

Field Session: Consistency Checker

*Proposed for Colorado School of Mines Field Session in Fall, 2023
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About Salesforce

Salesforce unites your marketing, sales, commerce, service, and IT teams from anywhere with Customer 360 — one integrated CRM platform that powers our entire suite of connected apps. With Customer 360, you can focus your employees on what's important right now: stabilizing your business, reopening, and getting back to delivering exceptional customer experiences.

The Project

At Salesforce, we use the Team as a center-point for a lot of development strategy and ownership, leading to many Team references throughout the code-base. As people move around, teams change, initiatives come and go, some of these team references get stale and outdated. In this project, we're looking to create some automation that finds these anomalies and flags the most-appropriate team or person about the issue.

In this project, we're looking for some python scripts that can be ran be automation (CircleCI, GH actions, one-off runs, etc), which checks our project tracker in a Salesforce org (Agile Accelerator) for validity, and opens up a work-item for the closest related team/user about the anomaly. The automation part here is critical to reducing manual work, so interacting with git & github APIs will be very beneficial. Interacting with a Salesforce org will require learning some REST fundamentals and Salesforce APIs like SOjects and SOQL. The code repositories we need to crawl come in all shapes, sizes, and formats, so expect to get a broad understanding of many formats, such as JSON, YAML, and XML, as well as methods to efficiently crawl a directory structure.

Here's an example JSON snippet that contains a team ID we're looking to ensure is an active team:

```
{
  "feature_definition": {
    "name": "feature1",
    "service_name": "coreapp",
    "tier": 2,
    "ownership": {
      "team_id": "a00B00000000aabbHIAQ"
    },
    ...
  }
}
```

Some other files may mention people by name, as seen here:

```
{
  "validapprovers": [
    "Daniel",
    "Matt",
    "Denise"
    ....
  ]
}
```

Technologies

- python
- SOQL
- yaml
- json
- git/github

The Team

- Members: 2 - 3, 4 weeks
- Each team member will be asked to sign an NDA with Salesforce
- Full remote via Google Meet