SPRINT #2 REPORT - CMPS 115

Product Name: E-tendance, Team Name: Midnight Cobra, Date: 2/20/2018

- Actions to stop doing: Some actions that the team should stop doing include: The team should stop assigning each other the same tasks. Since everyone likes to be included in all aspects of the project we often try to work together on the same functionality. While this could be good if we are always working together, it has its faults when we work apart and try and complete the same task. If one person completes the task before the other, the other person's work could go to waste, when they could of been working on a different task. This could slow down the progress of the app. This should apply to two members who are most likely not going to be working together in person.
- Actions to start doing: The team should be more accurate at estimating work tasks, since tasks were consistently underestimated last sprint. As a team, we thought that some of the tasks would require much less time than they actually did. We need to account for the time we are researching and learning the material as well. One area that was drastically underestimated was the time needed to learn Firebase. None of the team members had prior experience with Firebase, so this was very difficult for us to accurately estimate, and the majority of the sprint's work was dependent on properly integrating Firebase functions to each activity of the app. The team needs to update the hours expected to complete a task once work is started to better reflect whether we will be on pace to finish the sprint, as the burnup chart for this sprint was an inaccurate representation of our progress and wasn't as useful as it could have been. If we had done these things, we would have realized sooner that certain tasks needed to be reprioritized or pushed to later sprints. We need to start holding more group work sessions. It is more effective for this team because all of us have different skills that help with solving different roadblocks that different team members are having. We can also benefit from collective research regarding the database, as this seems to be the greatest roadblock in accomplishing tasks for each individual. The teams should start commenting their code clearly in order to make sure that other team members know what each line in the code is doing in order to avoid confusion and aid productivity while working on the app. Comments should ideally be added right after completing a task and prior to pushing as to not procrastinate doing SO.
- Actions to keep doing: The team should keep updating each other on what they have been working on each day as well as the roadblocks that were encountered. This allows for everyone in the team to be on the same page and ensures multiple people are not separately adding the same functionality. It also allows individuals to volunteer information or help if they believe they can solve a particular issue. The team should continue to keep pushing their code when they make changes in the app in order to ensure that all the team members have access to the latest version of the code. The team should also continue informing others when pushes are made to ensure that work is not overwritten or broken as a result of conflicting pushes.

- Work completed/not completed: As this was a big sprint, there was definitely a lot of progress made. As a team we were able to complete two out of three user stories. Professors are capable of creating a class, and the list view of their created classes is visible and selectable on their homepage. We created fields in the app where the professor can create their own class code and pin for their classes in order for students to check in with their specified information. These codes and pins were then saved into the database. Students are able to add classes created by professors by inputting the class code and pin specified by the professor, and their classes are saved in a list view and selectable. We also created a splash screen that authenticates the current user and redirects the app to the login screen, student side, or professor side based on the results of the authentication. We also made sure that the database can differentiate between the students and the professors in order to keep the database organized as well as be able to pull data easier. We also organized the database so that it stores enrolled students as well as the days of the attendance of the students. The team was unable to complete the third user story which required using geolocation to define the parameters in which students could check-in for attendance. We were able to create the backbone of how attendance would be taken in the app as well as saving information in an organized fashion in Firebase, but adding the GeoCheck will be high priority in the third sprint.
- Work completion rate: Two out of three user stories were successfully completed this sprint while the last was started but not finished. The total number of estimated ideal work hours was originally 77 hours, but was reduced to 55 hours once we decided to push geolocation to the next sprint. The sprint was 14 days in length, from February 7th to February 21st. One user story was completed on average every 6 days during this sprint. Based on our initial time estimates for tasks, we completed an average of 4 ideal work hours per day; however, the amount of work we put in this sprint was not accurately reflected because many tasks took much more time to complete than originally estimated, and additional tasks arose to become blockers in completing listed tasks. In actuality, we did roughly 5.25 hours of work per day, while the sprint required roughly 75 hours without implementing geolocation. Over both sprints, we completed 5 out of 6 user stories over 23 days, working out to one user story completing every 4.6 days. Using our adjusted hours, we were able to complete roughly 5.5 hours of work per day over both sprints.

