Team Name:

The Painters

Names and PIDs:

Josh Davis (jsd18), Torrin Conrath (torrin), justin Ridenour (justinlr), Ken Johnson (kenmjohnson03)

Project Ideas

Canvas Assignment Rewarder

1. Provide an example of five hypothetical non-functional requirements for this system. Be sure to include the specific type of requirement discussed in class, with each requirement coming from a unique category.

1. It need to be able to display all relevant tasks that need to be completed
2. It needs to send a positive message after completing a task
3. Create an algorithm that determines importance of each task
4. Create an executable or use a webpage that can hold the app
5. This requires the software to retrieve data from the canvas API

2. Provide an example of five hypothetical functional requirements for this system.

6. Order the tasks based on importance
7. Periodically check Canvas for assignments completed
8. Interface that you can view and interact with
9. Have application to load
10. Be able to be easily readable and simple to understand how it works.

3. Think of a specific task required to complete each of the functional requirements and non-functional requirements mentioned above (10 total). Estimate the amount of effort needed to complete this task using function points (i.e., using the values here). Briefly explain your answer.

Each task corresponds to the number from questions 1 and 2.

1. This requires the software to list the tasks in a window. (4) This is just simple printing and formatting and will not take too much time.
2. This requires the software to send automated positive messages linked to the canvas account. (7) This will take more time as it will require research and more complex implementation.
3. This requires considering the weight of the assignment and the due date and assigning an importance value based on these factors. (2) This algorithm will be very simple and can be implemented easily
4. Research the pros and cons of using an executable vs a website and select the better option. (3) This should be a relatively simple and straightforward task.
5. This requires researching how the Canvas API works. (6) It will take some time to understand the Canvas API enough to retrieve data.
6. This requires retrieving each task's algorithm score and sorting the tasks based on this score. (3) This will be a simple sorting algorithm which can be quickly implemented.
7. Use ticks or a timer or research another way to retrieve data periodically. (8) This may take more time as it requires research and a more complex implementation.
8. Implement an accessible GUI. (7) This will likely be a more time consuming task as implementing a GUI is a lengthy process.
9. This requires implementing an application. (5) This task only requires a prototype of our design so it should be pretty simple
10. Make sure the GUI is simple and avoid making it overly complex. (4) This only requires a simple review of our GUI's accessibility.

4. Write three user stories from the perspective of at least two different actors. Provide the acceptance criteria for these stories.

User 1: John is a Virginia Tech student that has trouble staying motivated and keeping his coursework organized. He uses canvas, but does not think that it is organized well enough. John wants a system

that will organize his work in order of importance (number of points available for a specific assignment) and that will notify him when a deadline is coming up.
User 2: Amy is a VT student that is feeling overwhelmed by her assignments. She struggles with deciding what assignment to even start on. Amy wants a system that will help her choose what assignment to do first, and she wants to feel rewarded for completing an assignment.
User 3: Steve is a VT student who forgets about his assignments constantly. He is sad he has missed so many points and wants a system that will remind him of his upcoming assignments. He would like it to notify him when assignments are coming due and provide him a simplified list of all the assignments he has to do.

5. Provide two examples of risk that could potentially impact this project. Explain how you would mitigate these risks if you were implementing your project as a software system.

1. The system missing an assignment could be detrimental to the user, who might miss out on points they otherwise would have gotten. A user would be upset if they did not complete an assignment because the system did not tell them it existed. I would run thorough tests with many scenarios covered, to make sure that the system works as intended and does not miss assignments.
2. Incorrect labeling of importance of assignments. Some assignments may be labeled as more important than others even though they might not be in the user's opinion. A user that has incorrectly labeled assignments may make the decision to complete a less important task instead of a more important one and feel displeased. To remedy this the user should be able to manually change the importance of items if they see fit.

6. Describe which process your team would use for requirements elicitation from clients or customers, and explain why.

To stay on track of progress we have biweekly deadlines where we would need to accomplish a certain amount of the project. During these deadlines we can have meetings to discuss what progress has been made and how much progress is needed for the following meetings. Having checkpoints will help make sure we are making steady progress and not procrastinating on any part of the project. It will also assist members of the team who are stuck and need help from other members without requiring us to email

each other all the time. During these meetings we can add what additions we made and what we are going to add next time on a Kanban Board with Github Project. This will help the clients know the progress we are making and what we are going to do in the future with the project.