Requirements Workshop:

0.a Come up with a team name for your group.
Name: Slackin'off

0.b Please list the names and PIDs of the team members who are present today (or knowingly absent)
Krishna Nair (krishnanair)
Hunter Jaques-Pownall(hunjaq)
Tyler Buxton (tbux)
Tyler Kim (tdkim)
Patrick Johnson (patrick91)

0.c Provide your preliminary project idea (or set of ideas). This is not a commitment to a project.
- Slack bot
- Same but for discord?
- Same but for JIRA?
- Used to connect a chat system to a kanban board. The use of keywords in a chat system tells the bot to create, move, or remove a task from the chosen task board.
    - For example, TODO: write unit test for backend @name

Using the approved idea for your group's course project, complete the following activities related to requirements analysis.

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. Improves workflow efficiency
    2. Improve communication within team
    3. Reduces Time spent creating task
    4. Outlines work distribution
    5. Increases documentation

2. Provide an example of five hypothetical functional requirements for this system.
    1. Must be able to add a task to the kanban board
    2. Must be able to move a task from 1 section to another
    3. Must be able to remove a task from the kanban board

4.   Must be able to accept/recognize input (add Task01 to TODO)
5.   Must be able to accept multiple collaborators per kanban board

3. Think of a specific task required to complete each of the functional requirements and non-functional requirements mentioned above. Estimate the amount of effort needed to complete this task using function points (i.e., using the values [here](#)). Briefly explain your answer.
   -   Implement accessing Slack and github apis - 2/10
   -   Implement recognition of words and their respective functions - 5/10
   -   Implement altering github to reflect recognition/functions - 8/10
   -   Implement a way so that the team gets access to the tasks - 2/10

https://www.scrumpoker-online.org/en/room/02324041/scrum-poker

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

   ●   As a developer, I need to create a slack bot to read messages when given a command.
   ●   As a developer, I need to use the GitHub api to send data from the slack bot.

As a tester when I provide a keyword, ie TODO, it should redirect whatever to the part of the board it was designated for.

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.

   ●   Competing products that would be better than ours
   ●   The bot would potentially mess up any current structure already implemented into the workflow
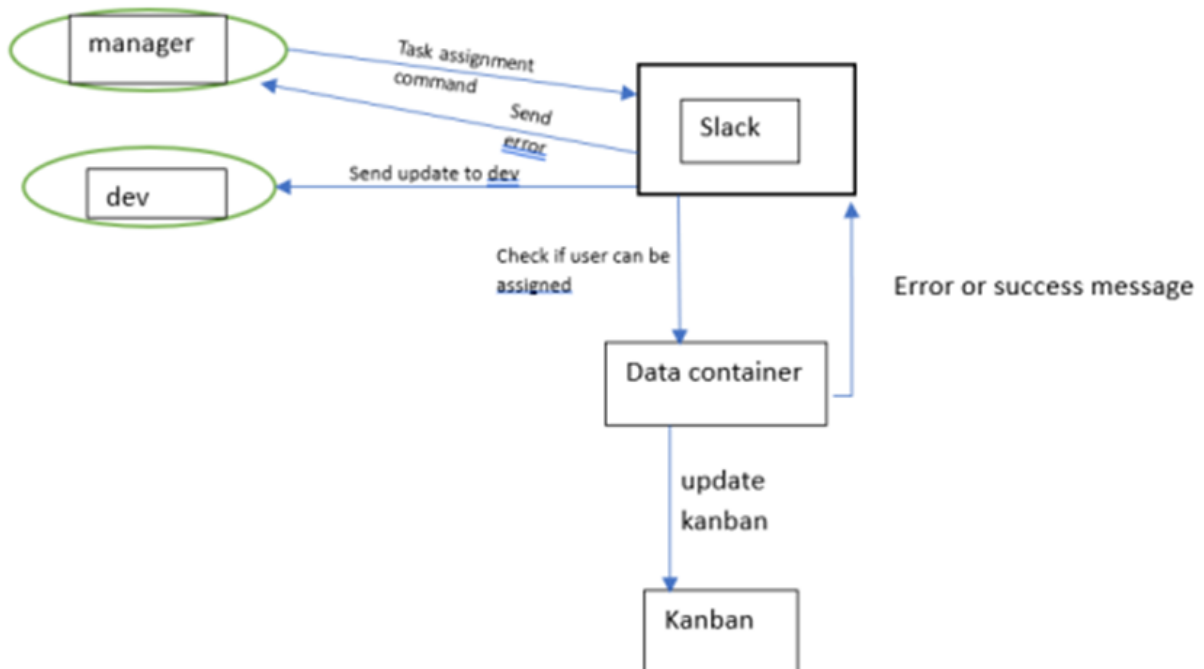

6. Describe which process your team would use for requirements elicitation from clients or customers, and explain why.
Prototyping/strawman, because we would best benefit from creating flow charts to document the process and how we plan to implement the program.
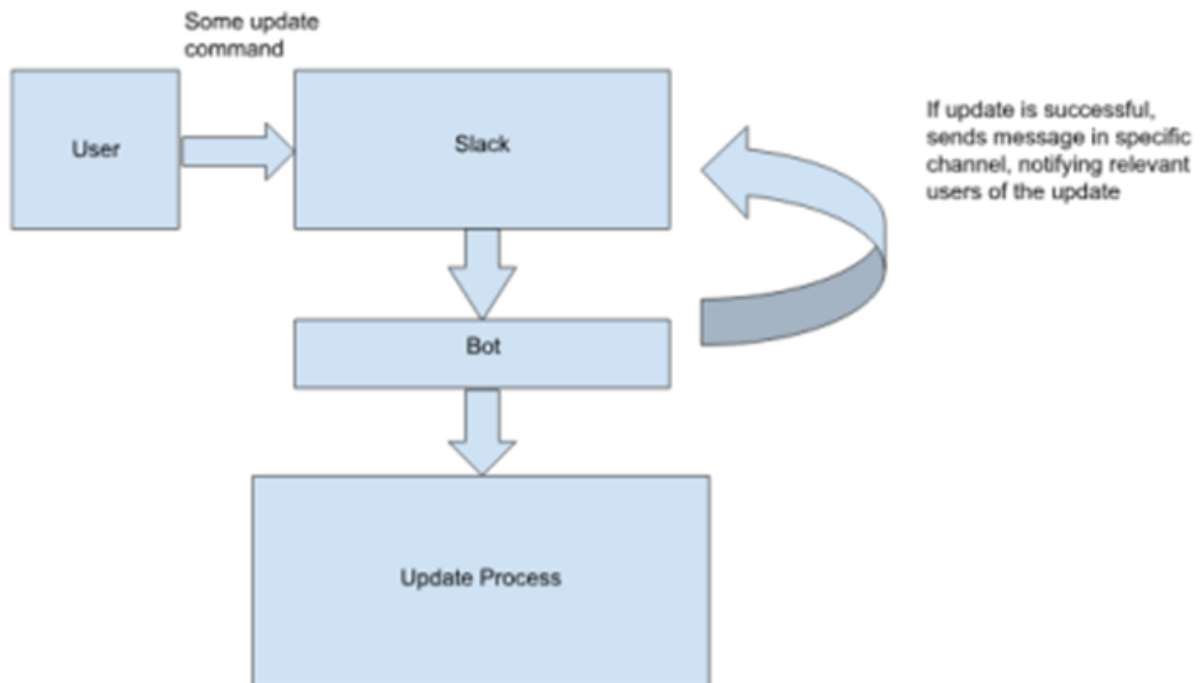
Requirements Analysis:

Hunter:

For this case, a manager adds another developer to a group dedicated to a task on the board. This would be done by a manager using a command such as /todo assign <task id>. Upon doing this, the new developer would be added to the group and notified, then receiving updates regarding their task. Additionally, there would be a defined limit on the number of simultaneous assignments the developer has, so if a manager attempts to add assignments than the limit, they would get an error and need to unassign them. A task being marked as completed would also reduce the number of active assignments.
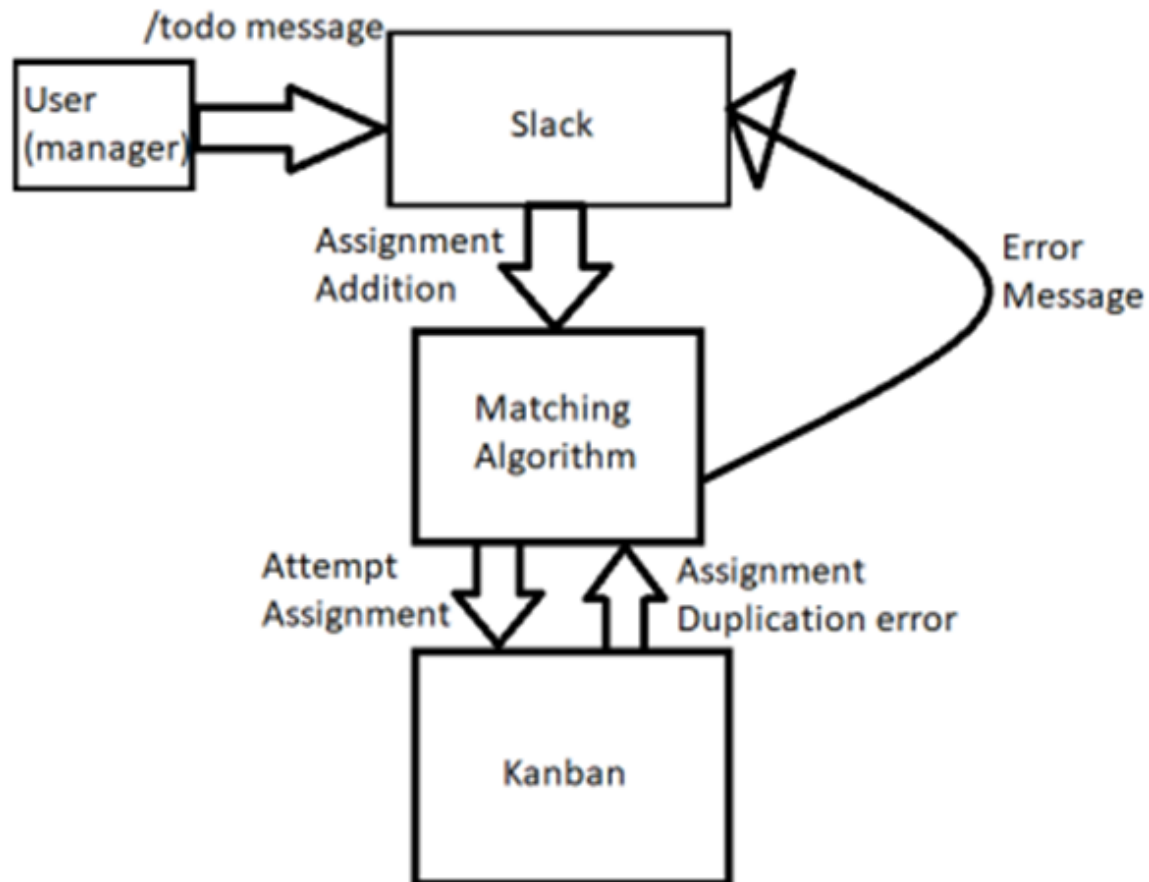
Krishna:

In this case, the user updates the kanban board, which also sends a message in a slack channel. This will happen whenever the board is updated, such as when a task is moved from in progress to finished. Once the bot receives whatever update to a task, it will perform that update. Once the bot updates the board, it will then go to a dedicated chat within a slack server to notify relevant members that an update has occurred by specifying what change was made, by who, and when it was made.

Some update
command

| User | → | Slack |

If update is successful, sends message in specific channel, notifying relevant users of the update
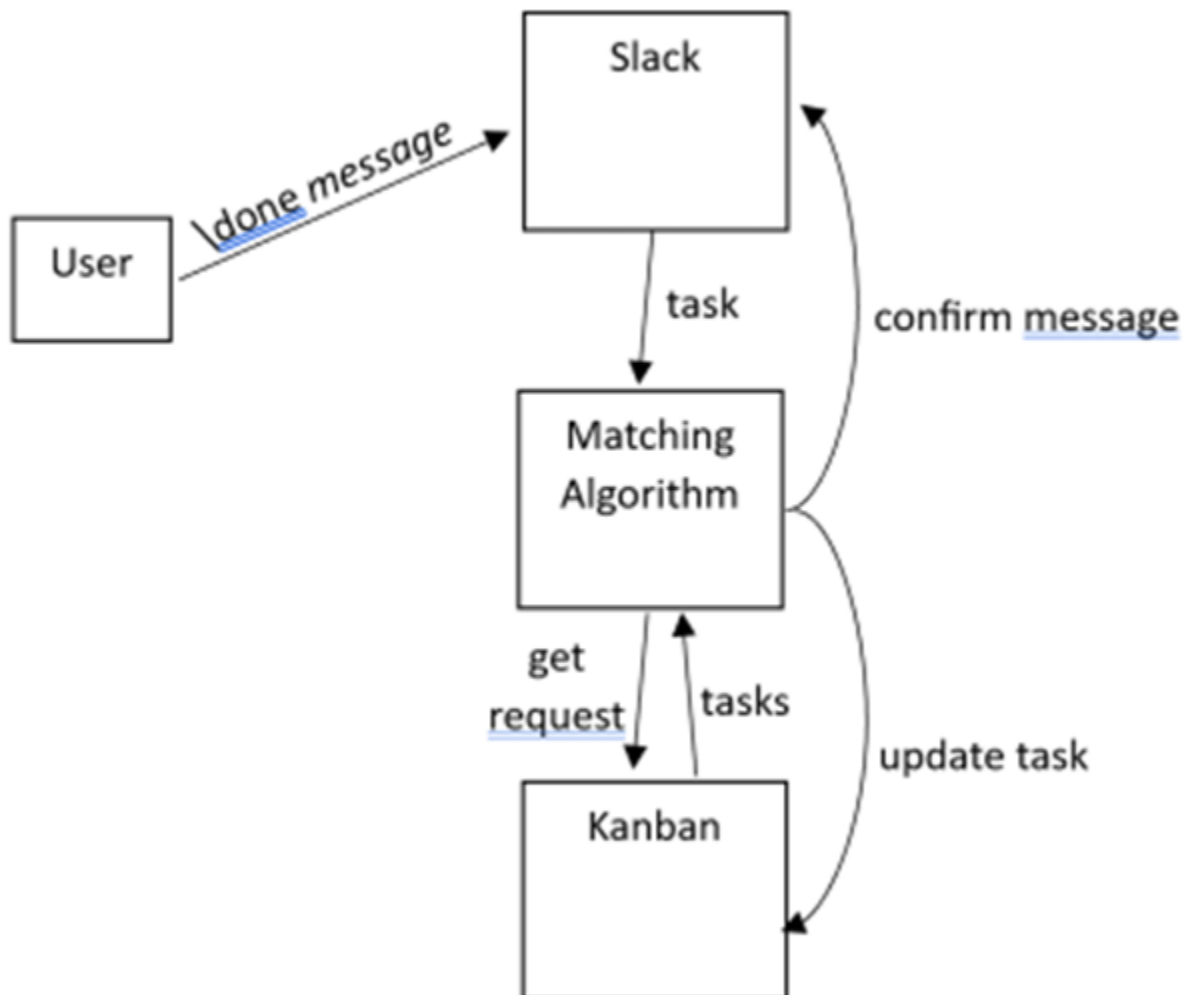
Bot

Update Process

Tyler Kim:

In this case, the user, a manager, is attempting to assign a task to a developer, after deciding what should be done and who should do it. This message will be typed out in slack as it is being discussed and is officially added with a /todo command. However, in this case, the assignment has already been created and assigned to the current developer, by another manager. Therefore, when the /todo message is typed, and slack sends the algorithm the assignment, an error will occur, as the matching algorithm checks the kanban board for duplicate assignments. This error is then sent back to the slack program, in the form of an error message. This then notifies the manager that the task is already in the "todo" state and avoids unnecessary work assignments.
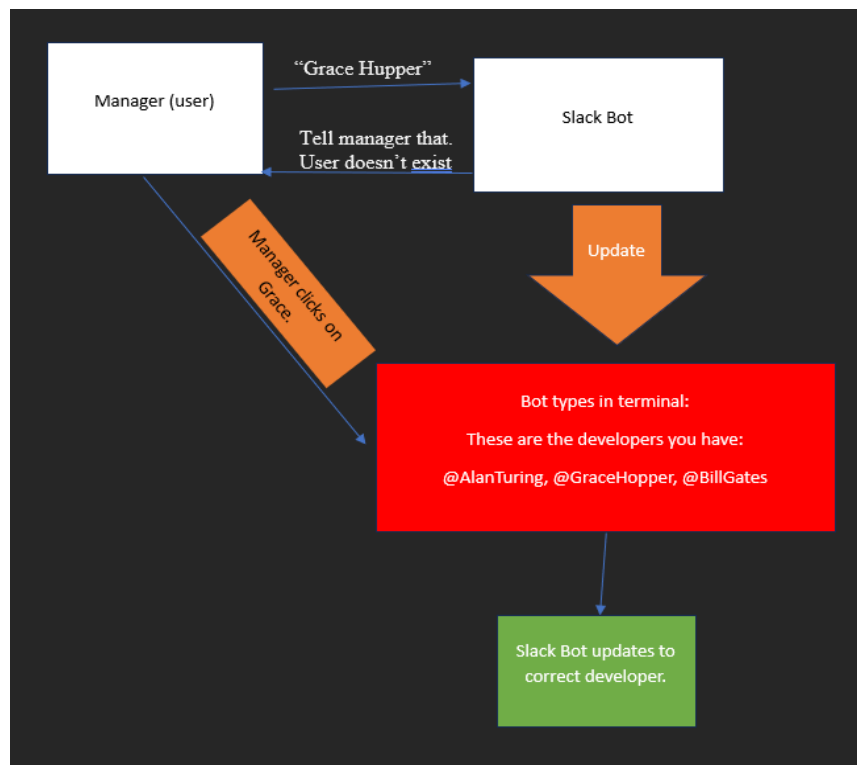
Tyler Buxton:

In this case, the user is trying to switch a task from the todo state to the done state. A message will be typed into Slack, it would need to follow the format \done message. The precondition for this case is that a task is already in the todo state with a similar message. Next, the slack bot will take the message and run it through a matching algorithm to check if the task is already in the todo state or progress state. In this case, the task is in the todo state. The slack bot will then push the new task to the done state and remove the old task from the kanban. It will also move over any users that were assigned to the task. If the switch was successful, it would notify the user on Slack that the task was successfully switched.

Patrick:

In this case, the manager (the user), is trying to assign a task to a developer, they have the task lined up but mistypes the name of the developer and didn't notice when they hit enter to put it in the chat. This message will be returned to the manager, "Sorry but there is no such user on this team and cannot be assigned that task, you have these developers on your team, would you want to use one of them instead?". In this case, there was a typo that the manager applied but didn't catch right away. Therefore, instead of having to do the whole process over again the chat had given the option of developers on the team to assign instead of the mistyped person. This way the manager doesn't have to go back and redo everything and just clicks on the developers name instead and the chat will update accordingly.

Process Deliverable - Scrum Meeting:

Tyler Buxton:

- *Yesterday:* I worked on writing use cases for P2
- *Today:* I am working on finishing P2.
- *Stuck:* I am stuck on how we should implement the matching statements in the slack bot.

Tyler Kim:

- *Yesterday:* I viewed examples of making use cases
- *Today:* I am working on P2
- *Stuck:* I am stuck with creating properly formatted use cases in P2

Hunter:

- *Yesterday:* Reviewed use cases and diagrams
- *Today:* Created a use case and diagram for PM2
- *Stuck:* I am stuck compiling scrum meeting

Krishna:

- *Yesterday:* I reviewed how to make use case models
- *Today:* I wrote out a use case for P2
- *Stuck:* I'm stuck on how exactly to structure the use case P2

Patrick:

- *Yesterday:* I worked on making my use case for P2
- *Today:* I am finishing P2 requirements and submitting for the group
- *Stuck:* I am stuck making my diagram for P2