

University of Washington Bothell

CSS 436: Cloud Computing

Program 3: Backup/Restore

Purpose

This exercise will introduce the student to using cloud storage programmable APIs.

Problem Statement

Create an application which recursively traverses the files of a directory and makes a backup to the cloud. The program should also be able to restore from the cloud as well. You will use the cloud storage APIs to do this.

Problem Statement Details

- **Examples:**

- **% backup** *directory-name*

- This will make a backup to the cloud of the specified directory to either Azure or AWS. The directory structure of the files should be respected and ideally visible in the cloud.

- **% restore** *directory-name*

- This will restore from the cloud the specified directory from either Azure or AWS. The directory structure of the files should be respected.

- You can use Java, C# or Python.
- The grader will test using their Azure or AWS account and a local file system on either windows or Linux. Your backup can work on either Windows or Linux, it does not need to work on both.
- If a directory or file already exists on the cloud and it has not been modified locally since it was backed up, then your backup program should not move the data needlessly.
- Given the varieties of possibilities a key part of this will be clear instructions given to the grader on how to get the application to work.
 - Assume you are releasing an open-source project that can be used by the grader.
 - You will need to be specific about where keys and such need to be placed.

Turn In

A **.zip file** including:

- VERY CLEAR INSTRUCTIONS on how to
 - Build and execute **backup**

- Build and execute **restore**
 - Simplicity and clarity of instructions will be part of the grade
- A short document which describes the arch and design of program