# CIS18A Course Project Part 1: Documentation and Program

In Project Part 1, you will create a program for a small business The program should incorporate all required elements as listed and described in Chapters 1 – 9. This program is intended to improve business process and operation flow. Refer to the below information and requirement.

## Program Documentation and Pseudocode: 100 points

1. Provide you company name (software company name).
2. Create a pseudocode for the program.

See tutorials:

<https://youtu.be/D0qfR606tVo>

<https://youtu.be/PwGA4Lm8zuE>

1. Create a short documentation describing the program purpose, function, and objectives. Minimum a page is required.

This document should explain the purpose of your program, targeted audience/type of users, and business functions.

* Who is it for?
* What is its purpose?
* What is its business function?
* What is its technical function?

1. Select a business type.

Business Types:

Select a type of business. \*\* ATM, bank programs will not be accepted as they are available in books or websites.

* Restaurant (program for customers, server, chefs, staff operation).
* Beauty salon/spa (program for customers or staff operation).
* Coffee shop (program for customers, baristas, or staff operation).
* Clothing retailer (program for customers, clerks, or staff operation).
* Health food retailer (program for customers, clerks, or staff operation).
* Gym with training programs (program for members, trainers or staff operation).
* Office supply retailer (program for customers, clerks, or staff operation).
* Furniture retailer (program for customers, clerks, or staff operation).
* Shoes retailer (program for customers, clerks, or staff operation).
* Mailing and shipping center (program for customers, clerks or staff operation).
* Pet grooming service provider (program for clients, groomers or staff operation).
* Pet supply retailer (program for customers, clerks or staff operation).
* Smartphone prepaid retailer (program for customers, clerks or staff operation).
* Urgent care provider (program for patients, doctors, nurses or staff operation).
* Pharmacy (program for patients, pharmacists, clerks or staff operation).
* Home repair/construction provider (program for clients, worker, or staff operation).
* Medical marijuana dispensary (program for patients, clerks, or staff operation).
* Business and resident cleaning service provider (program for clients or staff).
* Car wash (program for customers or staff).
* Gas station (program for customer, clerks, or staff operation).
* Nursery (program for customer, clerks or staff operation).
* Hardware store (program for customer, clerks or staff operation).
* Bakery (program for customer, bakers or staff operation).
* Ice-cream parlor (program for customer, clerks or staff operation).
* Nutrition center (program for customer, clerks or staff operation).
* Sporting goods retailer (program for customer, clerks or staff operation).

1. Write a Java program for the selected business that fulfill the below requirements, then test the program prior to submission.

## Program Requirements: You will graded on these requirements (200 points)

* **Comments: Document your code, program purpose (15 points)**
* **Appropriate data type (int, double, long, float…). (10 points)**
* **Variables: name and use your variables accordingly, reference the variables, include in blocks. (10 points)**
* **Switch statements (10 points):**
* **Adequate "Options" menu and selection.**
* **Loops (If, If-else, While, Do-while, Range-based, for-loop) (20 points).**
* **Operators: order precedence, functionality in arithmetic, logical and all parameters (20 points)**
* **Class: incorporate at least 2 classes in the program (10 points).**
* **Objects and methods: create objects, constructor and use methods to access these objects. (30 points).**
* **Arrays: include an array, 1 or more dimension is acceptable. (20 points).**
* **Control access to class members: (10 points)**
* **Inheritance: allows one class to incorporate another class into its declaration using inheritance. (10 point)**
* **Import packages: Include packages to streamline development. (10 points)**
* **Implement interfaces: at least more than one interface in the program (20 points).**
* **Efficiency and performance: consider design concepts into the program (5 points).**

**Total: 200 points**

Project Part 1 submission: Documentation (pdf or .docx) and program file (.java)