General

During the meeting, your project TA will be looking for the following things:

1. Team members have arrived on time. Given the fairly short duration of the meeting, we will consider anyone who does not arrive by the start of the meeting as late.
2. Each team member has committed to the CPSC 304 provided repository at least once prior to the start of the meeting.
3. Equal contribution to the discussion by all group members.
4. Willingness to participate in the discussion.

Feel free to discuss any questions/concerns you have with your TA. If you are uncomfortable with discussing your concerns publicly, you can also email your TA (contact information can be found on Canvas). If your TA does not reply within 2-3 business days, contact your instructor.

If the check in meeting starts late, no extra time will be given. In cases where the meeting starts late because of an issue on the part of the teaching team, the meeting will run for the scheduled length of time.

You may wish to update your deliverables for this milestone after meeting with your TA. We ask that you do not do so until the milestone grades have come out. This will help ensure that your TA looks at the correct commit when grading and it will speed up the process of grading.

Graphical User Interface (GUI)

Your project will require a front end (i.e., a GUI) for the user to interact with the database. When designing the GUI, think of it from the perspective of a user who is unfamiliar with Computer Science. The GUI should be user friendly and relevant to whatever topic your group has chosen. For example, "Create New Account" could be the name of a button that runs an "Insert" query and would be more appropriate than "Insert Query Button".

We expect you to produce a simple but adequate interface; it doesn't have to be fancy.

You should not be creating a text-based user interface (e.g., tutorial 6). The user should not be typing in a SQL statement at any point in the process.

You **cannot** use a GUI generating tool (such as Java Swing UI Builder).

Deliverables

Your deliverables should be committed to the CPSC 304 provided repository **at least two business days** prior to the meeting with your TA. For a specific definition of what two business days ahead of schedule means, see the syllabus.

1. A brief (~2-3 sentences) summary of your project. Many of your TAs are managing multiple projects so this will help them remember details about your project. You can reuse the summary from milestone 2.

2. **Timeline and task breakdown/assignment**: The breakdown should be at a level of detail that demonstrates that the group has spent time meaningfully considering what there is left to do. Note that we are not asking you to predict every single possible task that you will need to do. We want to see that the group understands the scope of what is left to do and is prepared to accomplish the remaining tasks in a reasonable manner.

   Each task should be specifically assigned to a group member (or combination of group members). It is in your best interest to be as explicit as possible about who will work on what. In the event that there is a dispute between group members, this is one of the first things the course staff will look at when evaluating the situation. If it is clear to us what has been agreed on, it will speed up the process of conflict resolution.

   Unless otherwise stated, it is assumed that all group members will work equally on the project. This does **not** mean that everyone needs to work on each task together. This means that the overall division of the work is equal. If this is not the case, state the work percentage breakdown for each member. This will serve as a written acknowledgement between all group members that there will be an uneven distribution of work. The member who does not do their fair share of work will have a penalty applied to their final project grade.

   While each member is not expected to know about every single line of code in the project, it is expected that all members can talk about the overall architecture of the project.

   The timeline should contain enough detail for your project mentor to determine that you understand that you need to produce a GUI for your full project.

3. The deliverables from milestones 1 and 2 have been added to the repository.

4. Each group member has made a commit to the repository. The commits do not have to be code related. For example, one group member can commit the milestone 1 deliverables, another the milestone 2 deliverables, and the third member the milestone 3 timeline.

During the meeting, your project mentor may ask each group member to demonstrate that they are able to make a commit. It is in your best interest to get everything set up now. In the event of a group dispute or disagreement over the level of contribution made by each member, we will be looking at the commit history. Git is an essential skill and this is a great way to get some practice at using it in a group context.

See the milestone 3 assignment on Canvas for the rubric. Refer to the syllabus for information on late submission/penalty rules.

FAQ

1. **How do we start determining what there is left to do?**
   A project can be broken down into the front end and the back end.

   The frontend has to do with what the user interacts with (e.g., buttons, text boxes, etc.). In the CPSC 210 term project, you were asked to create a graphical user interface (GUI)– the GUI is considered as the front end.

   The backend deals with code that "works in the background". For example, the code that makes a call to the database. Once you have the data, the front end can take over with regards to how to display it.

   When determining what there is left to do, try looking at the project from the perspective of the front end and the back end and listing all the things need to be done. For example, if your GUI has a button that will cause a table to refresh its data, you will need to figure out:
   a. How to create a button and a table
   b. How to place the button and table in the desired configuration
   c. How to place data inside the table
   d. How to trigger the data refresh once the button is clicked

2. **How should we divide the tasks?**
   The two most common approaches are front/back end or end-to-end.

   Teams that divide the tasks by front end/back end will divide the team into two. One group will work solely on creating the front end while the other group works on the back end. As both teams work in parallel, they will start linking up the front and back end to create a functional project.

   Coding from end-to-end means that each person does a bit of both the front and back end. Teams that choose this approach typically divide the list of queries and each person

is responsible for creating their bit of the GUI and ensuring that it is functional/can properly communicate with the database. This approach can provide a more well-rounded experience with databases but does require good communication amongst the team to ensure that everyone's code can integrate properly.

3. **I have a group member(s) not doing their part (e.g., slacking, not replying to communications, etc.). What can I do about this?**
Email your project TA if you have these concerns and the TA can help you resolve it. The earlier you notify the course staff, the more likely it is we can provide different options to resolve the situation. There is also an individual peer evaluation at the end of this project where you can express concerns about your project group members.

If your project TA does not respond within two business days, contact your instructor.

4. **The project involves building a GUI but we're not sure what to build, are there any examples?**
We are not showing examples of past projects because we do not want similar looking projects. Many of the projects submitted in the past have multi-page navigation as compressing all your queries onto one page is not the best holistic design.

5. **How do you make the GUI for Java or PHP?**
For Java, we recommend using JSwing library (much like what you worked with in CPSC 210). For PHP, your group will have to learn CSS+HTML. w3schools is a good site to learn fundamentals of CSS and HTML.

6. **We have changed our minds about the tech stack we want to use. Are we tied to using what we specified in Milestone 1?**
You **do not** have to use the tech stack that you described in Milestone 1. We recommend letting your project TA know about the change during the meeting as they may have some advice for you.