

Teamwork

TCSS360

To practice the concepts and principles presented in this course you will join a product team to develop a software application. This document describes individual and team roles and responsibilities. Specifically: a set of commitments expected of each team member toward their team; how to plan and document team work; and how you will evaluate the contributions by members of the team.

This is about a *product team* as opposed to a *group project*. Words like “team” and “teammate” and “team member” are used over 100 times in this document. The choice of words is meant to emphasize several important differences:

- The result is more than a document, it is a product
- Team members do more than combine their efforts, they coordinate their skills
- The objective is not just an assignment, it is a goal
- Beyond just finishing, teams celebrate accomplishments

Team Commitments

Weekly meetings

Meeting Roles

Meeting Agenda

First Meeting

Celebrate Achievement

Weekly Reports

Minutes

Task Matrices

Team Website

Project Team and Team Member Evaluation

Team Commitments

To be effective, team members must develop a high level of confidence that the other members of their team will contribute a fair share to the team goals. Team members must uphold these (and other agreed upon) commitments:

1. To meet weekly with your team at a regularly scheduled time; ***missing or being late to meetings will result in your receiving a lower grade than your teammates on the project;***
2. To make a good faith effort to meet with your team on an ad-hoc basis as needed;
3. To read your email at least once per day on Monday through Friday and to respond to any issues, questions, or requests from teammates. Weekends are reserved as not requiring a response unless other specific commitments have been arranged. There may be other days to respect similarly so please negotiate this among yourselves recognizing the diversity of cultures and personal beliefs amongst you. ***Note:*** team email correspondence must use members' UWNedID account; if a member would like teammates to cc messages to any other account, this should be documented in one of the team's weekly reports.
4. To use various communication media (IM, phones, etc.) as needed for effective team functioning.
5. To treat your teammates with respect in speech and manner to create an environment conducive to learning. It is always nice to work with friends, however being friends with or liking your teammates is not the objective of the team experience. ***The objective is to work effectively as a team regardless of the personal feelings that one has toward the other team members;***

6. To commit to perform your fair share of the team tasks;
7. To carry out your work commitments in a timely manner;
8. To uphold a high standard of quality in the work products that you bring to your team. You should complete a piece of work for presentation to your team at the same level of quality and quantity as if you were handing it in to the instructor;
9. To hold your teammates accountable for their work commitments, both in terms of quality and quantity;
10. To post/distribute meeting minutes within 24 hours of the completion of the meeting if you are the minutes taker, or earlier if your team agrees to an earlier deadline.
11. To inform your teammates as far in advance as possible when you know you will be unable to attend a meeting;
12. To take responsibility for contacting your team after a missed team meeting to determine what was discussed and what are your new responsibilities for the upcoming week;
13. To provide timely information to a teammate who has missed a team meeting concerning the missed meeting and the teammate's new responsibilities;
14. To contact the instructor if any team member is not attending meetings. I will intervene on the behalf of the team, but it is the team's responsibility to inform me.

Weekly meetings

You are required to have, outside of class time, a weekly in-person meeting with your project team. Arrange to have these at a regularly scheduled time for a minimum of 1.5 hours. If it works best for your team, you can split this into two meetings per week, as long as the total at least 1.5 hours. The intent of this meeting is to synchronize efforts, build team cohesiveness, identify deviations from targeted delivery dates, establish work commitments, and validate the successful (or unsuccessful) completion of previous commitments.

There may be on some class days, time for teams to hold *an additional* meeting. This could be a scrum or stand-up so that each member of the team leaves with a clear understanding of the team's tasks. ***This is not optional class time.*** These will be opportunities for me to join your meetings.

It is very likely you will spend additional time with your team or subsets of your team in order to carry out project tasks. You may also require additional scheduled full-team meetings at different points during the project.

At some point, arrange to conduct one meeting or more meetings virtually as a conference call or video conference where team members are not together in one place. Should any restrictions for social distancing (such as were imposed during the COVID pandemic), teams should have plans for functioning virtually both in real-time and asynchronously.

Meeting Roles

Each meeting should have one person who is the facilitator and one person who is the minute taker (or scribe). The facilitator and scribe should never be the same person in a meeting - that is one person should not have both roles at once. The facilitator is responsible for making and disseminating the agenda, ensures that the agenda is followed, ensures that all team members participate, encourages all to talk, and prevents dominance by any one person in the team. The minute taker is responsible for writing up the meeting minutes and distributing them to the team members within 24 hours of the meeting.

Rotate these roles each week in an equitable fashion until each member has served in each role. At that point, the team may choose to continue to rotate roles, or to install specific members to serve in those meeting roles on a regular basis. Be sure this is decided fairly and it must be recorded in the meeting minutes. Keep in mind, the facilitator is not necessarily a lead role, nor is minute taking necessarily busy-work. Every team is unique and leadership rises from members in many ways. In fact, great facilitators do not lead projects, and a high quality record of team discussions is an invaluable asset.

Meeting Agenda

Each meeting should have an agenda that is planned at the end of the previous meeting by all team members. The agenda should include

- when and where the meeting takes place;
- who is the facilitator and minute taker;
- a reminder of when the next meeting is and who will be facilitator and note taker;
- who is bringing what work products (or other items) to the meeting;
- a list of the topics of discussion, along with who is addressing each topic (if not a general discussion), and for how long each item is to be addressed; please make sure to include the following items in each agenda:
 - the first item should always be to discuss the agenda, adding or deleting discussion items, and to reorder or reprioritize items
 - a short discussion on team "process" or effectiveness;
 - review and summarize responsibilities and update the task matrix;
 - set the next meeting's agenda

Please make sure that each meeting includes a few minutes to discuss how the team is functioning and your effectiveness. There are aspects of team dynamics that are critical to the success of the project. Don't ignore issues that you believe are interfering with the effectiveness of the team and your ability to complete the project on time – make it part of weekly meetings to address problems. Individual coaching is best done directly but with kindness.

First Meeting

During the first meeting, please determine a *team name* - this will help in referring to your team and to establish a team identity. I'm certain you can arrive at something more inspiring than the simple names I created. Establish a regular meeting time each week for the balance of the term and determine a rotation schedule for who will be facilitator and minute taker at each meeting.

Please discuss and make agreements (documented in your first meeting minutes) on at least the following issues:

1. How will team members deal with another team member who appears to exercise too much control over the team?
2. How will team members deal with another team member who does not appear to be shouldering their responsibilities within the project, or who is not contributing during team meetings?
3. What will you do if circumstances prevents one or more team members from participating on the meeting day/time?
4. Any other team-related issues that you believe will be helpful to establish at the outset.

By coming to basic agreements about some of the most contentious issues of teamwork before these issues have surfaced will provide a basis for discussing and dealing with these issues when everyone can approach this topic calmly. Another benefit is that by putting these issues on the table as legitimate for team discussion, it makes more explicit the co-responsibility that all team members have toward one another, and helps to avoid some of these difficult situations.

Your first meeting should include a discussion of the commitments that individuals are expected to make to one another as detailed in the Team work section of the course syllabus. Ensure that everyone has correct emails and phone numbers for contacting one another.

Use meetings for thorough discussions of project deliverables. Make sure to divide responsibilities before leaving meetings.

Celebrate achievement

Successful teams also take time to celebrate their successes as a team. Find ways to have a small celebratory get-together after each deliverable is completed. Take time to praise one another's efforts. Especially highlight the contributions of those individuals who "went the extra mile".

Weekly Reports

Each week, you are expected to submit minutes and a *task matrix*, each of which is detailed below. If you have met more than once during the week, then each meeting should be run and documented as specified in this document. Your task matrices (see below) should summarize the tasks committed to by team members. For purposes of the task matrix a "week" begins and ends on the day of your regularly scheduled meeting. Both of these documents are to be maintained on a continuous basis on your team website.

By the first class session of each week, the facilitator from the most recent meeting must make sure the team website is up-to-date with the meeting minutes since the previous week.

Minutes

The minutes for each meeting should include:

- The team name,
- meeting date, start time, end time, and location,
- who was the facilitator and minute taker,
- who attended and who was absent,
- one or more paragraphs that summarizes 1) *what* you discussed, and 2) the *team decisions* you reached.

These minutes should take less than 30 minutes to complete, and should provide a record of your discussions and decisions. Please organize minutes into a continuous format so as the quarter progresses there will be an easy way to see a continuous stream of weekly meeting updates. This can be as simple as a document where the minutes for the current meeting are appended to the end (or beginning) of the document. An excellent alternative is a wiki. A github repository can also host a project wiki. You may find something like google docs suits this purpose, so that the document can be read and updated by each member of your team. If you wish, use the *Sample Minutes* document as a template.

Task Matrices

Each week, you will update your task matrices. A task matrix is a table that clearly documents *who* has committed to *what* tasks to be completed *when* for the week. Each task for each person should be listed in its own row, and all rows (tasks) associated with each person should be teamed consecutively. If two people are undertaking the same task, list these tasks separately for each person. In this way, you can keep track of who has fulfilled their task commitments and who has not. A task is expressed starting with an action verb, and is usually followed by some kind of document. Thus state "write and post minutes" rather than "minutes".

You should keep a single spreadsheet that clearly specifies each person's responsibilities. Add each week to the end of the spreadsheet. Each person should fill out his or her actual time to completion for the current week's commitments prior to arriving at the next weekly meeting. For the upcoming week, you should list the responsibilities each person has committed to, providing due dates and estimates for completion times but not actual dates and completion times until these tasks are completed.

You may use the *Task Matrix Template* spreadsheet as a template.

Some task guidelines:

1. Strive to subdivide tasks into sufficiently small units so that they can be achieved by the time you meet again.
2. Review tasks to verify the completion. Guard against listing the start of tasks, and instead simply write the task that is to be completed. For example, rather than writing "Start drafting section 5 of user manual", instead state "Write section 5 of user manual". Stating that a task is to be started provides "weasel" room for the person to complete this task in 30 seconds ("Well, I *started* the task, but I didn't

get very far"), whereas stating what tasks are to be completed provides a more definitive guideline that is less likely to cause misunderstanding.

3. Strive for equity for actual hours worked; if you cannot achieve this for each week, then you should try to achieve this across each milestone and the entire term.

Team Website and Repository

For check-ins and deliverables and to support your development work, you need a repository. Your team will build a project on GitHub that is publicly accessible (i.e. anyone in the whole wide world can access it). Besides code, you team may find it convenient to designate an area in the repository as a library of working documents. You need to establish the Git project at or shortly after your first meeting, and provide the url for the Git project to the instructor (jawit@uw.edu). Your project site needs to include the following items prominently on the project page:

- the team name
- date of the last update
- names of team members
- an area with links to your weekly minutes and task matrices,
- an area with links to check-ins and deliverables
- a single email address that I can use to send email to the entire team at once

I want to be able to get to any deliverable document in a minimum of clicks and be obvious on the project page. All text and image documents (or documents that combine text and images) should be in a format that displays directly in a major browsers (Chrome, FireFox, Edge). The obvious safe bets include PDF and HTML.

Your team must post all weekly reports, check-ins, and deliverables on your team page on the respective due dates.

Project Team and Team Member Evaluation

The project will receive a team grade. As indicated in the syllabus, this will be an integer between 0 and 4. This grade will take into account the extent to which you have met the project requirements and the extent to which the skills and concepts studied in the course are reflected in the project.

I will evaluate each team member's participation using the minutes, task matrices, the member's participation in class sessions, and the individual *Team Member Evaluation* reports that you will each fill out. These reports are due in Canvas on the same due dates as the major milestones/deliverables.

Each individual will receive a score that approximates that individual's effort on the project -- the "individual multiplier" -- between 0.0 and 2.0 The grade you receive on a deliverable will be the team grade times your individual multiplier. The default multiplier value is 1. In some cases I will award a multiplier of less than 1; this indicates that I believe that you have committed less than your fair share to the team effort. In rare cases, I will award a multiplier of greater than 1. I award greater than 1 on the individual multiplier in those cases where there is a documented history of significant effort toward improving the team functioning, such as encouraging team mates, helping others, resolving conflicts, and putting in extra time toward the project when it is needed.

Missing team meetings will generally result in penalties in your individual multiplier. In addition, there will be in class activities to present and share your team's work; missing in-class team activities (such as presentations, check-ins, critiques, exercises) will have an effect on your individual multiplier similar to missing a team meeting.

WARNING: If there is a documented history (in your weekly reports, team member evaluations, class activities, etc.) of contributing substantially less than your fair share to the team's effort, your individual multiplier will be sufficiently low that you will not pass this course.