# Design an Accounting System

The goal of this exercise is to design the classes and methods **(Models and Services)** required for an invoicing system for IT companies. Following is the requirements

## Design Classes, Properties, and Methods for the following requirements (No code is required here)

1. Company has multiple customers
2. Customers have one or more projects that are being executed by the company
3. Each project can be run in one of two billing modes
   1. Time & Material – Hours are logged by people working on the project and client is billed based on a fixed rate by the hour
   2. Milestone Based – Project has milestones and clients are billed a fixed amount when a milestone is completed
4. System should have the ability to generate invoices for customers and email them to customers at the end of every month

## Write code in one of the classes to meet the following requirement

1. Once a month, a file is uploaded into the system that has all the bank transactions. These include payments made by customers. Customers may pay all charges for multiple projects in one payment or may pay per project. The system must determine matching amounts and display it to the company’s accountant so he can easily tally payments and invoices. Following are the fields in the uploaded sheet.
   1. Date
   2. Type (Debit/Credit)
   3. Amount