

COMP 1112

Final Project This project is worth 10% of your final grade Due Date: Thursday, April 10, 5pm ET

Introduction

The purpose of this project is to demonstrate your ability to integrate the material you have studied during the COMP1112 course into a practical document automation application based upon a fabricated or real office activity that is normally completed "manually" – the final solution must be based **ONLY** on the concepts studied during the COMP1112 course.

The application you submit must be original work written by you. The work must be written for this course and not work that was completed for another course or for this course if you are repeating the course.

Students are encouraged to leverage this project to make industry connections and demonstrate their skills. A typical approach would be to approach companies and organizations and ask if they are currently using a manual approach to accomplish any repetitive tasks involving spreadsheets, Word documents, Google docs, web resources or PDF's. The student can then offer to create a solution at no cost to the company.

Here are some examples of past projects completed by students:

- An office that must produce a report each quarter that requires manually pulling data from multiple spreadsheets and analysing the data to determine if and how it should be included in the report For example counting the number of days a project is open etc.
- An office must pull data from multiple spreadsheets to determine a client's eligibility for a specific discount.
- An office needs to pull data from multiple spreadsheets to determine if an employee is eligible for a promotion.
- An office needs to pull data from multiple spreadsheets to determine if a student is eligible to be promoted to the next term.
- An office needs to review the data from a large spreadsheet to ensure that the data is clean and does not contain information that does not make sense. A report can be generated flagging those rows that need to be manually fixed, while other data can be corrected automatically, such as an email address in the wrong format.
- An office needs to capture client's information and write it to a spreadsheet, but before writing to the spreadsheet input validation is used to ensure all data is correct.
- An office needs to scour the internet to check competitor pricing on certain products and build a report showing products which are on sale at a competitor's location.

• AN office needs to search thousands of pages of information looking for ant text that fits into a particular pattern for investigative purposes.

Specific Deliverables

Due: Thursday, April 10, 5pm ET

- 1 A description of how the application works. (minimum 200 words)
- 2 A copy of the code in text form, black letters on white background. (**NOT** a screen shot of the code)
- 3 A 2–3-minute <u>narrated</u>, video demonstrating the application working, <u>NOT</u> you explaining the code.

Items 1 and 2 must be placed in the SAME pdf and uploaded to Blackboard Turnitin Link. Item 3 is uploaded to a specific link on blackboard.

Please pay attention to where you are uploading and what. Uploading the wrong item to the wrong place may not be able to be undone and thus full grades may not be awarded.

Important guidelines:

- Use only concepts found in the lecture slides.
- If your application is unique, it must not already exist online. However, if you choose to write a ubiquitous application your code must be unique.
- Your code must represent a single application, not a set of simple multiple applications.
- The instructor reserves the right to schedule an oral review if your submission appears, in any way, to be written or influenced by a third party, the purpose of the oral review is to confirm that you are the author of your submission. Authorship does not mean that you simply understand the code, authorship means that you understand the design decisions behind the code. Failure to demonstrate authorship of your submitted code will result in an academic misconduct which in turn will result in a zero in the project or a zero in the course.
- Plagiarism is the presentation of someone else's work, or AI generated code, as your own, plagiarised code will result in an academic misconduct and a zero in the project or course.
- If a student submits advanced code or code similar to that of another student or code that does not adhere to course coding standards an oral review may be scheduled to validate authorship of the code. If the oral review is not successful a zero will be awarded on the project and an academic misconduct will be filed resulting in a possible zero in the project or course.
- The assignment is to be completed individually.
- Students who score poorly in the midterm and/or final exam and submit a complex project will automatically be subject to an oral review to prove authorship.
- Sharing the content of your submission with other students is prohibited; students who submit similar code may be subject to an academic misconduct.
- Do not upload your code to a public repository.
- No grades will be assigned for filler code, that is code written just to satisfy a rubric element, the code must be usable code within the application design.
- Each section of code requires a descriptive comment.
- All course coding conventions (style guide) must be followed. A 10% penalty is levied for each style guide error.

• Before uploading your work triple check that you are uploading the correct file as the first file uploaded will be graded, resubmissions are not permitted.

Grading Rubric

Application Element	Points
while(while True not	5
accepted)	
for in range()	5
User defined function	5
String slicing	10
Lists	10
Input validation	10
Regex	10
r/w text files	10
Exception handling	10
r/w excel or Word or	10
Google sheets or PDF docs	
Time module	10
Complexity	30 points (max)
Low- 0-10: simple	
application with no	
complex logic such as	
determining valid data	
transfers and data	
manipulation or	
validation.	
Medium –10-20: some	
examples of complex logic	
within the application.	
High – 20-30: – an	
application with	
significant complex logic	
such as data manipulation,	
validation, cleansing and	
formatting.	
TOTAL possible	

Grading Penalties

1. Use of constructs outside the scope of the COMP 1111 course: -25% EACH

2. Course coding convention errors: -5% EACH

3. Wrong file format uploaded: -10%

4. Multiple simple applications -50%

5. Hard coded elements -10% EACH

6. Missing comments -5% EACH

7. Incorrect colour coding of code (black letters on white background required) -10%

8. Filler code (code that is entered simply to fulfill a rubric requirement but is not and integral part of the application. (no grades awarded in the rubric)

9. Submitting a game or entertainment-based application: -100%

This course focuses on real-world document automation tasks. Submissions that resemble games, entertainment apps, or interactive toys will receive a grade of zero. No exceptions.

Academic Misconduct Penalties

In the Computer Studies faculty, an academic misconduct will result in one of the following penalties depending on the number of academic misconducts on file. Academic misconducts are attached to the students file for the life of their time at the college, therefore a second or third offence will carry the penalty as outlined below regardless if they were committed in a different course or program.

- The first academic misconduct will result in a zero in the student work.
- The second offense will result in a zero on the course.
- The third offence will result in an 8 month suspension from the college.

Plagiarism in writing computer code

The purpose of writing code in this course is to demonstrate that you have independently written and understand the code and have the ability to independently solve a given problem with software. Therefore, you must be the author of any code you write. Authorship means that you independently designed the solution framework, designed the code and authored the code. Simply typing the code based upon coaching from a third party does not mean you authored the code. Writing the code with help from another person or the internet does not mean you have authored the code. Of course you may seek help to understand a construct in its general application, but you must then independently transfer that general knowledge to the specific problem you are trying to solve. So to be clear, copying a code solution or a portion of a solution, of any size directly from a third party source, is a form of plagiarism, and will result in a zero in the work involved. Or seeking help from another person beyond simple coaching on how to understand a certain concept vs getting help to implement a concept into your application is a form of plagiarism. Said another way, you should write your code on your own as if you were in a locked room alone with no access to the outside world except for access to the official language documentation, maybe one or two interactions with another person to get very general guidance on how a particular language constructs works.

Late penalties

Late penalties are implemented as follows:

5% will be deducted for the first 24 hour late period, starting one minute after the due date/time. See example below.

10% will be deducted for each day late after the first 24 late period.

After 4-24 hour late periods a grade of zero is assigned.

Example: Lets assume an assignment has a due date of Monday, Jan 3 at 5pm ET. If the assignment is handed in within the first 24-hour window beginning Jan 3 at 5:01pm ET the penalty is 5%. If the assignment is handed in within the second 24-hour window the penalty is 15%. If the assignment is handed in within the third 24-hour window the penalty is 25%. If the assignment is handed in within the fourth 24-hour window the penalty is 35%. If the assignment is handed in after the fourth 24-hour window (5:01 ET, Thursday, Jan 6) the penalty is 100%.

Submission Instructions

Submit **one PDF file** containing the application description **and** application code to the appropriate upload link on blackboard (note this is a turn-it-in submission – so code plagiarism will be checked by the system)

Submit one video to the appropriate upload link in blackboard. **Note that there is a different upload link for the video.**