**Problem statement**: Batch Apex jobs in salesforce that run daily to process daily records with certain condition,i.e; that has query like createdDate=today etc, gets affected if the batch job fails. Since such records are not addressed in the next bath job run. We want a solution where in if batch fails, the next run should process records b/w last successful run and today’s date.

**Solution Design:**

* In Batch class constructor or start method, set a static variable say 'strJobStartTime' to Current date time.
* Add Try-Catch block in Execute method of all batch jobs and in case of failure then store the error message (possibly ex.getMessage() + ex.getStackTrace()) in a static variable say 'strFailureMessage'
* In Finish method, if static variable 'strFailureMessage' != null then update the relevant record in custom settings for this job to set ‘CAP\_CC\_Last\_Failure\_Message\_\_c’ = strFailureMessage
* In Finish method, if static variable ‘strFailureMessage' == null then update the relevant record in custom settings for this job to set ‘CAP\_CC\_Last\_Successful\_Run\_On\_\_c’ = 'strJobStartTime’. //success scenarios
* In start method query or execute method, if there is a condition on dates (say placements created today) then it should be modified to placements created between CAP\_CC\_Last\_Successful\_Run\_On\_\_c and Today. **Note: Discuss this change with the designer to assess the impact before making the changes**

Custom metadata details:

* In Custom Setting 'Schedule Batch Job' and create below new fields:

|  |  |  |
| --- | --- | --- |
| **Label** | **Data type** | **Mandatory** |
| Frequency Type | Picklist  (Minutes (Default),  Hours,  Daily,  Monthly) | No |
| Job Description | Text Area(255) | No |
| Job Interval | Number(18, 0) | No |
| Job Start Time | Datetime | No |