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Project 3
Flowchart Submission

```
        START
          |
          v
   Ask user to enter
      First Name
          |
          v
   User Enters First Name
          |
          v
   Ask User to enter
      last name
          |
          v
   User enters last name
          |
          v
   Ask user to enter
    student ID number
          |
          v
   user enters student ID
        number
          |
          v
        MENU
```

```
                          START SELECT
                            CLASSES
                               │
          ┌────────────────────┼
          │                    ▼
          │            ┌──────────────┐
          │            │ ask user for │
          │            │  number of   │
          │            │   classes    │
          │            └──────────────┘
          │                    │
          │                    ▼
          │            ┌──────────────┐
          │            │  User input  │
          │            │  number of   │
          │            │   classes    │
          │            └──────────────┘
          │                    │
          │                    ▼
          │              ╱────────────╲
          │             ╱  number of   ╲
     YES  └───────────  ╲ classes > 3 OR╱
                         ╲  number of  ╱
                          ╲classes < 1╱
                               │
                              NO
                               │
                               ▼
              YES        ╱────────────╲        NO
         ┌─────────────  ╲  number of  ╱  ─────────────┐
         │                ╲classes == 1╱                │
         ▼                 ╲──────────╱                 ▼
  ┌──────────────┐                         YES    ╱────────────╲    NO
  │ ask user for │                   ┌──────────  ╲  number of  ╱  ────────┐
  │ first class  │                   │             ╲classes == 2╱          │
  └──────────────┘                   │              ╲──────────╱           │
         │                           ▼                              YES ╱────────────╲
         ▼                    ┌──────────────┐               ┌───────── ╲  number of  ╱
  ┌──────────────┐            │ ask user for │               │          ╲classes == 3╱
  │  User input  │            │  first and   │               │           ╲──────────╱
  │ first class  │            │    second    │               ▼
  └──────────────┘            │   classes    │        ┌──────────────┐
         │                    └──────────────┘        │ ask user for │
         │                           │                │ first second │
         │                           ▼                │  and third   │
         │                    ┌──────────────┐        │   classes    │
         │                    │  User input  │        └──────────────┘
         │                    │  first and   │               │
         │                    │    second    │               ▼
         │                    │   classes    │        ┌──────────────┐
         │                    └──────────────┘        │  User input  │
         │                           │                │ first second │
         │                           │                │  and third   │
         │                           │                │   classes    │
         │                           │                └──────────────┘
         │                           │                       │
         └───────────────┐           │           ┌───────────┘
                         ▼           ▼           ▼
                     ┌──────────────────────────┐
                     │   END SELECT CLASSES     │
                     └──────────────────────────┘
```

```
                    ┌─────────────────────┐
                    │  START SCHOLARSHIP  │
                    └─────────────────────┘
                              │
                              ▼
                    ╱─────────────────────╲
                    │   Ask user for       │
                    │   scholarship        │
                    │   type               │
                    ╲─────────────────────╱
                              │
                              ▼
                    ╱─────────────────────╲
                    │   User enters        │
                    │   scholarship        │
                    │   type               │
                    ╲─────────────────────╱
                              │
                              ▼
                        ╱───────────╲
                       │ Scholarship │          NO
                       │ type equal  │──────────────┐
                       │ to Academic │
                       │ or Foundation│
                        ╲───────────╱
                          │ YES
                          ▼
                    ╱─────────────────────╲
                    │   Ask user to        │
                    │   enter              │
                    │   scholarhsip        │
                    │   amount             │
                    ╲─────────────────────╱
                              │
                              ▼
                    ╱─────────────────────╲
                    │   User enters        │
                    │   scholarship        │
                    │   amount             │
                    ╲─────────────────────╱
                              │
                              ▼
                        ╱───────────╲       YES
                       │ Scholarship │──────────────┐
                       │ amount < 0  │
                        ╲───────────╱
                          │ NO
                          ▼
                    ┌─────────────────────┐
                    │  END SCHOLARSHIP    │
                    └─────────────────────┘
```

```
                    START VIEW
                     SCHEDULE


                    Ask user if
                   they want to
                        view
                    schedule or
                       print
                     schedule


                                              NO
               schedule Option
                  == 1 OR 2


         YES
                        case
                   scheduleOption

         1                          2

     OUTPUT formated          Output schedule
      schedule to user.        to 'Schedule.txt'
                                     file.


                    END VIEW
                    SCHEDULE
```

```
                    START VIEW BILL

                    Ask user if
                    they want to
                    view their bill
                    or print their
                    bill

                    User enters
                    billChoice

                    billChoice == 1          NO
                    OR 2

                                YES

                    Calculate
                    TotalCreditHours
                    equals course hours
                    added together.

                    Calculate
                    totalTuition equals
                    totalCreditHours
                    times
                    tuitionPerHour(263.
                    00).

                    Calculate totalDue
                    equals totalTuition
                    plus fees minus
                    scholarship.

                    case billOption

         1                            2

    OUTPUT formated              Output
    bill to user.                billto  'Bill.txt' file.

                    END VIEW BILL
```

```
                                                                    ┌──────────┐
   ╭──────────────╮                                                 │    EE    │
   │ START PRINT  │                                                 ╰────┬─────╯
   │   DETAILS    │                                                      │
   ╰──────┬───────╯                                                      ▼
          │                                                         ╱──────────╲
          │                                                        ╱    case    ╲
          ▼                                                        ╲ detailChoice╱
    ╱─────────────╲                                                 ╲──────────╱
   ╱  Ask user if  ╲                                                 │        │
  │  they want to   │                                           1 ┌──┘        └──┐ 2
  │  view or print  │                                             ▼              ▼
   ╲    details    ╱                                      ┌────────────────┐ ┌────────────────┐
    ╲─────────────╱                                       │ OUTPUT formated│ │ Output details │
          │                                               │ details to user│ │ to 'Details.txt'│
          ▼                                               │(Schedule and Bill)│ │ file.          │
    ╱─────────────╲                                       │                │ │(Schedule and Bill)│
   ╱  User enters   ╲                                     └────────┬───────┘ └───────┬────────┘
  │   detailChoice   │                                            │                 │
   ╲               ╱                                              └────────┬────────┘
    ╲─────────────╱                                                        ▼
          │                                                      ╭──────────────────╮
          ▼                                                      │ END PRINT DETAILS│
     ╱─────────╲                                                 ╰──────────────────╯
    ╱ detailChoice==1╲      NO
   ◇      OR 2       ◇──────────┐
    ╲               ╱
     ╲─────────╱
          │ YES
          ▼
   ┌─────────────┐
   │  Calculate  │
   │TotalCreditHours│
   │equals course hours│
   │added together.│
   └──────┬──────┘
          ▼
   ┌─────────────┐
   │  Calculate  │
   │ totalTuition equals│
   │ totalCreditHours│
   │    times    │
   │tuitionPerHour(263.│
   │    00).     │
   └──────┬──────┘
          ▼                                                 ╭──────────────╮
   ┌─────────────┐                                          │  START EXIT  │
   │Calculate totalDue│                                     ╰──────┬───────╯
   │equals totalTuition│                                           │
   │ plus fees minus│                                              ▼
   │  scholarship. │                                          ╭──────────╮
   └──────┬──────┘                                            │   END    │
          ▼                                                   ╰──────────╯
       ╭──────╮
       │  EE  │
       ╰──────╯
```