

CSE 564: Software Design

Fall 2015

Team Assignment 1

In this assignment, you are required to design and build a software program that will take input from the user, calculate some values and present the results in a flexible visual format.

Your software will calculate the maximum cube dimensions that can be made from one long piece of wood.

- The program will allow the user the option to enter the size in metric units (centimeters/meters) or American units (inches/yards).
- The program will calculate the maximum possible cube that can be made with the given piece.
- The program will display the cube side length as well as it's volume in text form.
- The software will also display a drawing of the resultant cube, showing the dimensions of the cube side as well as the volume.
- The user can switch the input as well as the output values between the two measurement systems at will. The program will offer flexibility of transforming between the two standards (American and Metric) for both the input and the output.

Make any necessary assumptions if needed.