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Obfuscator Task - Data Redaction and Obfuscation Description
Redaction Description:

This project aims to create an obfuscation application capable of concealing production data in the Bank project. The primary goal is to maintain the confidentiality of Personally Identifiable Information (PII) while retaining the usability of the data for testing.

Fields Obfuscated

in this project, certain fields are obfuscated to protect sensitive personally identifiable information (PII). The main fields obfuscated include

- *Social Security Number (SSN):* Obfuscated by replacing some of the last digits with asterisks (***--1234 becomes ***--****).

Obfuscation Methods:

The obfuscation methods employed are based on principles of masking and substitution. An example of the obfuscation method used is:

```
private String maskSSN(String ssn) {
    return "***-**-" + ssn.substring(7);
}
xs
```

Special Preparations:

In addition to running the "gradle obfuscator" and "gradle test" commands, there are some additional steps to consider :

- Run the Integration Test with the command ./gradlew test after executing the obfuscator. This is to ensure that the data remains valid after the obfuscation process.
- After obfuscation is performed, the next step is to ensure that the binary check_pii corresponds to the operating system.

Challenges Faced:

Sometimes, further iteration in the obfuscation method may be required to address all potential exposures of PII. If there are issues related to data alignment in PII, it is necessary to inspect and rectify the program in the obfuscate() method