

Project Title: **SALESFORCE PROJECT READY**

DAY 3:

Topic: **Batch Apex**

Milestone / Activities: 1) From the developer console create a new apex class and enter the following code.
2) From the developer console create a new apex class and enter the following code.

Detailed Description:

Batch Apex is used to run large jobs (think thousands or millions of records!) that would exceed normal processing limits. Using Batch Apex, you can process records asynchronously in batches (hence the name, “Batch Apex”) to stay within platform limits. If you have a lot of records to process, for example, data cleansing or archiving, Batch Apex is probably your best solution.

Syntax of BatchApex:

```
public class MyBatchClass implements Database.Batchable<sObject> {  
    public (Database.QueryLocator | Iterable<sObject>) start(Database.BatchableContext bc) {  
        // collect the batches of records or objects to be passed to execute  
    }  
    public void execute(Database.BatchableContext bc, List<P> records){  
        // process each batch of records  
    }  
    public void finish(Database.BatchableContext bc){  
        // execute any post-processing operations  
    }  
}
```

1. From the developer console create a new apex class and enter the following code.

Program Implementation:

```
public class ApplicationBatchTest implements Database.Batchable<sObject>{
    //start(), execute(). finish()
    public Integer totalForms = 0; // total no of application form
    public Integer totalConvertedForms = 0; // total no of students
    public Database.QueryLocator start(Database.BatchableContext bc){
        // gathers the data for you
        String applicationQuery = 'select id, Name, Ready_To_Join__c from ApplicationForm__c';
        Return Database.getQueryLocator(applicationQuery);
    }
    public void execute(Database.BatchableContext bc, List<ApplicationForm__c> formList){
        // process the data
        for(ApplicationForm__c af : formList){
            totalForms++;
            if(af.Ready_To_Join__c){
                totalConvertedForms++;
            }
        }
    }
    public void finish(Database.BatchableContext bc){
        // emails ,
        Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
        // address, subject, content( data to sent to admins)
        mail.setSubject(' Application form and student record data as of today ');
        mail.setPlainTextBody(' Total no of application form records are : '+totalForms+ ' out of
which no of students as per today : '+totalConvertedForms);
        String[] emailAddress = new String[]{'your email address'};
        mail.setToAddresses(emailAddress);
        Messaging.sendEmail(new Messaging.SingleEmailMessage[]{ mail } );
    }
}
```

2) From the developer console create a new apex class and enter the following code.

Program Implementation:

```
public class applicationschedule implements Schedulable{  
    public void execute(SchedulableContext sc){  
        ApplicationBatchTest abt = new ApplicationBatchTest();  
        Database.executeBatch(abt, 400); // 200 to 2000  
    }  
}
```

After program implementation, from apex class we need to schedule job and fill the details as per our requirements.

Outcome:

The screenshot displays the Salesforce Developer Console interface. The left sidebar shows the 'Setup' menu with various options like 'Service Setup Assistant', 'Release Updates', and 'Lightning Experience Transition Assistant'. The main area is titled 'Apex Classes' and shows the details for the 'ApplicationBatchTest' class. The class is active, created by 'Divya.Kanchari' on 1/10/2022 at 4:02 AM, and has 0% code coverage. The 'Class Body' tab is selected, showing the following Apex code:

```
1 public class ApplicationBatchTest implements Database.Batchable<Sobject>, Database.Stateful {  
2     public Integer tf=0;  
3     public Integer ts=0;  
4     public Database.QueryLocator start(Database.BatchableContext bc){  
5         String app= 'select id,name,Ready_To_join__c from Application_Form__c';  
6         return Database.getQueryLocator(app);  
7     }  
8     public void execute(Database.BatchableContext bc, List<Application_Form__c> formList){  
9         for(Application_Form__c af: formList){  
10             tf++;  
11             if(af.Ready_to_join__c){  
12                 ts++;  
13             }  
14         }  
15     }  
16 }  
17  
18 public void finish(Database.BatchableContext bc){  
19     Messaging.SingleEmailMessage mail= new Messaging.SingleEmailMessage();  
20     mail.setSubject('Application form and student record data as of today');  
21     mail.setPlainTextBody('total '+tf+');  
22     String[] emailadd = new String[]{'testjohn@gmail.com'};  
23     mail.setToAddresses(emailadd);  
24     Messaging.sendEmail(new Messaging.SingleEmailMessage[] {mail});  
25 }
```

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Apex Classes

applicationschedule

Apex Class Detail

Name: applicationschedule | Edit | Delete | Download | Security | Show Dependencies

Namespace Prefix: | Status: Active

Created By: Divya Kanchi | 1/11/2022, 1:37 AM | Code Coverage: 0% (0/0)

Last Modified By: Divya Kanchi | 1/11/2022, 1:38 AM

Class Body

```
1 public class applicationschedule implements Schedulable{
2
3
4
5     public void execute(SchedulableContext sc){
6         ApplicationBatchTest abt = new ApplicationBatchTest();
7         Database.executeBatch(abt, 400); // 200 to 2000
8     }
9
10
11
12
13
14
15 }
```

Edit | Delete | Download | Security | Show Dependencies

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apex

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Apex Jobs

Click here to go to the new batch jobs page

Monitor the status of all Apex jobs, and optionally, abort jobs that are in progress.

View: All | Create New View

Action	Submitted Date	Job Type	Status	Status Detail	Total Batches	Batches Processed	Failures	Submitted By	Completion Date	Apex Class	Apex Method	Apex Job ID
	1/11/2022, 1:48 AM	Batch Apex	Completed		1	1	0	Kanchi Divya	1/11/2022, 1:48 AM	ApplicationBatchTest		7075g00001J7Bom
	1/11/2022, 1:39 AM	Scheduled Apex	Queued		0	0	0	Kanchi Divya		applicationschedule		7075g00001J7AWz

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