

University of Washington Bothell

CSS 490: Cloud Computing

Program 3: Backup

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. You will use the cloud storage APIs to do this.

Problem Statement Details

- **Example:**

- **% Backup**

- This will make a backup to the cloud of the current directory and sub-directories to 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 need work on either Windows or Linux. A cloud object store should be utilized.
- 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.
- As bandwidth is expensive your program should minimize the amount of data that needs to be moved. For instance, if a directory is backed up a second time only modified files should be updated.

Turn In

A **.zip file** which the module named:

- VERY CLEAR INSTRUCTIONS on how to
 - Build Backup
 - Execute Backup
- Simplicity and clarity of instructions will be part of the grade
- A pre-built version of the application
- All code and clear instructions or Makefile on how to build the application
- A short document which describes the arch and design of program. The document should also include the test plan of how you tested the backup facility.