6.170 Project Final Reflection
Team Abu Mongoose (Occasional Thoughts)
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Team Reflection:

What we learnt:
The project gave us an opportunity to get experience in working with the node/mongo stack and improved our programming skills. It introduced us to several new APIs including the facebook and mandrill APIs. We all participated in front end development extensively and got introduced to integrating bootstrap components. The research involved in implementing the code introduced us to several online resources which will remain helpful for future reference.

We got experience in working as a team and taking responsibility of our individual tasks while collectively working towards a common goal. We learnt to communicate effectively and resolve team conflicts amicably. The project forced us to stay disciplined throughout and follow both official and personal deadlines.

What went well:
The division of labor was good in that we each worked on disjoint parts of the application in a way that did not lead to conflicts. No one was doing any redundant work, or inadvertently hindering anybody else's work. As a consequence, merging all individual work into the final working app was a smooth process. The division of work was also more even than last time. We each took on more than in the MVP (partly because there was more work to be done for the final version). That helped us learn relatively more in the same amount of time.

Communication was good. Not only were we all on the same page most of the time but we communicated frequently about our progress, latest bugs and resolved issues during and outside the meetings.

We coordinated working together often with each work session being a few hours long. We ended up accomplishing a lot more in that period than we might have had we been working in isolation at separate times.

We were able to help each other out, especially with pieces of code that we had individually written. Angus had a lot of programming experience so often times, he would help us out by quickly seeing the error we were making or by pointing us to a resource. Following the MVP submission, Angus demonstrated how to use the Chrome debugger so we would be able to use it better in our own debugging. That made us a bit less reliant on him.

Finally, working together was a pleasant experience. Following the MVP submission, we made some changes that made us more organized as a team. As the app got closer to being complete we also felt increasingly enthusiastic about it and so working together was fun.

What could have been done differently:
After the MVP we were thinking that the rest of the implementation should be straightforward. How add built all the relevant pages and just had to connect the backend and the frontend together. However it became apparent that implementing the details of the privacy settings and supporting link sharing was fairly complicated and more time demanding. It would've been great if we had realized that and done some of that work in the MVP as well.

We were also limited in different ways by the facebook API. Sharing private links through facebook didn't work, as facebook didn't allow for more than one 'to' field. Similarly, sharing public links through facebook didn't work. Facebook thought the specific link we wanted to share was an invalid source. This made us move to using mandrill for sharing links through email. It would have saved us a lot of time to work with mandrill directly instead of integrating the facebook api.

Lastly, we spent a lot of time polishing the create new occasion modal but we did not spend enough time on the look of each individual occasion. The look of the published occasion especially should have been a core concern since it is those published occasions that would compel users to use our app. However, giving that the focus of this class was not on frontend polish, our final product was not too bad.

What would we do differently in the future:
In the future we will spend more time investigating the different apis we intend to use before committing to a specific approach. We will also have a deeper evaluation of what the core aspects of our app are and what challenges we expect to face. It would also have been great if we accomplished more work early, especially during Thanksgiving break. We were a little crunched in time, especially since two of our team members flew away for interviews this past weekend, in addition to the sickness of a member. It would have been better to frontload our workload.

Peer Reviews:

Suniyya's Peer Reviews

Usman: Usman was very focused and got his work done efficiently. He took the lead in making the UI better, finding the right css stylesheets, creating modals for all the input and editing forms, enabling picture upload and making the app look like a polished product. He also took the initiative to fix the issues our MVP had had which we had not been able to address earlier.

As a programmer Usman did his work well. He could also benefit from trying a role in which he coordinates other team members, which requires proactively guiding work in the direction it needs to go. At times, I felt that his voice could have been heard more. He should be more confident when suggesting new ideas. But he did a great job.

Noor: Noor was great at figuring out and working around issues with sharing occasions using the facebook API. He also did a lot of work on publishing, emailing links using mandrill and moving css out of ejs. A particular bug caused Noor to keep receiving 10 emails every hour at 20 minutes past the hour. That was funny and made us all smile every hour. He was efficient and kept us on track with deadlines which was especially helpful before the final submission deadline, when we were focused on our own work. He was great at coordinating between us all and breaking down and delegating work. Noor was also nicer during disagreements.
 To improve Noor could work on his time management skills. Other than that, he should just continue gaining coding experience as he already is.

Angus: Angus did a great job working on the backend as a whole. He took the lead in testing, publishing, sharing, creating the public links. He was really dedicated to the project. He helped me out multiple times with jQuery issues and it was helpful to talk through implementation details with him. He also very quickly took care of any issues that resulted from the backend. Following the MVP, he made sure we each were responsible for more work than we had been for the MVP and that helped us learn more. I did not have a good idea of how much code Angus wrote and exactly all the work he did. In the future, it would be helpful if he updates the others on what he has been doing and has accomplished even if it may sound repetitive.

Usman's Peer Reviews

Suniyya did a good job in switching gears from front end to backend as mentioned in the previous review. She took lead on figuring out the functionality for edit/delete buttons and worked more independently. She showed visible improvement in coding ability from the beginning to the end of the project. At times she got frustrated with the slow progress in the project and lost motivation. For the future, I would recommend her to continue gaining programming experience by working on more projects.

Noor did a great job in carrying out continuous user testing throughout the development process to figure out the bugs in our codes. He helped in keeping the team focused by prioritizing our goals and setting milestones for the team. He was especially valuable with debugging issues and showed initiative in presenting the project as well. Due to other commitments Noor had to leave town during the last week which put some work on halt and had to be finished at the last moment. Noor demonstrated good project management skills but in the future it would be more useful for him to focus on improving his programming skills.

Angus was excellent with his programming skills and continued to help the team by taking on tough problems. He helped resolved multiple debugging issues and was a great help in improving the UI at the last minute. Due to other commitments and health issues, Angus was not present at some of the meetings. At times there were communication lapses as well due to his unavailability. Since he wrote most of the backend code, a lot of the backend bugs were left for him to fix. In the future, i would recommend Angus to share his code with the team in a manner where other members can come in and edit/build on his efforts.

Noor's Peer Reviews

Suniyya was a lot better at taking up responsibilities and accomplishing work from the MVP. She took up working on adding thoughts and providing the editing and deleting functionality. I believe that she learned a lot out of this experience and contributed to the team progress. I know that at points she was frustrated by her progress in comparison to others in the team, but if she looked at her own improvement from the MVP she would have realized that she has contributed a lot more and became more valuable to the team. In the future, it would be great if she is open about such frustrations and if she can work on channeling any negative feelings to propel her contributions to the team.

Usman took absolute ownership of the create new occasion modal and did a lot of work in optimizing it for the functionality that we seek and make it look good. I was inspired by how good he got it to look and how he was patient and manage to support all the functionality that we had in the backend. He also improved on all the things we mentioned in the MVP reflection. He worked with the team and updated us frequently on his progress. Having said that, Usman was still generally focused on the frontend. I think this took away from his understanding of how the backend worked. In terms of learning, I think it would've been good for him to take some work in the backend as well. For the future, we should communicate what we are working on with each others and do code reviews so that every team member knows each part of the code base regardless of the author.

Angus was the main contributor to the implementation. Like in the MVP, he was the main lead on the programming part of this effort and his previous coding experiences made it easy for him to assume that role. However, following the MVP he made sure that each of us felt challenged and had enough work to do. We worked on the backend together and it was great working with him. Personally, I learned a lot by working with him and he always took the time to explain concepts I was missing and help out wherever possible.

Angus' Peer Reviews

General Reflections: This is the first time I'm doing a project in which I am the one of the more experienced members. My failing health toward the end of the project has been tough

on the team, especially when there are certain parts of the code that I am familiar with, that would take me very little time to make small edits / use Chrome debugger to catch bugs, but ended up costing the team quite some time because I wasn't able to leave my bed to do hackathon style coding with my teammates. In the future I will try to write extensive documentation while I am writing code so that in the case of personal troubles / health issues (which did come up during this project), the rest of the team can pick up with the coding with less pain.

Suniyya: Suniyya has been working on the front end, like for the MVP. My main concern would be the lack of confidence -- for example, a lot of issues could be identified quickly with the Chrome debugger and print statements, but perhaps due to a lack of confidence in programming, a much more convoluted (hacky) solution was coded up (for HTML/CSS/frontend JS), which may be hard to debug given the global nature of CSS. That said, since the MVP she became much more involved with frontend JS scripting, many of which involve AJAX calls to the backend. I believe she has benefitted greatly from gaining confidence as a programmer and trusting her own debugging abilities. Since she came into the project with little web programming experience, I believe that this project has served the purpose of introducing her to web programming and the process of product development: from initial design to eventual shipping.

Usman: Like in the MVP, Usman has mostly been working on integrating templates (modals) into our product. Such is a non-trivial task, with the many nuanced behavior of modals and buttons that we needed to carefully consider and take care of. I would love to see him work more with CSS so as to learn more about the nuances of classes overriding rules of CSS, passing th phase of borrowing CSS to the phase of writing CSS that integrates different UI components.

Noor: Noor was very helpful integrating APIs with our product: FB login, FB messages, and Mandrill email client, all of which are essential features. Noor was also very organized in terms of setting tasks for us to do, which was valuable especially during my sickness, when I can only focus on few tasks, as opposed to the first half of the project when I was working on the backend while helping other members with coding.