

Seneca CPR101 — Final Project

Project Milestones and Details

Start by developing the Final-Project-**Plan**.xlsx. This is an artefact, as it is called in project management.

Version 1

1. See the **Final Project Overview document**

- Video tutorial: [Version 1](#)
- the video tutorials use the command line to simplify the steps and keep the demonstrations independent of a specific IDE
- the tutorial used Desktop as a folder for simplicity, but it is better to create a separate folder for the final project files
- Note that any repeating characters or strings you see in the testing demo are entered quickly to preserve the pace of the video. The test data you see is for example and demonstration only.

You can use your favourite code editor to **enter Version 1 C code** found in the Project Source Code.zip.

- Instead of using VS IDE's Project manager, create a folder for our Final Project where you can edit .c files using VS IDE -- but not compile them.

2. **Comment the program, not the code.** See [Programming Comments.docx](#) and [Programming Comments DEMO.mp4](#)

3. See [Compiling modules.docx](#)

4. **Develop Test cases.**

See [Programming Test Cases.docx](#) and ...test-cases.xlsx templates.

5. **Run and document the test case results.**

Capture the console output of your tests and paste into a *module-testing.txt* text file.

6. If your group is carrying on with the next version, no submission to Bb is required *unless your professor has requested a separate submission for each version.* Else, if your group is satisfied with the lower marks in this version (Quality % factored by 0.694 for reduced scope), see Project Submission notes below.

Version 1 of this assignment must be submitted in order to pass the course. Click on the above submission link to view the marking rubric.

Version 2

1. Set up **git for Version Control**

- see the Project Overview and "git basics" documents
- Get [git for Windows or macOS](#)
- Video tutorial: [How To Install git](#)
- initialize and configure git repository

2. add Version 1 files to the git repo and commit. This sets the "trunk" or master branch.

3. Video tutorial for Final Project's [Version 2](#)

4. **Add** Ver.2 code to the .c source files from Ver.1

(For inexplicable reasons, some teams comment out the Ver.1 code when they add Ver.2. Do not do that. Adding Ver.2 does NOT mean deleting Ver.1.)

5. Comment, compile, develop and run test cases, capture results as in the previous version. Add the capture of terminal session tests to the previous version's *module-testing.txt* file.

6. Use git to add & commit Version 2 code. Capture git results in *module_git_log.txt* file.

7. If your group is carrying on with the next version, no submission to Bb is required *unless your professor has requested a separate submission for each version.* Else, if your group is satisfied with the lower marks in this version (Quality % factored by 0.794 for reduced scope), see Project Submission notes below.

Version 3

1. See **Final Project Overview** and add the Ver.3 functionality to what was previously implemented in Ver.2

2. Steps as per previous version.

Milestones	Due
<p>Lecture class on introduction to Project Management (PM).</p> <ul style="list-style-type: none"> • Create a joint Plan spreadsheet (stored in your Team / Channel Files) describing each group member's individual responsibilities. <ul style="list-style-type: none"> ◦ Everyone should outline ideas and approaches for all aspects of the project, then share those outlines with each other. ◦ Group work is heaven when all members <i>share</i> the work all the way through. 	<p>3 calendar days after PM class</p> <ol style="list-style-type: none"> 1. Set up your Bb group in MS Teams. See Final Project group-team set up 2. Each team member uploads their notes to channel > Files on how Project Management Process Groups applies to the Final Project 3. Each team member reviews other member's notes 4. The team develops a common understanding of Project Management Process Groups 5. Develop a S.M.A.R.T. plan for the whole project 6. Post the Plan.xlsx file in Team's private channel > Files <ul style="list-style-type: none"> ◦ everyone collaborates on the plan ◦ conduct an MS Team meeting while you all input the details in the Plan.xlsx file

- Group work is hell when the work is *split into discrete sub-assignments*. At first it will be easy...the hell comes when none of the pieces fit together or when requirements, not visible in the beginning, are missed.
- Update tasks within the Plan as work progresses to indicate steps completed and new steps added as needed.

Working on the project

- Teamwork:** Forming a team is establishing communication between the individual members, collaborating, and the sharing of tasks. Storming happens when people disagree, do not participate, or honour their commitments. Norming is sorting out the storming. Performing is getting the work done as a team according to accepted norms.
- Always** collaborate using your group's MS Teams channel. The following SHOUTING is because too many people who have taken the course before ignored that sentence.
 - DO NOT USE CHAT** for anything related to the project! Chat is ONLY for private and personal messages unrelated to the project.
 - Use the team channel Posts for all project related communications and collaboration. Use the Plan.xlsx for project coordination and individual work items; use Files for project artefacts and source code files.

Problems communicating?

Email through Blackboard via the link on your group number, in your Teams group channel use @name or @Bb to the attention of all group notes about what you have done and who has or has not responded belong in your Teams channel and in the Assignment Plan. Else there is communication on record and your professor cannot take action without demonstrable cause.

3 calendar days after PM class

All group members have made contact and participated in setting the Plan.

Request review of a single file in your MS Team Channel > Files

- > click Final-Project-Plan.xlsx > click Conversation (in top right) MS removed this easy to use feature!
- Workaround:** in Files, click a file's ... menu, click "Copy link", change permissions to "People with existing access", i.e. member group's channel.

The screenshot shows the Microsoft Teams interface. In the top bar, the 'Files' tab is selected for the channel 'Bb 02'. Below the tab bar, the file 'Final-Project-Plan.xlsx' is listed. A context menu is open over this file, and the 'Copy link' option is highlighted. To the right of the file list, the 'Copy link' settings are displayed. The permission is set to 'People in Seneca with the link can view'. A red box highlights the 'click to change' button next to this permission setting.

- > in Posts, click [New conversation] @your professor "Please review.", and paste the link.

The screenshot shows a Microsoft Teams post. The text '@prof Please review.' is followed by a link to 'Final-Project-Plan.xlsx'. A red box highlights the link, and another red box highlights the 'paste' button. A third red box highlights the 'ignore' button.

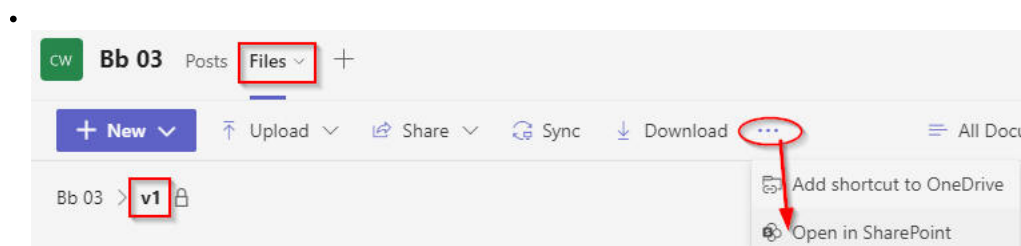
Request review of many files in your MS Team Channel > Files

- all files to be reviewed should be in Files or *one* sub-folder (files in sub-sub-folders will not be reviewed)
>> organize files in same way they will be submitted. See the Project Overview, Appendix B.

That is, use your channel for *everything and anything related to doing this assignment.*

If it is not in the team channel, then as far as your professor is concerned, your team's communications never happened and the files do not exist.

- In a professional environment, if you communication or develop outside the prescribed systems:
 - a) it is not, and never was, done
 - b) you will never do it again because...
 - c) You. Will. Be. Fired. Sacked. Terminated with Cause.
- **IS THAT CLEAR?**



-  Share  in SharePoint
-  Share link
- Select "People with existing access"
- Return to Teams and paste link in Posts with review request @prof

4 calendar days after PM class

Assignment Plan is due.

Notify professor of any group member not communicating, participating, or delivering.

Anyone not collaborating on the project by this date will be removed from the group and be responsible for completing the project or with other similarly non-cooperative group members. Similarly, any group *not* reporting a member's non-participation by this date will be responsible for that person's work.

5 calendar days after PM class

Team members work on their deliverables for Version 1.

Professor assigns known non-participants into their own Bb group.

6 calendar days after PM class

Team members share their module's commenting and test cases with other team members.

Team members meet and establish standards of work quality and quantity.

1 week after PM class

Discussion and questions about project Versions 1, 2, 3

Opportunity for general consultation on the project during class time and by request through a Teams meeting outside class up until the time of the last class next week.

Update your Plan with actual accomplishments by each team member.

See [Plans and Emergencies](#)

All team members have contributed to Version 1 according to their team's established standard quality of work.

Please check your quality against the Programming Comments.docx and Programming Test Cases.docx requirements.

Team requests a qualitative project review @professor by providing a link to their Teams folder containing **all** project files. Do not use sub-folders or zip files.

A team member requests review of an individual file by opening it, clicking "Conversation" for Office files or the round speech bubble in a post @professor asking for review.

8 calendar days after PM class

Team adjusts Version 1 after feedback. **Version 1 due.**

9+ calendar days after PM class

Optionally, go on to Version 2 with same process as above.

Update Assignment Plan with actual accomplishments by each team member.

Project submission will be evaluated overall, both qualitatively and quantitatively, for any and all versions completed. Team members who completed...

- Versions 1 & 2 & 3 receive up to full project marks (out of 100) which comprises 20% of course grading.
- Versions 1 & 2 receive the project mark * 0.794, factored to

Second Last Class of the Term

Same as last week except for Versions 2 and 3 (because Version 1 should be done by now)

1 calendar day after Second Last Class

Team adjusts Version 2 after feedback. **Version 2 due.**

Last Class of the Term

Same as second last class day except for Version 3

1 calendar day after Last Class

Team adjusts Version 3 after feedback. **Version 3 due.**

<p>reflect the project's reduced scope.</p> <ul style="list-style-type: none"> • Version 1 receive the project mark * 0.694, factored to reflect the project's reduced scope. • The factoring assumes consistent quality across versions. <p>The Assignment Plan and submission comments must declare differences among members' contributions to the project's versions.</p>	
<p>Project submission</p> <p>The Bb Final Project accepts multiple submissions if necessary to correct errors / omissions. Only the most recent submission is evaluated.</p> <p>In Blackboard, only one team member needs to submit the project version's files on behalf of the team.</p> <p>After submitting, if you see nothing where you expect the submission to be rendered/referenced, click Continue. You may have to repeat the upload. (Who knows why? It's Bb.) In any case, do check for the confirmation message and email.</p>	<p>Project Submission</p> <p>One team member submits a Bb##.zip to Bb for grading on behalf of the team where ## is your Bb group number. It is the same sut for weekly activities using the title link at top of this page.</p> <p>Consult the Project Overview document and check that required files are present in the root of the zip archive.</p> <p>Add Comments,</p> <ul style="list-style-type: none"> -- include a link to your MS Team Channel's File tab and the name (Bb ##) of your MS Team Channel -- Note whether all team members contributed equally and deserve the same marks, or how team member contributions varied. -- Note highest version completed by all team members or by individual where different. <p>For 3-2-1 backup purposes,</p> <ul style="list-style-type: none"> -- from your Teams channel > Files, copy everything to your own OneDrive. -- the Bb submission counts as one of the backup copies.