject

1. Gotoquick findbox insetupandsearch for matchingRule.
2. Clickon matchingrule >> click on NewRule.
3. Select the object as Customer details andclick Next.
4. Givethe Rule name:Matchingcustomerdetails
5. Uniquename:is auto populated
6. Define the matchingcriteria as
7. Field MatchingMethod
   1. Gmail Exact
   2. Phone Number Exact

1. Clicksave.
2. Aftersavingclick on activate

## PROFILES

1. Go to setup page >> type Profiles in Quick Find bar >> click on Profiles >> click on ‘S’
2. Click on Clone beside Standard Platform User.
3. Under Clone Profile: ProfileName:NGOsProfile
4. Then click on Save

## CREATIONOFUSERS

|  |  |
| --- | --- |
|  |  |
|  |  |

In our Project we consider them as NGO’s

##### **Creationof User1**

1. Goto setup page >> type users in Quick Find bar >> click on users>> New user.
2. InGeneralInformationgivedetailsas:(Note:createusersasperyourwishNGO’s) First Name : Iksha Foundation

Last Name : Iksha\_Foundation

Alias : iiksh

Email:GiveYourEmail

Username:[ikshafoundation@sb.com](mailto:ikshafoundation@sb.com)(givetheusernamedifferent) Nickname : Auto Populated

UserLicense:SalesforcePlatform Profile : NGOs Profile

Active : Check

1. Click on Save

|  |  |
| --- | --- |
|  |  |
|  |  |

**CreationofUser2,User3**

1. CreateanotherTwoUsersbyfollowingstepsinActivity-1withsimilarUserLicense and Profile.
2. GiveDifferentFirstName,LastNamebasedonDifferentNGO’s.

|  |  |
| --- | --- |
|  |  |
|  |  |

## PUBLIC GROUPS

|  |  |
| --- | --- |
|  |  |
|  |  |

Creation of Public Group 1

1. Gotosetuppage>>typePublicGroupsinQuickFindbar>>clickonPublic Groups >>click on New.
2. UnderGroupInformation: Label : Iksha

Group Name : Iksha

Grant Access Using Hierarchies : Check

1. In Search, Select Users.
2. In Selected Members Add Iksha Foundation and System Administrator

|  |  |
| --- | --- |
|  |  |
|  |  |

Creation of Public Group 2

1. ByFollowingStepsinActivity1,CreateothertwoPublicGroupsforothertwo users.
2. After Saving this would look like this.

# REPORTTYPES

|  |  |
| --- | --- |
|  |  |
|  |  |

CreationofReportTypes

1. Go to setup page>>type Report Types in Quick Find bar>> click on Report Types>>click on Continue >>ClickonNewCustomReport Type.
2. InDefinetheCustomReportType: Primary Object : Select Venues

ReportTypeLabel:VenuewithDropOffwithVolunteer

ReportTypeName:Venue\_with\_DropOff\_with\_Volunteer Description : Venue with DropOff with Volunteer

StoreinCategory:SelectOtherReports Deployment Status : Deployed

1. ClickonNext
2. NearClicktorelateanotherObjectSelectDrop-OffPoints.
3. Andalsoselect"A"recordsmayormaynothaverelated"B"records.
4. NowagainNearClicktorelateanotherObjectSelectVolunteers.
5. NowclickonSave

|  |  |
| --- | --- |
|  |  |
|  |  |

## REPORTS

#### CreationofReportonVenuewithDropOffwithVolunteer

1. Gototheapp(FoodConnect)>>clickonthereportstab
2. ClickonNewFolder.

FolderLabel:CustomReports

FolderUniqueName:CustomReports

1. OpenCustomReportsandclickonNewReport
2. SelectReportType:VenuewithDropOffwithVolunteer
3. ThenclickonStartReport.
4. InGROUPROWS:AddVolunteerName
5. InColumns:AddVenueName,Drop-OffpointName,Distance.
6. NowclickonSave&Run.
7. GiveLabelas:
8. ReportName:venueandDropOffpoint
9. ReportUniqueName:AutoPopulated
10. ClickonSelectFolderandselectCustomReport,thenclickonSave.

|  |  |
| --- | --- |
|  |  |
|  |  |

#### CreationofReportonVolunteerswithExecutionDetailsandTasks

1. Gototheapp(FoodConnect)>>clickonthereportstab
2. ClickonCustomReportsFolderandclickonNewReport
3. SelectReportType:VolunteerswithExecutionDetailsandTasks.
4. ThenclickonStartReport.
5. InGROUPROWS:VolunteerID
6. In Columns : Add Volunteer : Volunteer Name, Task : Task Name, Execution Detail : Execution Detail Name, Volunteer: Owner Name, Task: Date, Task : Rating.
7. NowclickonSave&Run.
8. GiveLabelas:

ReportName:VolunteerTask

ReportUniqueName:AutoPopulated

1. ClickonSelectFolderandselectCustomReport,thenclickonSave.

•:::FoodConnectl-klrr.•VotNJoO,vr1<1c,vVolLm,Mr<vDsc,p-DffJar,--.,v2<«vticnD•c1il1v vD1<hM1rt1<v

V:iluntccrT11sk,/Volunwilllh=tionlmail'I.IMTasls I**11•'""**11,.••,.**lB-**

)ai:Oulline T'Filter,;Q Oi'f,...l."Wingaimited,..,..,t,erolr,mrdRJ.oi:!,e,.po,trosee"''..-,,.:hi,g

-----------j1VoluntN'IIOt•1]Volurll1'ffN.Jme•utiooIN....,•**-TH:T.ast:Nam,,**•

**Groop,**

LIJ:<l.,.ePreviewkJromaiuilyC.

lsJGO.OOPR-OWs.

Norwa>m<mu...... tinpm,;.w.':"ryn.,Ming1N"""'"orriringr.po!tlt...\_

l!llGl'.OIJPCOUJWIS •Editothl,rlttminthetil'".erp.ll'HILAdrlgroup **0.**

**G**

**0.**

# DASHBOARDS

|  |  |
| --- | --- |
|  |  |
|  |  |

AddingvenueandDropOffpointReporttotheDashboard

1. Gototheapp(FoodConnect)>>clickontheDashboardstab.
2. ClickonNewFolder.

Folder Label : Custom Dashboards FolderUniqueName:AutoPopulated

1. OpenCustomDashboardsandclickonNewDashboards
2. Name:OrganizationDetails
3. ClickonWidgetandselectChartorTable
4. InSelectReport:SelectvenueandDropOffpointReport.
5. Thenclickon select
6. InAdd Component:

Display As : Select Lightning Table ComponentTheme:SelectDark(Optional)

1. Nowclickon save.

# SHARINGRULES

#### Creationofsharingrules

1. Go to setup>>type Sharing Settings in quick find box>>Click on theSharing Settings.
2. ScrolldownandfindDrop-OffpointSharingRules.
3. ClickonnewnearDrop-OffpointSharingRulesandNameitas: Label : Rule 1

RuleName:Rule\_1

1. Selectyourruletype:SelectBasedoncriteria.
2. Selectwhichrecordstobeshared:

Field:Operator:Value=Distance:lessthan:15

1. Selecttheuserstosharewith:NearShareWith

PublicGroups:Iksha

1. Clickon Save.
2. ClickonnewnearDrop-OffpointSharingRulesandNameitas:

Label:Rule2

RuleName:Rule\_2

1. Selectyourruletype:SelectBasedoncriteria.
2. Selectwhichrecordstobeshared:

Field:Operator:Value=Distance:greaterthan:15 Field:Operator:Value=Distance:lessorequal:30

1. Selecttheuserstosharewith:NearShareWith

PublicGroups:NSS

1. Clickon Save.
2. ClickonnewnearDrop-OffpointSharingRulesandNameitas: Label : Rule 3

RuleName:Rule\_3

1. Selectyourruletype:SelectBasedoncriteria.
2. Selectwhichrecordstobeshared:

Field:Operator:Value=Distance:greaterthan:30 Field:Operator:Value=Distance:lessorequal:50

1. Selecttheuserstosharewith:NearShareWith

PublicGroups:StreetCause

1. Clickon Save.

## HOME PAGE

|  |  |
| --- | --- |
|  |  |
|  |  |

CreationofHome Page

1. Go to setup >> type Lightning App Builder in quick find box>>Click on the Lightning App Builder and Select the New.
2. SelectHomePageandgiveLabelasHOMEPage.
3. SelectStandardHomePage.
4. NearComponentssearchforFlowandDragandDropinRightSide Section..
5. Ontherighthandside: Flow : Venue Flow
6. NearComponentssearchforDashboard,thenDragandDropitinfirst Section.
7. ClickonSaveandActivation,thenclickonAppDefault,thenAdd Assignments.
8. AddFoodConnectAppandthenSave.
9. FoodConnectHomePagewouldLookLikethis.

|  |  |
| --- | --- |
|  |  |
|  |  |

# CONCLUSION

The Salesforce-based food redistribution project effectively addressesthe dual challenges of food waste and hunger by creating a streamlined, organized system for managing surplus food. Through the use ofcustom objects such as Venue, Dropoff Point, Task, Volunteer, and Execution Details, the platform ensures that all aspects of the food donation and distribution process are meticulously tracked and managed.

By automating key tasks, optimizing logistics, and providing real-time data insights, the project not only improves operational efficiency but also maximizes the impact of food donations. Volunteers are better coordinated, food is delivered promptly and safely, and the system adapts to the needs of both donors and recipients.

Ultimately, this project demonstrates the power of Salesforce in creating scalable, sustainable solutions that benefit both communities and the environment. It sets a precedent for how technology can be leveraged to tackle pressing social issues, offering a replicable model that can be adapted by other communities worldwide to address food insecurity.