

Computer Science I

CMPE/CSCI 1370 - 01

Today

Time	Topic
9:30 - 9:45	Design recipe in C++
9:45 - 10:00	Combining templates / simplifying conditionals review
10:00 - 10:30	In-class exercises

Design recipe

Design recipe

0. Read problem statement, write wishlist
1. Data definitions
2. Signature, purpose, stub
3. Examples
4. Template
5. Function body
6. Test and debug

Composing templates

function accepts multiple parameters

- Data definitions + single-parameter templates
- Combine templates
- Simplify cond expression

Composing templates

- Check if available for office hours based on day of the week and hour of the day
- Mixing primary colors
- Determine whether an attempted charge on a debit card is successful based on whether the account is suspended or not, and account balance is sufficient for purchase price
- Calculate insurance premium from gender, age, and number of tickets on record
- Diagnose a patient based on temperature, and whether or not he has either (or more) of: a stuffy nose, rashes, pain in the ear

Simplifying cond expressions

- cond where all answers are the same: eliminate the cond
- multiple conditions need to be true to produce an answer: and
- multiple clauses have the same answer: or

Exercises!

Attendance!

<http://bit.ly/1370-1rollcall>