Team Project Phase 1 - Wednesday

- Due Feb 5 by 11:59pm
- Points 100
- Submitting a file upload
- File Types pdf
- Available Jan 11 at 12am - Feb 7 at 11:59pm

This assignment was locked Feb 7 at 11:59pm.

Introduction

This team project's goal is to help you move beyond small, throwaway, class-sized programs toward those society needs and will use. You have been introduced to numerous principles and concepts during your education. The challenge now is determining which are relevant for the task at hand and how to choose between potential solutions. In computing, there is seldom one right way to satisfy the needs of a set of stakeholders. Two key reasons for this are the differing stakeholder goals and objectives and the accelerating rate of change in technology, user needs, and the competitive market for the work.

Success depends upon providing the right solution to the right people at the right time in a form that can be effectively used today and in the future. Success also demands the solution protect the user from improper or malevolent use without onerous burdens on legitimate users. Up to now, most of the programs you have written have focused on satisfying various functional requirements. As a professional, you will be challenged to create and support systems that bring significant value to those using, producing, supporting, and operating them. The greater the value, the more attractive it will be as a target and the more critical the need for it to work as required in a rapidly changing world. Many of these valuable aspects are quality attributes (e.g., security, privacy, effectiveness, ease of use, etc.).

Employing high-performance teams brings numerous benefits to all aspects of software-intensive systems. The proper use of the team member's unique experiences, perspectives, and capabilities can be a determining factor between producing a good product and a successful one. Project success will require going beyond the testable knowledge focus of many courses you have taken to find common ground across the team for effectively implementing the solution within the given resource constraints (e.g., time, cost, etc.). A set of Team Norms is a powerful tool to work through many of the common challenges facing groups that need to become a high-functioning team. The work by Tuckman is commonly used to help people appreciate and move more quickly to high performance. The following Wikipedia article is a good place to start.

https://en.wikipedia.org/wiki/Tuckman%27s_stages_of_group_development ⤷
(https://en.wikipedia.org/wiki/Tuckman%27s_stages_of_group_development)

High-performance teams don't just partition the work, work independently to produce their portion of the solution, and then collaborate to integrate the parts into a working whole. The work each needs to perform may require changes to solution elements that other team members need to use. Integration

can be a nightmare if these changes are not carefully designed and coordinated. The Scrum Daily Standup Meetings share work accomplished, identifies issues, and outline what will be done next. While you are not expected to hold daily standups, you are expected to hold at least two each week. This critical communication tool helps team members to identify previously unrecognized overlaps, realize a previous experience might help resolve another's issue, and facilitate coordination. Not communicating and putting work off until just before the deadline is not appropriate for this course and regularly leads to painful integrations and poor results.

You have been provided with foundational code with supporting documentation. You are expected to build upon this foundational code and enhance the supporting documentation (e.g., UML-based architecture and detailed design diagrams), so they are current and in alignment with the code and each other.

The team is expected to implement input validation for all the input fields. Recognize the similarities and factor out common work into helper methods. Work together to select the best insights and work from the team member's HW1 submissions.

The team must ensure that the required set of new user stories specified below has been implemented and integrated into a well-functioning application. These user stories may be incomplete, may conflict with one another, and may be in error, just like in the real world outside of the university. Your team is expected to address and resolve these issues by engaging with the stakeholders' representative, your instructors. The application must be documented like the provided code so others would assume it was the work of a single author.

Two screencasts must be produced: the first showing that the functional requirements have been implemented. The second specifies how the requirements align with the architecture (which may need to be updated from what was provided), the potentially updated detailed design, and the code and satisfy the stakeholders' needs as described in the product vision.

The team must submit a properly filled-out PDF using a provided MS Word template. The detailed requirements for this homework are specified below. **Each team member** is required to verify that the submission was successful and works as required **before** the deadline.

Tasks

This team project phase requires the team to perform the following tasks.

1. In parallel with the following tasks, work to establish a set of Team Norms to help the members move from being a group of students into being a high-performance team. An Ed Discussion Thread has been established as a tool to help the entire class come up with a set of potential issues that have caused problems in the past. Your team needs to produce a list of these issues and how the team is expected to address them as needed to minimize the negative impact of each issue and build stronger connections among the team members. The Ed Discussion Thread is not the place to propose Team Norms, just raise the issues. Your team must develop the norms that are right for this

team and this class. A deliverable for this task is listed below.

One key norm is meeting at least twice a week for a "stand-up" meeting, where each member of the team describes in just two to three minutes 1) what they accomplish, 2) what the plan to accomplish, 3) issues that are blocking progress. This meeting must be recorded and submitted with thew two other required screencasts described below in Task 7. (Consider using Zoom to do the recording.). The purpose of this communications meeting is to identify activities where collaboration may be required. Waiting until integration to discover that two or more team members made changes to the same set of classes (methods and attributes) without agreeing on what those changes need to be can be catastrophic! The meeting is not a problem solving meeting. (For more about this kind of meeting read this article, **Daily Scrum Meeting** ⤷ **(https://www.mountaingoatsoftware.com/agile/scrum/meetings/daily-scrum)** .

2. Find a set of professionally produced applications or webpages that require users to log in and allow updating that user's account information (e.g., name, email address, and password). Reach and **document** a shared agreement on the user experience and interface aspects the team project should employ.

3. Identify and **document** the input validation required by every input field for the phase. Ensure that input validation is performed before using the input, issue meaningful error messages if the validation fails, and only process the input when the validation is successful.

4. Study the required user stories for this phase of the project. The provided foundational code implements some user stories for the New User and Admin roles. The team must work together to identify elements of those user stories that still need to be implemented. Building on the team members' experiences with HW1, collaborate across the team to create and **document** a plan (e.g., who will do what and when) to implement those user stories. Emphasize resolving unknowns and risks as early as possible. (E.g., If the obvious solution does not work, ensure there is enough time to experiment as needed to find a solution that does with enough time remaining to implement the components and integrate them into the submission well before the deadline.) Part of the documentation includes notes from each Standup Meeting.

5. Establish and **document** a list of new automated tests that must be produced and used. Implement the tests and address issues these tests uncover.

6. Upload the application source to your team's GitHub, ensuring the grader has permission to access and download the submission. (Do not make your GitHub content available for anyone outside of your team or the Grader to access!)

7. Produce a pair of screencasts. The first demonstrates the functional requirements have been implemented. The second explains how the requirements flow to the architecture, the detailed design, the code, and the test cases. Upload these screencasts as well as the set of standup meetings to your GitHub, ensuring the grader has permission to access and download them.

8. Produce a PDF using the following MS Word template and capture evidence that each of the above tasks was performed by including each documented elements specified in the above tasks (1 - 5).

9. Submit this PDF before the deadline so there is enough time for the upload of the submission to finish, for Canvas to process the submission, and for Canvas to add it to its data repository before the deadline. Just **starting** the upload before the deadline is **not adequate**! It is the responsibility of **every member of the team** to ensure the submission satisfies the requirements, the submission has been successful, and it is visible in Canvas before the deadline.

10. Perform the Peer Evaluation for this assignment, and the submission has been successfully received by Canvas before the deadline.

Deliverables

A PDF document must be produced that covers the following items.

- Use the following Template for your PDF submission: (5%)

    TP1 Assignment Template.docx **(https://canvas.asu.edu/courses/215181/files/102163173?wrap=1)**

- Cover page complete with each teammember's name. In addition in Appendix A, each team member must provide six lines of description about their contribution to this report. All team members must agree with the description every other team member has provided. Every team member who name appears on the cover page certifies that all the the material in the report (not just their contribution), including the code, is the original contribution by the team's members, is from the assignment and ASU materials including code, documentation, and diagrams provided on Canvas, or is the work of another and has been properly cited and referenced.: (5%)
- Task 1: List the issues the team has concluded have a high-enough probability of becoming an issue for the team to warrant a Team Norm to address it. For each issue, the team has described what they expect of the involved team member(s) and the whole team on how to address the issue in order to avoid having it become a problem for the entire team. Each member of the team must sign these team norms and a copy of the Team Norms with the signatures must be placed in Appendix B of the Template. (10%)
- Task 2: Shared Agreement on the User Experience and Interface: (10%)
    - List the user experience aspects identified in the professional products and why the team believes these are important for this application. (5%)

- List the user interface aspects identified in the professional products and why the team believes these are important for this application. (5%)
- Task 3: Input Validation: (10%)
  - List each of the input fields that appear in the submission. (5%)
  - Describe how to determine if the input is valid before using it. (3%)
  - List the error message to be displayed for input that is not valid. (2%)
- Task 4: Implementation Plan and Progress Made: (10%)
  - Each member of the team has been allocated one or more user stories (or portions of user stories) and when they will be tested and ready for integration. (3%)
  - A schedule of the Standup Meetings (at least twice a week) for the team. (3%)
  - Notes from **each** Standup Meeting showing progress, issues, and next steps. (4%)
- Task 5: List of Automated Tests to be Implemented: 10%
  - The purpose of each test. (5%)
  - Specify who will implement, document, and produce the screencast of the use of each test. (5%)
- GitHub: A working URL that can be copied and used to access the code, the Screencasts, and the Stand Up Meeting recordings. A ReadMe file must be provided a list of all the items placed in the repository (specified in this deliverables section) and how to access each: (10%)
- Two Screencasts, Plan for producing them, and the Stand Up Meeting recordings: (20%)
  - The first is a technical screencast that shows and explains the code. The code must be readable, and the explanation must be audible and how the code accomplishes its purpose. (5%)
  - The second is aimed at all potential users and shows the execution of the application and how each requirement is satisfied. (5%)
  - For each screencast, produce and **document** a brief plan outline that specifies who on the team will do what (to show equal allocation of effort). The technical plan outlines the items from requirements to the final product and how they flow gracefully to the final product that the screencast will cover. The second screencast plan outlines which team member will cover which of the requirements   Each team member must participate equally as a screencast presenter. (5%)
  - Also ensure that your recording of your stand up meeting have been recorded as described above and added to your repository. (5%)
- The code (nicely formatted with internal documentation) produced for this assignment is consistent with the provided code and documentation, so most people would assume it had been written by the same author: (10%)

Rubric TP 1

Criteria	Ratings			Pts
Template Usage: The pdf must follow the provided template format	**5 pts** **Correct template used and fully filled with accurate content.**	**2.5 pts** **Template used but contains minor inaccuracies or missing elements.**	**0 pts** **Incorrect or missing template.**	5 pts
Cover Page: complete with each teammember's name. In addition in Appendix A, each team member must provide six lines of description about their contribution to this report. All team members must agree with the description every other team member has provided. Every team member who name appears on the cover page certifies that all the the material in the report (not just their contribution), including the code, is the original contribution by the team's members, is from the assignment and ASU materials including code, documentation, and diagrams provided on Canvas, or is the work of another and has been properly cited and referenced.	**5 pts** **Name and required details are present Team review are missing**	**2.5 pts** **Minor errors in the cover page.**	**0 pts** **Cover page missing.**	5 pts
Task 1: List the issues the team has concluded have a high-enough probability of becoming an issue for the team to warrant a Team Norm to address it. For each issue, the team has described what they expect of the involved team member(s) and the whole team on how to address the issue in order to avoid having it become a problem for the entire team. Each member of the team must sign these team norms and a copy of the Team Norms with the signatures must be placed in Appendix B of the Template.	**10 pts** **Student has listed down potential issues, and expectations from individuals and the team to address the issue for each listed issue**	**5 pts** **The student has not clearly mentioned steps to address each issue**	**0 pts** **Task 1 Missing**	10 pts
Task 2.1: List the user experience aspects identified in the professional products and why the team believes these are important for this application.	**5 pts** **Student has listed the UX aspects for the referred website**	**2.5 pts** **The description for why they believe is important is vague and not to the point or has only 1 point**	**0 pts** **Missing task 2.1**	5 pts

Criteria	Ratings			Pts
Task 2.2: List the user interface aspects identified in the professional products and why the team believes these are important for this application	**5 pts** **Student has listed the UI aspects for the referred website**	**2.5 pts** **The description for why they believe is important is vague and not to the point or has only 1 point**	**0 pts** **Missing task 2.2**	5 pts
Task 3.1 List each of the input fields that appear in the submission.	**5 pts** **Student lists all input fields**	**2.5 pts** **Student misses a few input fields**	**0 pts** **Missing task 3.1**	5 pts
Task 3.2 Describe how to determine if the input is valid before using it.	**3 pts** **Description is accurate and to the point**	**1.5 pts** **Description is vague**	**0 pts** **Description missing**	3 pts
Task 3.3 List the error message to be displayed for input that is not valid.	**2 pts** **Error message clear and concise**	**1 pts** **Error message vague**	**0 pts** **Error message missing**	2 pts
Task 4.1 Each member of the team has been allocated one or more user stories (or portions of user stories) and when they will be tested and ready for integration.	**3 pts** **Each member has a decent distribution of user stories**	**1.5 pts** **Stories not evenly distributed**	**0 pts** **Distrubution not present**	3 pts
Task 4.2 A schedule of the Standup Meetings (at least twice a week) for the team.	**3 pts** **Two or more Standups scheduled**	**1.5 pts** **Less than two standups scheduled**	**0 pts** **No standups scheduled**	3 pts
Task 4.3 Notes from each Standup Meeting showing progress, issues, and next steps.	**4 pts** **MOMs from standups present and has relevant information**	**2 pts** **MOMs don't contain relevant information or missing for some meetings**	**0 pts** **MOMs missing completely**	4 pts
Task 5.1 The purpose of each test.	**5 pts**	**2.5 pts**	**0 pts**	5 pts

Criteria	Ratings			Pts
	Purpose of each test is present	**Purpose for each test not present**	**Purpose not mentioned for any testcase**	
Task 5.2 Specify who will implement, document, and produce the screencast of the use of each test.	**5 pts Work distribution mentioned**	**2.5 pts Work not distributed to all students**	**0 pts Work distribution missing**	5 pts
GitHub: A working URL that can be copied and used to access the code, the Screencasts, and the Stand Up Meeting recordings. A ReadMe file must be provided a list of all the items placed in the repository (specified in this deliverables section) and how to access each	**10 pts Github URL present and contains the code, link to screencast, readme with required details**	**5 pts Missing readme/complete code or video links**	**0 pts URL missing**	10 pts
Screencast 1 The first is a technical screencast that shows and explains the code. The code must be readable, and the explanation must be audible and how the code accomplishes its purpose	**5 pts Video is present and to the point**	**2.5 pts Video vague, and does not follow requirements**	**0 pts Video missing**	5 pts
Screencast 2 The second is aimed at all potential users and shows the execution of the application and how each requirement is satisfied.	**5 pts Video is present and to the point**	**2.5 pts Video vague, and does not follow requirements**	**0 pts Video missing**	5 pts
Screencast 3 For each screencast, produce and document a brief plan outline that specifies who on the team will do what (to show equal allocation of effort). The technical plan outlines the items from requirements to the final product and how they flow gracefully to the final product that the screencast will cover. The second screencast plan outlines which team member will cover which of the requirements Each team member must participate equally as a screencast presenter.	**5 pts Documentation is as per requirements**	**2.5 pts Document is missing a proper plan or proper distribution of work**	**0 pts Missing documentation**	5 pts
Screencast 4 Also ensure that your recording of your stand up meeting have been recorded as described above and added to your repository.	**5 pts Both standup meeting**	**2.5 pts There is only 1 stans-up recording, or the**	**0 pts Recordings are missing**	5 pts

Criteria	Ratings			Pts
	recordings are present	**meetings are very short (don't have actual information)**		
The code (nicely formatted with internal documentation) produced for this assignment is consistent with the provided code and documentation, so most people would assume it had been written by the same author	**10 pts Code conforms to the requirements**	**5 pts Code is either inconsistent or missing documentation**	**0 pts Code changes missing**	10 pts
Bonus Point	**0 pts Full Marks**	**0 pts No Marks**		0 pts
			Total Points: 100	