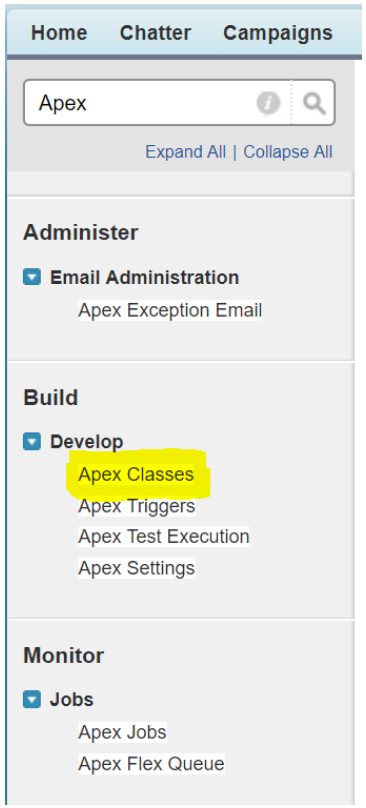
# Sample Apex Class genericQuery

FROM RELEASE 3.34

## Classic

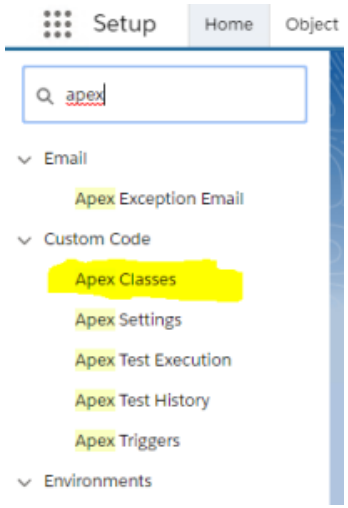
To create a new Apex class, access Setup in SalesForce, and type in "Apex" in the quick search box.

Select "Build ... Develop ... Apex Classes".




## Lightning

Access Setup, and search for "Apex" in the search box.




## Classic and Lightning

We provide two examples here.

The first example queries email Task objects from the Salesforce system:

**Sample Apex genericQuery**

```
@RestResource(urlMapping='/jtelACD/getEmailTasks')
global with sharing class JTELACD_GetEmailTasks {
    // Class to decode the parameters
    public class GenericQueryParams {
        public String Param1;
        public String Param2;
        public String Param3;
        public String Param4;
        public String Query;
    }

    @HttpPost
    global static void doPost() {
        RestRequest req = RestContext.request;
        RestResponse res = RestContext.response;
        res.addHeader('Content-Type', 'application/json');

        // Deserialize the JSON
        GenericQueryParams genericQueryParams = (GenericQueryParams) System.JSON.deserialize( req.requestBody.toString(), GenericQueryParams.class );

        List<Task> tasks = [
            SELECT FIELDS(STANDARD),
                   TYPEOF Who
                       WHEN Lead THEN FirstName, LastName, Email
                       WHEN Contact THEN FirstName, LastName, Email
                   END
            FROM Task
            WHERE Status = 'Inbound Email'
            WITH USER_MODE
            LIMIT 1
        ];

        if (tasks.size() > 0) {
            res.statusCode = 200;
            res.responseBody = Blob.valueOf(JSON.serialize(tasks[0]));
            return;
        }

        res.statusCode = 404;
        res.responseBody = Blob.valueOf('{"error":"No task found"}');
    }
}
```

The second example sets Task objects to "In Progress" in Salesforce:

**Sample Apex genericQuery**

```
@RestResource(urlMapping='/jtelACD/setEmailTaskStatus')
global with sharing class JTELACD_SetEmailTaskStatus {

    // Class to decode the parameters
    public class GenericQueryParams {
        public String Param1;
        public String Param2;
        public String Param3;
        public String Param4;
        public String Query;
    }

    @HttpPost
    global static void doPost() {

        RestRequest req = RestContext.request;
        RestResponse res = RestContext.response;

        res.addHeader('Content-Type', 'application/json');

        // Deserialize the JSON
        GenericQueryParams genericQueryParams = (GenericQueryParams) JSON.deserialize( req.requestBody.toString(), GenericQueryParams.class );

        if (String.isBlank(genericQueryParams.Param1)) {
            res.statusCode = 400;
            res.responseBody = Blob.valueOf('{"error":"Missing task id"}');
            return;
        }

        if (String.isBlank(genericQueryParams.Param2)) {
            res.statusCode = 400;
            res.responseBody = Blob.valueOf('{"error":"Missing status"}');
            return;
        }

        List<Task> tasks = [
            SELECT FIELDS(STANDARD)
            FROM Task
            WHERE Id = :genericQueryParams.Param1
            LIMIT 1
        ];

        if (tasks.isEmpty()) {
            res.statusCode = 404;
            res.responseBody = Blob.valueOf('{"error":"Task not found"}');
            return;
        }
```

```
        Task task = tasks[0];
        task.Status = genericQueryParams.Param2;

        update task;

        res.statusCode = 200;
        res.responseBody = Blob.valueOf(JSON.serialize(task));
    }
}
```

# CURL Test

First of all, obtain an OAUTH Token, see Testing with CURL.

The following CURL command can be used to test this API:

**CURL - genericQuery Test**

```
curl --silent -i -X POST -d '{ "Param1" : "Example Param 1", "Param2" : "Example Param 2", "Param3" : "Example Param 3", "Param4" : "Example Param 4", "Query" :
"Example Query" }' --header "Content-Type: application/json" --header "Authorization: Bearer <OAUTH_TOKEN>" --header "Connection: Close"
"https://<SALES_FORCE_INSTANCE_URL>/services/apexrest/jtelACD/genericQuery"
```