# CISY 2320: BUSINESS APPLICATIONS PROGRAMMING

## PROGRAMMING ASSIGNMENT 4: MAR/15/2018

**Program description**: this assignment is about creating a comprehensive GUI for your second assignment program which allows users to:

- Enter new business details by filling in the fields and text areas in the program's GUI
- Showing statistics graphically using bar charts to compare different businesses
- Highlighting the most profitable business and displaying its 100% ROI year
- Displaying all the business details, that used to be displayed in assignment 2, inside a text area in case the user wants not only view the statistics but also to copy some of the information
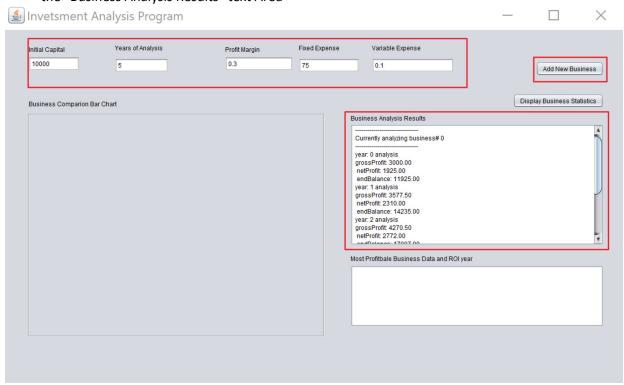
**Assignment objectives**: to practice all the GUI concepts, classes and methods learned so far.

**Assignment due date**: this assignment is 3 weeks long with 3 days (with penalty) grace period. It's due midnight on April.5th and no more assignments to be accepted after April.8th midnight which is typically a day before your final exam.
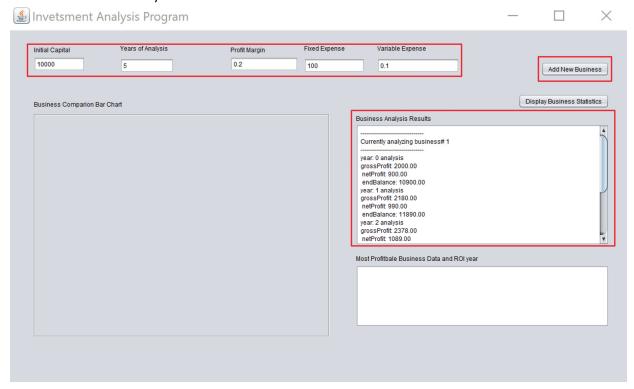
**Assignment special notes:** my implementation is tentative and primarily provided to give you an idea of how the program could work. You are free to choose the GUI design, components, layout and internal program logic you deem appropriate just always make sure that you meet the assignment description and objectives mentioned above; as this is what TA will be marking your submission against.

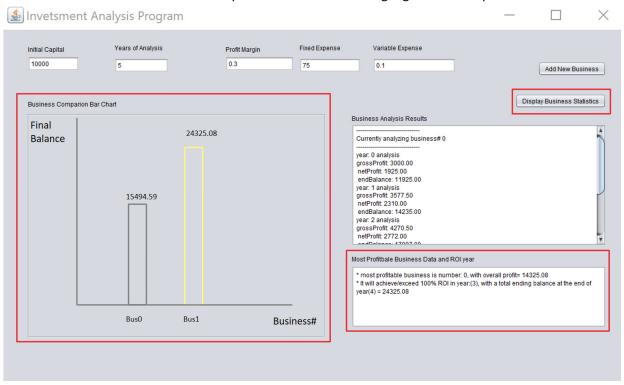**Program components layout and operation**: as shown in the next page:

- After entering Bus0 information, click "Add New Business" button to display the annual analysis in the "Business Analysis Results" text Area



- After entering Bus1 information, click "Add New Business" button to display its annual analysis in the "Business Analysis Results" text Area

- Once all businesses data has been entered, click the "Display Business Statistics" button to show the most profitable business with its 100% ROI year in the "Most Profitable Business Data and ROI year" text area, simultaneously it displays the ending balances or total profits of different businesses in the "Business Comparison Bar Chart" and highlight the most profitable one.



**Important**: assignments are to be coded individually and submitted on time. Penalties for late submissions are listed in the course outline. Copied assignments will receive zero regardless of who copied from who!