

CSc 210: Software Development
Section 12: Program Decomposition
November 20th, 2017

In class we have been discussing how to break down and analyze a problem we are given. This is a critical step to understand how to program a solution to a problem. Today, we will examine the methodology used in class and apply it to different situations.

Exercise I: Read the Spec

Under today's section on the course site, you will find a link to a problem specification from another class here at UofA. Download this spec. Carefully read through it and try to understand the problem.

Using the ideas from class, analyze this problem, ask clarifying questions, decompose it, and come up with a rough idea of what the system would look like.

Exercise II: Restaurant System

Fast forward five years, you have graduated from UofA and are working at a software contracting firm making the big bucks. You are assigned to create a restaurant management system for a small restaurant chain in New Mexico called "Los Pollos Hermanos." They give you the following description of how they want the system to behave:

"Everything is so hard to keep track of in our restaurants. The customers orders always get mixed up, when people are waiting to be seated we call them in in the wrong order, and we always bring the food to the wrong table. Customers always get really mad and its bad for business. Additionally, we still keep physical copies of all our receipts and frankly I have lost track of some. We just need a system that helps us solve these issues!"

Using the ideas from class, analyze this problem, ask clarifying questions, decompose it, and come up with a rough idea of what the system would look like.

