

**Computer Science Department
San Francisco State University
CSC 340
Spring 2016**

Assignment 7- All the Things

Due Date

Wednesday, May 4, at midnight.

Overview

The purpose of this project is to leverage the template **Tree** class we created to allow our budget application to record many months of budget.

Submission

See the submission guidelines posted on iLearn.

Requirements

1. Implement the **EnvelopeBox** class that will use the template **Tree** to store a month of **BudgetEnvelopes**.
 - 1.1. See the UML for required members and methods
 - 1.2. Extra Credit: Carry a previous month's amounts over to a new month when the new month's **EnvelopeBox** is created (see the EC constructor).
2. Updated the **BudgetEnvelope** class to include the overloaded operators needed to save and display:
 - 2.1. Overloaded **ofstream << operator** (save to file)
The format to be written to the file is:
ENVELOPE_ID ENVELOPE_NAME AMOUNT
 - 2.2. Overloaded **ifstream >> operator** (read from file)
 - 2.3. Overloaded **ostream << operator** (output to stdout)
The output should be:
[ENVELOPE_ID] ENVELOPE_NAME: AMOUNT
3. Write a test driver

Resources

The makefile for this assignment can be found at <https://gist.github.com/jrob8577/2aa923ae477ef63debd3cc53c4fb027> (the same as for assignment 5 - template classes are only included via header include, and you may use main.cpp to write your driver).

Appendix A: UML Diagrams

