

# Problem Decomposition Revisited (Again): Object Oriented Design

There's more...?



# Outline

- **Object Oriented Design**
  - Identify the Classes
  - Identify what Information each Class Needs
  - Identify what each Class Needs to Do



# Software Development Life Cycle

1. Understand the Problem = Requirements Analysis
2. Work out the Logic = Design
3. Convert it to Code = Implementation
4. Test/Debug
5. Maintenance

Today we will talk about requirements analysis and object oriented design.

# What are the Nouns?

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- You have been hired to automate bank operations for a local credit union. They have told you that their business operates as follows:
  - Customers can open accounts. They can make deposits and withdrawals and can close accounts also. On some accounts interest needs to be added, and sometimes fees are deducted.
  - All employees can help customers with deposits and withdrawals. Only some employees are authorized to open and close accounts.

# Summary

- **Object Oriented Design**

- Identify the classes
- Identify what information each class needs
- Identify what each class needs to do
- Identify use cases
- Define the API
- Define the instance variables
- Finally – write some code!

