



Salesforce Project Ready
Entry Level Training & Professional Development
Program

Project Title : Online Training Management

Day 1 :

Topic : Brief explanation of Salesforce and CRM, Comparison of Excel data and Salesforce

Milestone / Activities: Difference between Standard Objects and Custom Objects

Detailed Description : Salesforce is a Cloud based software company, that gives platform to businesses to relate their Marketing, IT, Sales, Commerce, and Services to their customers. Salesforce has web based Software. Salesforce Integrated into many catagories to improve their business. Now a days salesforce is using on Facebook, LinkedIn, youtube etc.



It is a No 1 CRM platform, i.e, Customer Relationship Management which makes direct interaction between customer and business by apps. Here customers can make direct marketing by given platform and also track customers marketing strategy.

Application: In salesforce we can create number of application by using many platform like Lightning Components, Apex, VisualForce. By comparing this to Excel we say that application is workbook.

Object : It organises the data in application. Salesforce already given database that includes few Objects and fields that helps customers/clients to run better those objects are called Standard Objects, and which we create by requirements are called Custom Objects.

Salesforce Developer Edition can be created by two ways

They are:

- i) Trailhead
- ii) salesforce web site

Milestone Activities Screenshot:

Login to the salesforce

The screenshot shows a web browser window with the address bar displaying `creative-raccoon-juvjnf-dev-ed.lightning.force.com/lightning/n/trlhdtips_Welcome`. The browser's address bar includes navigation icons (back, forward, refresh) and a search bar. Below the address bar, there are links for 'Apps', 'Bookmarks', 'Gmail', 'YouTube', and 'Maps'. The main content area features the Trailhead logo on the left, a search bar with a dropdown menu set to 'All', and a navigation bar with links for 'Playground Starter', 'Welcome' (highlighted), 'Install a Package', and 'Get Your Login Credentials'. The 'Welcome' section has a large illustration of a raccoon character sitting on a log, holding a laptop. Below the illustration, the text 'WELCOME, KADAPA' is displayed in a large, bold, blue font. Underneath, a paragraph states: 'This is your Trailhead Playground, where you can complete hands-on challenges for Trailhead, and try out new Salesforce features and customizations.' A link is provided: 'Just getting started? Watch this quick video to learn tips for success.' At the bottom, there is a video player thumbnail showing a bear character reading a map titled 'TRAILMAP' with the text 'Getting Started with' overlaid.

creative-raccoon-juvjnf-dev-ed.lightning.force.com/lightning/n/trlhdtips_Welcome

Apps Bookmarks Gmail YouTube Maps Other bookmarks Reading list

TRAILHEAD

All Search...

Playground Starter Welcome Install a Package Get Your Login Credentials

WELCOME, KADAPA

This is your Trailhead Playground, where you can complete hands-on challenges for Trailhead, and try out new Salesforce features and customizations.

Just getting started? Watch this quick video to learn tips for success.

Getting Started with

Day 2 :

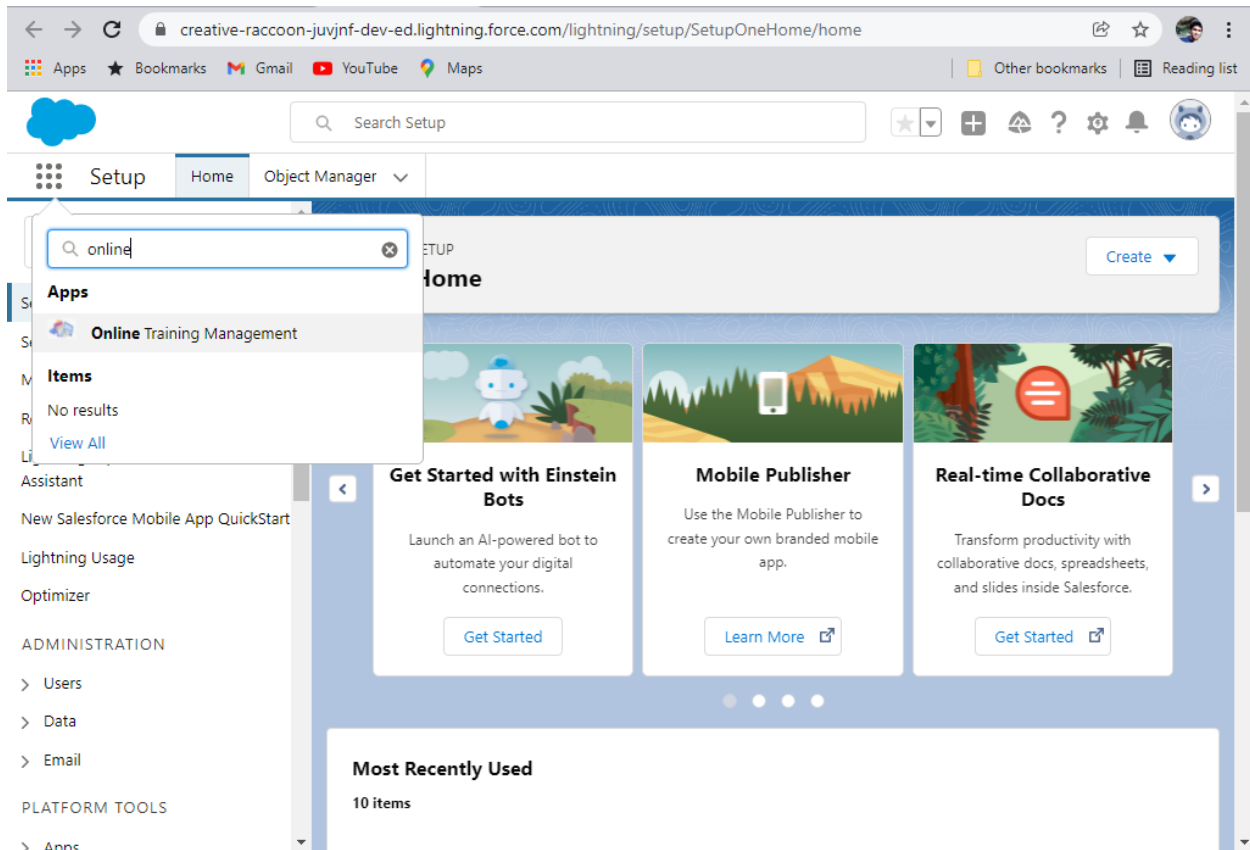
Topic : Creating Application, Objects, Fields, and Validation rules

Milestone / Activities: Created validation rules

Detailed Description: Project aim is to create App for "**Online Training Management**".

This app is created by Lightning App. In available tabs, add Home tab.

In App launcher we find our application, following is the screenshot of app



Create custom Objects either using Schema Builder or Custom Object. The following custom objects are created for the Online training Management are

i) Courses

- Rename Record Name : Course ID
- Data type : Auto Number
- Display Format : C-{000000}
- Starting Number : 1
- Deployment status : Deployed
- Allow Search : Access
- Add Notes and Attachment : Selected

- Add to Navigation Tab : Selected

Snapshot of Course Custom Object :

The screenshot shows the Salesforce Object Manager interface for a custom object named 'Course'. The browser address bar indicates the URL: `creative-raccoon-juvjnf-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01I5g000002NnYS/Details/view`. The page header includes the Salesforce logo, a search bar labeled 'Search Setup', and navigation tabs for 'Setup', 'Home', and 'Object Manager'. The main content area is titled 'SETUP > OBJECT MANAGER Course' and features a left-hand navigation menu with options: 'Details' (selected), 'Fields & Relationships', 'Page Layouts', 'Lightning Record Pages', 'Buttons, Links, and Actions', 'Compact Layouts', 'Field Sets', 'Object Limits', 'Record Types', 'Related Lookup Filters', and 'Search Layouts'. The 'Details' section on the right contains a 'Description' field and a table of object properties:

Property	Value
API Name	Course__c
Custom	<input checked="" type="checkbox"/>
Singular Label	Course
Plural Label	Courses
Enable Reports	<input type="checkbox"/>
Track Activities	<input type="checkbox"/>
Track Field History	<input type="checkbox"/>
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

Buttons for 'Edit' and 'Delete' are located in the top right corner of the details section.

Custom Course Object Custom Fields are

- Course Name as label and with datatype Text.
- Course Duration(In Months) as label with datatype picklist by entering values are(1,2,3,4,5,6)
- Course Catagory as Label with picklist datatype and values are (Cloud Computing, Data Management, Cyber Security)
- Course Fee as label with Currency datatype with length(5,4).
- Course Description as label with Text datatype and length(50)

Validation Rules for Course Object is

- Course Fee should not be negative value and should be less than \$3000.

Snapshot of Course Custom Object Custom Fields:

The screenshot displays the Salesforce Lightning interface for creating a new Course record. The 'Information' tab is active, showing the following fields:

- Course ID:** A text field.
- Owner:** Kadapa Charan (with a 'Change Owner' button).
- * Course Name:** A required text field.
- * Course Duration(In Months):** A required dropdown menu currently set to '--None--'.
- * Course Catagory:** A required dropdown menu currently set to '--None--'.
- * Course Fee:** A required text field.
- Course Description:** A text area.

At the bottom of the form are three buttons: 'Cancel', 'Save & New', and 'Save'.

ii) Trainer

- Rename Record Name : Trainer ID
- Data type : Auto Number
- Display Format : T-{000000}
- Starting Number : 1
- Deployment status : Deployed
- Allow Search : Access
- Add Notes and Attachment : Selected
- Add to Navigation Tab : Selected

Trainer Object Custom Fields are

- Full Name as label with Text datatype conatins length(25).
- Email as both label and datatype and it should not take duplicate mails.
- Mobile as label with Phone datatype with length(13).
- Whatsapp as label with Phone datatype with length(13).
- Date of Birth as label with date datatype.
- Age as label using formula as datatype and return type as Number.
- Experience as label using picklist datatype and values are(0,1,2,3,4)
- LinkedIn Profile as label using URL datatype.

- Expertise as label using text datatype.

Validation Rules for Trainer Object are

- Mobile and Whatsapp should be minimum of 10 digits and maximum of 15 digits.
- Full Name, Phone, Date of Birth cannot be empty.
- Trainer age cannot be less than 25 years.

Snapshot of Trainers Custom Object and its Fields:

The screenshot shows a web browser window with the URL `creative-raccoon-juvjnf-dev-ed.lightning.force.com/lightning/o/Trainer__c/new?count=2&nooverride=1&useRecordTy...`. The browser's address bar and tabs are visible. The main content area shows a 'New Trainer' form. The form is titled 'New Trainer' and is part of the 'Trainers' custom object. It contains several fields: Trainer ID, Owner (Kadapa Charan), Full Name, Email, Date Of Birth, Experience (dropdown), Expertise, LinkedIn, Phone, and Whatsapp Number. The form has 'Cancel', 'Save & New', and 'Save' buttons at the bottom.

iii) Students

- Rename Record Name : Student ID
- Data type : Auto Number
- Display Format : S-{000000}
- Starting Number : 1
- Deployment status : Deployed
- Allow Search : Access
- Add Notes and Attachment : Selected
- Add to Navigation Tab : Selected

Custom Fields for this Object are

- First Name as label with Text datatype contains length(25).
- Last Name as label with Text datatype contains length(25).

- Email as both label and datatype and it should not take duplicate mails.
- Mobile as label with Phone datatype with length(13).
- Whatsapp as label with Phone datatype with length(13).
- Date of Birth as label with date datatype.
- Enrollment Date as label using Auto Generated(date) and it should be locked/read only field.

Validation rules for Student Object are

- Mobile and Whatsapp should be minimum of 10 digits and maximum of 15 digits.
- Last Name, Phone, Date of Birth cannot be empty.
- Trainer age cannot be less than 16 years

Snapshot of Student Custom and its Fields:

The screenshot shows the 'New Student' form in the Salesforce Lightning interface. The form is titled 'New Student' and is part of the 'Students' object. It contains several fields: 'Student ID' (a text field), 'First Name' (a text field), 'Last Name' (a text field), 'Email' (a text field), 'Whatsapp Number' (a text field), 'Enrollment Date' (a date field), 'Owner' (a dropdown menu showing 'Kadapa Charan'), 'Date Of Birth' (a date field), and 'Phone Number' (a text field). The form has a 'Cancel' button, a 'Save & New' button, and a 'Save' button. The background shows the Salesforce Lightning interface with a search bar and a list of students.

iv) Meetings

- Rename Record Name : Meeting ID
- Data type : Auto Number
- Display Format : S-{000000}
- Starting Number : 1
- Deployment status : Deployed
- Allow Search : Access

- Add Notes and Attachment : Selected
- Add to Navigation Tab : Selected

Custom fields for this Object are

- Valid from and valid to as label using date datatype.
- Active as label with checkbox datatype to find whether the meeting is active or not.
- Meeting Url as label with URL datatype to login to the session.

Validation rules:

- Valid from date should be less than Current date.
- Valid To date should be less than valid from.

Snapshot of Meeting Custom Object and its Fields:

The screenshot shows the Salesforce Lightning interface for creating a new meeting. The browser address bar indicates the URL: `creative-raccoon-juvjnf-dev-ed.lightning.force.com/lightning/o/Meeting__c/new?count=4&nooverride=1&useRecord...`. The page title is "Online Training Ma...". The navigation bar includes "Home", "Courses", "Trainers", "Students", and "Meetings". The "Meetings" tab is selected, and the "New Meeting" form is displayed. The form is titled "New Meeting" and is part of the "Meetings" custom object. It includes the following fields:

- Meeting ID**: A text field.
- Valid from**: A date field with a calendar icon.
- Valid upto**: A date field with a calendar icon, currently set to "2/4/2022".
- Meeting Url**: A text field.
- Owner**: A dropdown menu showing "Kadapa Charan".
- Active**: A checkbox.

The form has three buttons at the bottom: "Cancel", "Save & New", and "Save".

Day 3:

Topics: Relationship fields and Validation Rules

Milestone/Activities:

Relationship Fields:

1) Lookup Relationship:

We can say this as One to many fashion. We can create upto 40 fields in an object. It is not a mandatory, if we delete parent field it does not affect to child field.

2) Master-Detail Relationship:

In this field, It allows the parent record to control child record attributes such as sharing and visibility. It is always required field. If we delete parent field automatically child field will be deleted.

iv) Batch Scheduling:

- Rename Record Name : Batch Scheduling ID
- Data type : Auto Number
- Display Format : BE-{000000}
- Starting Number : 1
- Deployment status : Deployed
- Allow Search : Access
- Add Notes and Attachment : Selected
- Add to Navigation Tab : Selected

Custom Fields for this Object are

- Batch ID as label with Autonumber datatype.
- Batch Type as label with Picklist datatype values contains Weekend/Weekday.
- Add lookup fields Course ID to Course, meeting ID to meeting, Trainer ID to Trainer.
- Add two Fields with datatype Date that Start Date and End Date.

v) Course-Trainer Object

- Rename Record Name : Course-Trainer ID
- Data type : Auto Number
- Display Format : CT-{000000}
- Starting Number : 1
- Deployment status : Deployed
- Allow Search : Access

Custom Fields for Course Trainer Object

- Add a Master-Detail Relationships for Trainer and Course with label Trainer ID and Course ID.
- Label as Course-Trainer ID by Auto Number datatype.
- Use Formula datatype to display Course Name and Trainer Name.

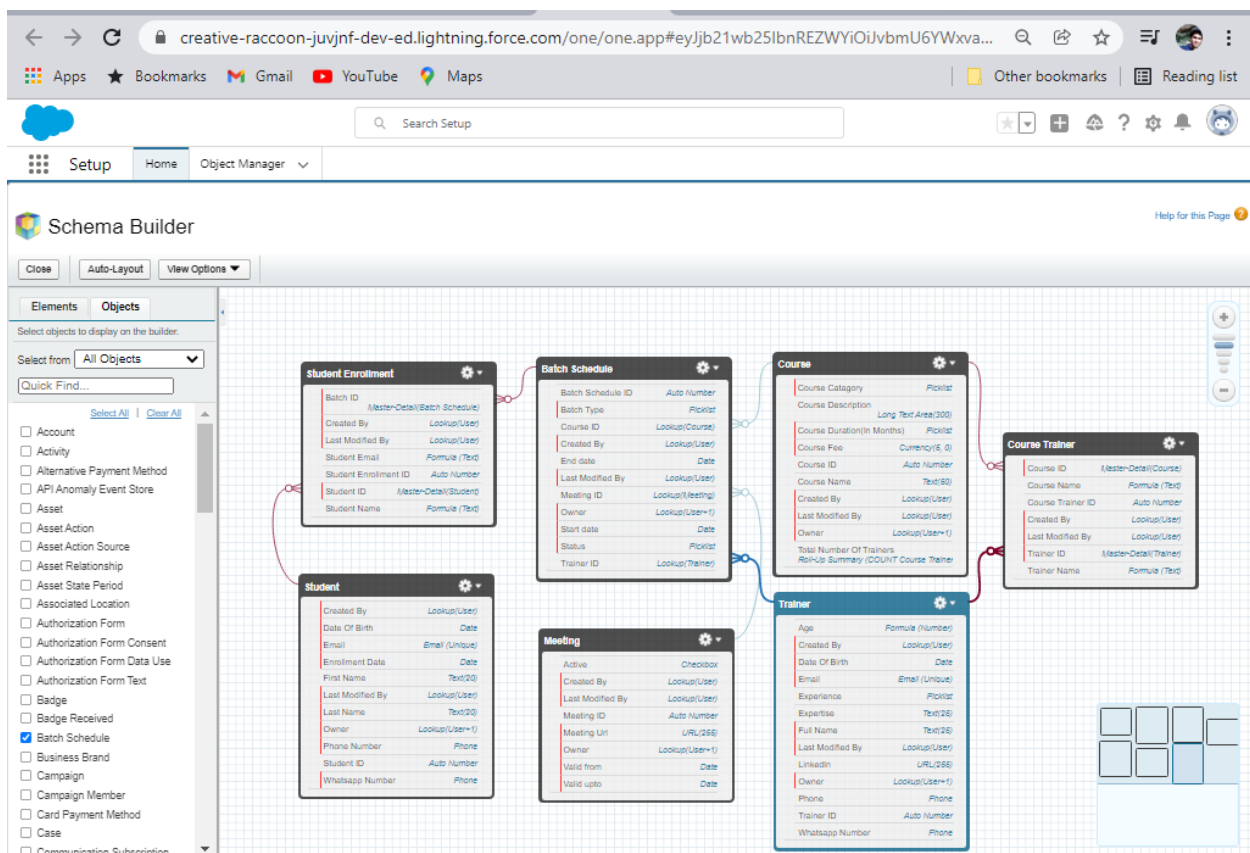
vi) Student Enrollment Object

- Rename Record Name : Student Enrollment ID
- Data type : Auto Number
- Display Format : SE-{000000}
- Starting Number : 1
- Deployment status : Deployed
- Allow Search : Access

Custom Fields are

- Add a Master-Detail Relationship with Batch Schedule and Student and label it as Batch ID and Student ID.
- Label as Student Enrollment ID b Auto Number datatype.
- Use formula datatype to display Student Email and Student Name.

Milestone/Activities screenshot:



Day 4:

Topic : Automations

Milestone/Activities : To reduce the admin efforts salesforce introduces automations which helps to stop doing repetitive tasks. Automations are triggered and executed when the user requirement should be true. This automation works on back end.

Automations are 6 types

The following are GUI based Automation

- 1) Workflow
- 2) Process Builder
- 3) Approval Process
- 4) Flow Automation

The following are Code based Automations

- 5) Trigger
- 6) Apex Schedules

1) Workflow

This works with business logic to automate activities based on some business criteria. When the conditions are true, the automated activity gets executed. Workflow allows you to set various actions based on events or conditions. The actions that can be set include updating a field, creating a task, triggering an email and more. Actions can be triggered based on time of day even.

2) Process builder Automation

Process Builder is an automated Salesforce tool that allows you to control the order of actions or evaluate the criteria for a record. It is a flow Process. Process Builder gives you the ability to use straightforward 'If/Then' logic. In this we can update field, send an email alert, create a record by scheduled time event.

3) Approval Process

Approval Process in salesforce is used for approve records. Records submitted by this user which also called Approver, In Approval Process contains several actions to approve the records, they are

- i) Initial Submission action : It occurs when user first submit the records for approval. It runs automatically. This includes Field update, Email Alert, tasks, and bound messages.
- ii) Final Approval action : It occurs when a record approved from all the approval steps.

This includes Field update, Email Alert, tasks, and bound messages.

iii) Final Rejection action : It occurs when a record rejected by any approval step. This includes Field update, Email Alert, tasks, and bound messages.

iv) Recall action : It occurs when a record recalled after submission for approval. This includes Field update, Email Alert, tasks, and bound messages.

4) Flows

It allows us to build complex business automation by building applications, instead using code. Flows execute logic by call Apex classes. It collects data and perform actions.

Requirement for project:

--> After 1 day of validity of meeting, The Active checkbox automatically be Uncheck using workflow rules.

-->Setting reminder email to meeting owner that 1 day before the valid to date using workflow rule.

--> Sending an email to the batch schedule owner 2 days before the valid to date using workflow rule.

Snapshots fo Milestone/Activities:

Workflow Rules

Workflow Services

- Batch Management
- Monitor Workflow Services

Process Automation

- Workflow Actions
 - Email Alerts
 - Field Updates
 - Outbound Messages
 - Send Actions
 - Tasks
- Workflow Rules

User Interface

Edit Rule Active be uncheck after 1day of validto

Help for this Page

Step 3: Specify Workflow Actions Step 3 of 3

Done

Specify the workflow actions that will be triggered when the rule criteria are met. [See an example](#)

Rule Criteria	TODAY()- Valid_upto__c = 1
Evaluation Criteria	Evaluate the rule when a record is created, and any time it's edited to subsequently meet criteria

Immediate Workflow Actions

Action	Type	Description
Edit Remove	Field Update	Active Be Uncheck

Tasks

Workflow Rules

User Interface

Translation Workbench

Export

Import

Override

Translate

Translation Language Settings

Environments

Monitoring

Time-Based Workflow

Security

Expire All Passwords

Network Access

SETUP

Workflow Rules

Edit Rule Reminder to owner before 1 day

Help for this Page

Step 3: Specify Workflow Actions

Step 3 of 3

Done

Specify the workflow actions that will be triggered when the rule criteria are met. [See an example](#)

Rule Criteria

Valid_upto__c - TODAY () = 1

Evaluation Criteria

Evaluate the rule when a record is created, and any time it's edited to subsequently meet criteria

Immediate Workflow Actions

Action	Type	Description
Edit Remove	Email Alert	Email alert to reminder of owner

Add Workflow Action

SETUP

Workflow Rules

Edit Rule Reminder to owner before 2 days of valid upto date

Help for this Page

Step 3: Specify Workflow Actions

Step 3 of 3

Done

Specify the workflow actions that will be triggered when the rule criteria are met. [See an example](#)

Rule Criteria

Valid_upto__c - TODAY () = 2

Evaluation Criteria

Evaluate the rule when a record is created, and any time it's edited to subsequently meet criteria

Immediate Workflow Actions

Action	Type	Description
Edit Remove	Email Alert	Email reminder to owner before 2 days of valid to

Add Workflow Action

Day 5 :

Topic : Custom Page creation using VisualForce

Milestone/activities : Page Creation using VisualForce

Visualforce :

Visualforce page is a web pages. These are created by unique tag based Mark-up language. It just like HTML, it's use is to access, display and update the organization's data. This will be accessed by URL link.

Visualforce pages can created by using two ways.

One way--> Go to Developer console--> New--> visualforce page.

Second way--> Setup--> Quick find box--> visualforce pages--> New.

Requirement for Project:

--> Create Course and Trainer pages using Custom Controller.

--> Create Student, Meeting and Batch Schedule pages using Standard Controller.

Snapshots of Milestone/ Activities:

Course Page

creative-raccoon-juvjnf-dev-ed--c.visualforce.com/apex/Course

Apps Bookmarks Gmail YouTube Maps Other bookmarks Reading list

New Course

Information

Course Name

Course Fee *

Course Category * --None--

Course Duration(In Months) * --None--

Course Description

Save Record

Trainer Page

creative-raccoon-juvjnf-dev-ed--c.visualforce.com/apex/Trainer

Apps Bookmarks Gmail YouTube Maps Other bookmarks Reading list

New Trainer

Information

Full Name *

Phone

Email *

Date Of Birth * [1/8/2022]

Experience --None--

Expertise

LinkedIn

Whatsapp Number

Save Record

Student Page

New Student

✓ **Success:**
Record Inserted Successfully

Information

First Name

ramesh

Last Name *

katta

Date Of Birth *

12/26/2001

[1/8/2022]

Email *

ramesh23@gmail.com

Enrollment Date *

1/4/2022

[1/8/2022]

Phone Number *

(425) 638-9752

Whatsapp Number *

(425) 638-9752

Save Record

Meeting Page

creative-raccoon-juvjnf-dev-ed--c.visualforce.com/apex/Meeting

Apps Bookmarks Gmail YouTube Maps Other bookmarks Reading list

New Meeting

✓ **Success:**
Record Inserted Successfully

Information

Valid from *

1/19/2022

[1/8/2022]

Valid To *

2/25/2022

[1/8/2022]

Meeting Url *

clay@231gmail.com

Active

☒

Save Record

Batch Schedule Page

creative-raccoon-juvjnf-dev-ed--c.visualforce.com/apex/Batch_Schedule

Apps Bookmarks Gmail YouTube Maps Other bookmarks Reading list

New Batch

Batch Type *

--None--

Start date *

[1/8/2022]

Course ID

Weekday

Meeting ID

Q

Trainer ID

Weekend

Q

Status *

--None--

Save

