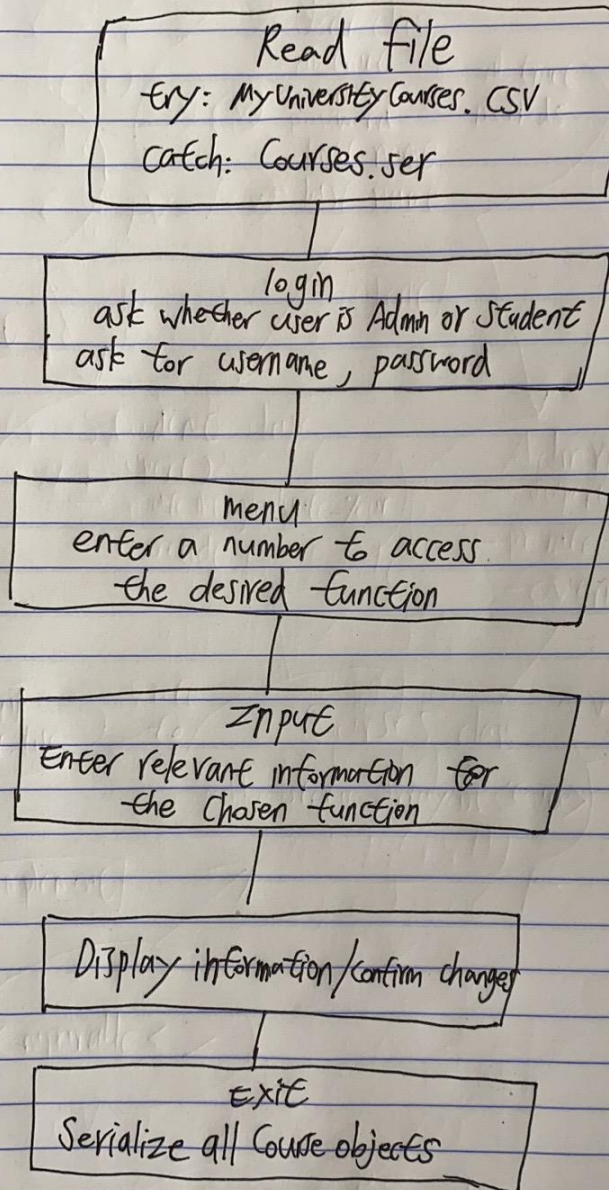


CSR class main() workflow:





Student class and Admin class inherit three abstract methods and four variables (username, password, first name, last name) from the abstract class User. A Student object is also a User object and Student object thanks to polymorphism. Student and Admin override the three inherited methods by implementing them (view\_all(), student\_report(), exit()). The Course class has two overloaded constructors, one requires all the information types as in the CSV file but the other allows an empty course without any students in it. Student, Admin, and Course all have some private properties (e.g. graduate\_year, ArrayList <Student> full-roster, course name) that can only be reached through public methods, embodying encapsulation. ArrayList is used throughout the system which is an abstract data type. Its behavior is defined but its implementation is not.