

Final Project	
Github Portfolio	
Name: Thomas Joseph T. Astudillo	Date Submitted: 20/11/2025
Course Code and Title: CPE201A - Computer System Administration and Troubleshooting	Instructor: Sir Lloyd Aldrin Pornobi
1. Objective/s:	
This final project aims to demonstrate the student's ability to create and build a GitHub portfolio by compiling and organizing outputs from other Computer Engineering courses.	
2. Intended Learning Outcome/s:	
By the end of this final project, the students should be able to: <ul style="list-style-type: none"> Develop a professional GitHub portfolio that effectively showcases their projects and demonstrates integration of knowledge from various Computer Engineering courses. 	
3. Directions:	
<p>1. Create a New Repository</p> <ul style="list-style-type: none"> Log in to your GitHub account. Click New Repository. Set the repository title as: CPE201A_FP_SURNAME Add a short description, for example: "Final Projects Compilation for CpE Courses." Choose the repository visibility (Public or Private). Click Create Repository. <p>2. Prepare Files on Ubuntu Linux</p> <ul style="list-style-type: none"> Open your Ubuntu terminal. Navigate to the directory where your final projects are saved. cd ~/Documents/CpE_Projects Organize your project folders according to different CpE courses, for example: CPE201A_FP_SURNAME/ __ CPE101/ __ CPE102/ __ CPE103/ __ CPE104/ Make sure each folder contains the corresponding final project files from that course. 	

3. Initialize Git and Push to GitHub

4. Verify and Share

- Go to your GitHub repository online and confirm that all files and folders are properly uploaded and organized.
- Copy your repository link and make sure it is accessible (if required, set repository visibility to “Public”).

5. Documentation

- Take screenshots of the following:
 - Repository creation page.
 - Organized folder structure.
 - Ubuntu terminal commands during initialization, commit, and push.
 - Final GitHub repository page showing the uploaded projects.
- Compile all screenshots and input it in Section 4. Outputs.

4. Outputs:

*Insert the outputs in here.

Create a new repository

Repositories contain a project's files and version history. Have a project elsewhere? [Import a repository](#).

Required fields are marked with an asterisk (*).

1 General

Owner *



AstudilloCPE

Repository name *

CPE201A_FP_ASTUDILLO

CPE201A_FP_ASTUDILLO is available.

Great repository names are short and memorable. How about [cautious-umbrella](#)?

Description

Final Projects Compilation for Computer Engineering Courses

59 / 350 characters

CPE_Final_Projects

CPE007

ARISE(Final_Project)_Team Mai...

Arrays_ASTUDILLO

Built_In_Functions_ASTUDILLO

```

07:55:35.271599 thomas ~ thomas
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ touch ARISE_Final_Project_MaiTEAM.cpp
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ARISE_Final_Project_MaiTEAM.cpp

nothing added to commit but untracked files present (use "git add" to track)
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ ls
ARISE_Final_Project_MaiTEAM.cpp  Arrays.cpp  Testing
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ gedit ARISE_Final_Project_MaiTEAM.cpp
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ git status
On branch main
Your branch is up to date with 'origin/main'.

thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ git add ARISE_Final_Project_MaiTEAM.cpp
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   ARISE_Final_Project_MaiTEAM.cpp

thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ git commit -m "Adding ARISE_Final_Project to Repository"
[main 76b8bd3] Adding ARISE_Final_Project to Repository
 1 file changed, 324 insertions(+)
 create mode 100644 CPE_Final_Projects/CPE007/ARISE_Final_Project_MaiTEAM.cpp
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 491 bytes | 491.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/AstudilloCPE/CPE201A_FP_ASTUDILLO
 274a597..76b8bd3  main -> Main

```

CPE201A_FP_ASTUDILLO / CPE_Final_Projects / CPE007 / ARISE_Final_Project_MaiTEAM.cpp

A screenshot of a GitHub repository page for 'ARISE_Final_Project_MaiTEAM.cpp'. The code editor shows the source code with syntax highlighting. The commit history shows a single commit from 'AstudilloCPE' with the message 'Adding ARISE_Final_Project to Repository'. The commit hash is 76b8bd3, it was made 1 minute ago, and it has 324 lines of code (271 loc) and 8.47 KB size.

```

Code Blame 324 lines (271 loc) · 8.47 KB
76b8bd3 · 1 minute ago History

1 #include <iostream>
2 #include <vector>
3 #include <string>
4 #include <fstream>
5 #include <sstream>
6 using namespace std;
7
8 struct Product {
9     string name;
10    double price;
11    int quantity;
12 };
13
14 const string INVENTORY_FILE = "inventory.csv";
15 const string USERS_FILE = "users.txt";
16
17 // Function declarations
18 bool login();
19 void registerUser();
20 void addProduct(vector<Product> &inventory);
21 void viewProducts(const vector<Product> &inventory);
22 void editProduct(vector<Product> &inventory);
23 void deleteProduct(vector<Product> &inventory);
24 void sellProduct(vector<Product> &inventory);
25 void saveToFile(const vector<Product> &inventory);
26 void loadFromFile(vector<Product> &inventory);
27 void inventoryMenu(vector<Product> &inventory);
28
29 // ===== MAIN =====
30 int main() {
31     int choice;
32     vector<Product> inventory;

```

thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007\$ ls
Arrays.cpp Testing
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007\$ gedit Arrays.cpp
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007\$ git add Arrays.cpp
thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007\$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
 (use "git restore --staged <file>..." to unstage)
 new file: Arrays.cpp

thomas_ubuntu@ThomasUbuntu:~/Documents/CPE_Final_Projects/CPE201A_FP_ASTUDILLO/CPE_Final_Projects/CPE007\$ git commit -m "Adding Array.cpp file to Repository"
> "
[main 274a597] Adding Array.cpp file to Repository
 1 file changed, 19 insertions(+)
 create mode 100644 CPE_Final_Projects/CPE007/Arrays.cpp

[CPE201A_FP_ASTUDILLO / CPE_Final_Projects / CPE007 / Arrays.cpp](#)

AstudilloCPE Adding Array.cpp file to Repository 274a597 · 1 minute ago ⏲ History

Code Blame 19 lines (18 loc) · 436 Bytes ⌂

```

1 #include <iostream>
2 #include <string>
3 using namespace std;
4 int main() {
5     string days[] = {"Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"};
6     int dayNumber;
7     while (true) {
8         cout << "Enter a Number to determine the Day (0 - 6): ";
9         cin >> dayNumber;
10        if (dayNumber >= 0 || dayNumber < 7) {
11            cout << "Day: " << days[dayNumber] << endl;
12        } else {
13            cout << "Invalid input." << endl;
14        }
15    }
16    return 0;
17 }
```

[CPE201A_FP_ASTUDILLO / CPE_Final_Projects / CPE008 /](#)

AstudilloCPE Add files via upload 1ac32dc · 1 minute ago ⏲ History

Name	Last commit message	Last commit date
..		
FINAL-PROJECT_CPE008_Group_1.pdf	Add files via upload	1 minute ago
Testing	Create Testing	1 hour ago

[CPE201A_FP_ASTUDILLO / CPE_Final_Projects / CPE007 /](#)

AstudilloCPE Adding ARISE_Final_Project to Repository 76b8bd3 · 2 hours ago ⏲ History

Name	Last commit message	Last commit date
..		
ARISE_Final_Project_MaiTEAM.cpp	Adding ARISE_Final_Project to Repository	2 hours ago
Arrays.cpp	Adding Array.cpp file to Repository	2 hours ago
Testing	Create Testing	2 hours ago

5. Conclusion/Learnings/Analysis:

Based on my conclusion. I have learned how to use ubuntu and github in tandem in order to create, upload, and edit repositories without having to use github's graphical user interface. This will greatly help me in my future endeavors as an aspiring Computer Engineer and build my overall future by creating a portfolio of my current projects, codes, activities, documents, and various other activities that I may do in the future.

"I affirm that I will not give or receive any unauthorized help on this activity/exam and that all work will be my own."

6. Assessment Rubric:

Rubric for SO 7 (7)							
Criteria	Ratings						Pts
⑤ SO 7 PI 1 Student Outcome 7.1 Acquire and apply new knowledge from outside sources. threshold: 4.8 pts	6 pts Excellent Educational interests and pursuits exist and flourish outside classroom requirements.knowledge and/or experiences are pursued independently and applies knowledge learned into practice	5 pts Good Educational interests and pursuits exist and flourish outside classroom requirements,knowledge and/or experiences are pursued independently	4 pts Satisfactory Look beyond classroom requirements, showing interest in pursuing knowledge independently	3 pts Unsatisfactory Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently	2 pts Poor Relies on classroom instruction only	1 pts Very Poor No initiative or interest in acquiring new knowledge	6 pts
⑤ SO 7 PI 3 Student Outcome 7.3 Critical thinking in the broadest context of technological change threshold: 4.8 pts	6 pts Excellent Synthesizes and integrates information from a variety of sources; formulates a clear and precise perspective; draws appropriate conclusions	5 pts Good Evaluate information from a variety of sources; formulates a clear and precise perspective.	4 pts Satisfactory Analyze information from a variety of sources; formulates a clear and precise perspective.	3 pts Unsatisfactory Apply the gathered information to formulate the problem	2 pts Poor Gather and summarized the information from a variety of sources but failed to formulate the problem	1 pts Very Poor Gather information from a variety of sources	6 pts
⑤ SO 7 PI 4 Student Outcome 7.4 Creativity and adaptability to new and emerging technologies threshold: 4.8 pts	6 pts Excellent Ideas are combined in original and creative ways in line with the new and emerging technology trends to solve a problem or address an issue.	5 pts Good Ideas are creative and adapt the new knowledge to solve a problem or address an issue	4 pts Satisfactory Ideas are creative in solving a problem, or address an issue	3 pts Unsatisfactory Shows some creative ways to solve the problem	2 pts Poor Shows initiative and attempt to develop creative ideas to solve the problem	1 pts Very Poor Ideas are copied or restated from the sources consulted	6 pts

Total Points: 18