# CECS 491B - Sec 6 - Retrospective Document Project Name: ArrowNav

Team Longhorn:

Brayan Fuentes

**Christian Lucatero** 

Curtis Nishihira

Miguel Zavala

Spencer Gravel (Team Leader)

May 2, 2022

## 9/7 - Sprint 0

## What did we do well?

- Team members provided useful project ideas that were presented at the in-person meeting.
- Productive in-person group meeting in which the team was able to choose the project ideas from the pool of ideas brought by each member and were able to start thinking about the unique features.
- Every team member suggested edit changes that the proposal needed before the proposal submission.

## What do we need to improve on?

- Continuously adding more tasks to the next sprint since there is more work than anticipated
- Start conducting daily scrum meetings to get continuous updates on each team members' progress as well seeing what roadblocks they might have encountered.

## Persisting Issues:

- Proposal still has not been approved which other documents are dependent on.
  - Team members will postpone their tasks for the upcoming sprint by 2 days to allocate more hours to project proposal.

## 9/21 Sprint 1

#### What did we do well?

- Daily scrum meetings kept team members aware of the team's progress as well as being able to assist other members when they had any roadblocks.
- Team was good about getting docs looked at by other teammates to try and follow a more formal review process
- Office hours were visited consistently to get as much feedback as possible

## What do we need to improve on?

- Daily stand up often deviated by tangents, Scrum master needs to keep team more on topic
- Improve documentation for client by posting to github, and recording meetings notes such as a running doc for stand up
- Under Planned the amount of hours required for tasking during Sprint 1, this needs to be addressed by more accurately accounting for time in the assignment of story points

## Persisting issues:

- Proposal continuing to be a roadblock because of unapproval.
  - Solution: Allocate even more hours then previous sprint to prioritize the approval of proposal. Team needs to be more detail oriented to catch errors before sending proposal submissions to the client.

- Other classes, projects and jobs are taking up the time of the group members.
  - Solution: Members need to begin to do their homework ahead of time and plan their time accordingly around their work to dedicate more time towards the Senior Project.

## **10/5 Sprint 2**

What did we do well?

- Was able to get proposal approved and remove persisting roadblock
- Team managed time better with other classes and was able to allocate more time to the project
- Daily standup has become less deviated by virtue of scrum master intervening

What do we need to improve on?

- Deliverables were delayed by proposal, for next milestone with no blockers, the team should start much earlier and spend more hours initially than during sprint 0 and 1
- Adjusted to previous sprint but overestimated the story points, the team needs to utilize both sprint 1 and 2 data to continue to refine planning sessions
- Team members need to make more of an effort in posting deliverables/items immediately to github when said deliverables/items are completed.

#### Issues:

- Upcoming External Work from Other Classes
  - Team members need to start the tasks 1 day before the sprint due to external homework and exams being assigned.

## 10/14 Sprint 3

What did we do well?

- Were able to get the tasks assigned to this sprint completed.
- Daily standup has become less deviated by virtue of scrum master intervening
- Team members suggested edit changes to the deliverables that will be used in the next sprint.
- Attending office hours to get an even better understanding of what the documents required.

What do we need to improve on?

- Adjusted to previous sprint but overestimated the story points, the team needs to utilize both sprint 1 and 2 data to continue to refine planning sessions
- Team members need to make more of an effort in posting deliverables/items immediately to github when said deliverables/items are completed.
- Team members need to remember to move the tasks in Zenhub(kanban board) so that the rest of the team members can see the sprint's progression.

- Upcoming external projects and midterms
  - Team members need to start the tasks for the next sprint 1 day earlier to take into account the busy upcoming week.
- Tasks on Zenhub are not being updated
  - Team members need to update the status of tasks by 11pm on the same day that they were finished.

## 10/26 Sprint 4

What did we do well?

- The team was able to finish the deliverables for milestone 2 by the internal due date.
- Attend office hours to be able to obtain new information and feedback that will help in making the final edits to the deliverables.

What do we need to improve on?

- The team needs to utilize both sprint 3 and 4 data to continue to refine planning sessions
- Team members need to make more of an effort in posting deliverables/items immediately to github when said deliverables/items are completed.
- Team members need to keep remembering to move the tasks in Zenhub(kanban board) so that the rest of the team members can see the sprint's progression.
- Team members need to improve their time management to avoid risks that could affect the sprint workload.
- The team needs to be consistent in attending the daily stand ups. There were a few
  occasions that the stand up was canceled due to insufficient members. Responsibility
  falls on the scrum master to remind and encourage the team to attend the daily stand
  ups.
- Improve the formatting of the story cards in Zenhub.

- A few of the stand-ups had to be canceled due to not having enough team members available to attend.
  - Scrum master will send reminders half an hour before the designated time to remind the team about the stand up.
- Tasks on Zenhub are not being updated
  - Team members need to update the status of tasks by 11pm on the same day that they were finished.
- Bad Time Management within the team
  - Team members should have 25% of their tasks done by each quarter of the sprint.
- Improve formatting the stories in Zenhub
  - Product owner and scrum master will update the stories with any required parts missing (priority, assignment, story points, sprint #, internal deadline, external deadline) by 11pm 10/26

# 11/11 Sprint 5

#### What did we do well?

- Communication among team members was efficient and clear.
- Team members were able to complete their designated tasks by the end of the sprints
- Team members continued to attend office hours and ask questions and/or learn about what could be done to improve any/all deliverables.
- Team members suggested changes when peer editing the revised milestone 1 documents.

## What do we need to improve on?

- Team members must inform other team members of any gaps in knowledge regarding deliverables or tasks assigned during sprints.
- Have more meetings outside of our daily standups to work and collaborate on documents. This helps in providing collaborative insight into any deliverable assigned.
- Team members need to be more consistent in attending the daily stand ups as there were a lack of members from time to time.

#### Issues:

- Random team members are not showing up for some scrum meetings, with no notice of absence given ahead of time.
  - Scrum master will message the team on the first day of sprint 6 to revise and confirm the daily stand up schedule to ensure that members can start attending regularly.
- Some of the team members do not have the required environments installed
  - On the first day of sprint 6 the members must have everything that is specified on the tech spec document installed by the end of the day.
- Upcoming Finals
  - Members should start the next sprint tasks 3 days earlier to take into account the busy upcoming weeks leading to the week of the final.

# 12/14 Sprint 6

## What did we do well?

- Were able to finish the implementation and the low-level design assigned to this sprint completed.
- Attend office hours to be able to obtain new information and feedback that will help in making the final edits to the low level design.
- Team members were able to more frequently attend the daily standups and were able to
  effectively relay information to members that couldn't attend the daily stand ups to
  prevent progress from being delayed.

 We were able to attend the bonus lecture during Thanksgiving Break to obtain new information on the implementation of our Low Level Design as well as have an idea of our implementation.

## What do we need to improve on?

- Team members need to improve their time management to avoid risks that could affect the sprint workload.
- Team members need to make more of an effort in posting deliverables/items immediately to github when said deliverables/items are completed.

## Issues:

- Team members are forgetting to post updates on the github
  - Team members need to commit any of the updates done to their assigned tasks by 11pm on the same day.
- Team members understanding of technologies and languages is not up to par
  - Team members must allocate at least 4 hours on the first day of the next sprint to familiarize themselves with the technologies specified on the tech spec

## 02/03 Sprint 7

## What did we do well?

- Teammates began researching their own respective individual unique aspects of the application.
- Teammates agreed and followed a new SCRUM schedule based on the needs and schedules of other teammates.
- Increased communication on aspects of the applications and what needs to be done/completed.
- All necessary software needed for the application was downloaded by all teammates.

# What do we need to improve on?

- Letting other teammates and the SCRUM master know ahead of time if they are unable to attend SCRUM meetings.
- Record questions that need to be asked to Vong instead of trying to recall from memory when attending office hours.

#### Issues:

- Teammates initially had trouble assigning unique features of the application for the individual code review for the application.
  - Teammates had a meeting to resolve the previously stated issue and had the unique features of the application assigned to their respective teammates.

## 02/16 Sprint 8

What did we do well?

- Finished all outlines for DARs that needed approval by their respective internal due dates.
- Submitted DARs for approval in a timely manner.
- Teammates continued to make progress on their individual unique features for their code review.

## What do we need to improve on?

- Conduct more research when writing and editing the DARs so the technology can be approved as soon as possible
- Teammates who have unique features that interact or rely on other features of the application need to communicate on their progress so that they are on the same page.

#### Issues:

- Teammates not showing up to SCRUM meetings and not giving a heads up or notice when said teammate will be absent
  - Have SCRUM Master remind teammates what is expected of them when attending SCRUM meetings.
- Other classes and their work make it difficult for teammates to find time to work on their unique features for the application.
  - Create a concrete schedule with time dedicated to completing or working on tasks relating to the application.

## 03/02 Sprint 9

## What did we do well?

- Provided consistent updates on progress made towards aspects of the application that were due by their respective dates.
- Group mates continued implementing their code towards their respective responsibilities for individual code review.
- Group mates were more coordinated in determining dates to congregate and collaborate on working towards the completion of the application.

## What do we need to improve on?

- Increased communication between group members that have features that are reliant on aspects of other group member features.
- Reporting to either the team leader or SCRUM master if a group member is absent from a scheduled meeting.

- Merge conflicts often occured as a result of team members editing the same file in their branches and then making a pull request.
  - The development team needs to do a better job of communicating who is working on what files. If a team member is going to be changing a file they should announce it at minimum during the daily stand up, group messaging would be

- preferable. By doing this team members can be aware of who is working on what files at what time.
- Additionally, it should also be announced when said team member is done augmenting that file and done with their pull request to notify team members that the file is open to change. The same communication method applies to minimum stand up, preferably group messaging.
- A few of the stand-ups had to be canceled due to not having enough team members available to attend.
  - Scrum master will send reminders at least an hour before the designated time to remind the team about the stand up.

## 03/17 Sprint 10

What did we do well?

- Progression on individual code continues among the group members.
- SCRUM meetings are very concise and direct, with all members present at a majority of the meetings.

What do we need to improve on?

- Any questions that the group has regarding the application or anything relating to the lecture should be brought forward to the group or the professor for clarification.

#### Issues:

- Simple bugs persisted for longer than needed as a result of lack of peer reviews and communication.
  - Team members should schedule code peer reviews with teammates at least at the halfway mark of their estimated time to completion from sprint planning.
     Preferably code peer reviews will take place at each quarter of the estimated time of completion should time allow it.
  - Team members that announce an unsolved roadblock for 3 consecutive stand ups should schedule a peer review immediately following the 3rd stand up conclusion.
- Bad Time Management within the team
  - Team members should have 30% of their tasks done by each third of the sprint.

# 03/25 Sprint 11

What did we do well?

- Groupmates adhered to personal schedules and were able to achieve the desired work that was planned for the application.
- SCRUM meetings are very concise and direct, with all members present at a majority of the meetings.

- Questions posed by group members regarding the application were answered respectfully by other group members.

# What do we need to improve on?

- Communication among group members is starting to decrease slowly, therefore increasing communication or keeping it consistent.

#### Issues:

- Merge conflicts continue to persist
  - Not as a result of teammates working on the same file. Conflicts resulted from branches not being up to date with main or team members making changes directly to main.
  - All changes must be made through a branch and pull request to keep the main branch clean and working. Additionally, team members should at minimum update main branch changes to their working branches before making a pull request. If working branches are up to date with main, team members will have to spend less time resolving merge conflicts.

## 04/13 Sprint 12

## What did we do well?

- The group communicated that they completed their respective features before their assigned individual code review.
- Communicating what they were stuck on when working on their feature and the group providing helpful feedback.

# What do we need to improve on?

- Time management allocated to individual features in order to fully implement other core requirements (such as testing).
- Team members must inform other team members of any questions regarding their feature in a timely manner and not rushing to get answers.

## Issues:

- Consistency of attending SCRUM meetings began to decline.
  - Have the SCRUM master remind everyone in the group to attend SCRUM meetings 2 hours before so that group members can make time to attend.
- Team members asking questions with inadequate amount tof time to respond
  - Team members that have questions must take into consideration the other team members time and give them 1 day to respond before asking again.
  - Team members should not be asking asking question 2 days before the sprint deadline.

## 04/27 Sprint 13

## What did we do well?

- Asking questions ahead of the sprint deadline and giving the team ample time to respond.

## What do we need to improve on?

- Continue to improve and work on the application. Just because the individual code review is over does not mean that there is no more work that can be done.

## Issues:

- BRD
  - Spend 2 days of the next sprint time working on the unfinished features and understanding why and where the error is occurring before the application is ready for deployment.

# 05/04 Sprint 14

## What did we do well?

- Successfully published Team Longhorn's application in a production environment for all people to utilize on FireFox.
- Final group mate completed individual code review.
- Collaboration and communication between group members towards the last leg of the sprint helped in determining how much more work needed to be put in before the application was ready to be published.

## What do we need to improve on?

- Aspects of how the application was constructed and created could have been done better or more efficiently.
- There were features/requirements that couldn't have been implemented fully but with more time could've been finished.

- Features Not Fully Complete
  - There are some features that the team were unable to finish in the time desired due to other assignments from other classes.