Erin Alltop Reflective Journal C CS361 – Fall 2017

Week 7

Monday 11/6/17 - Lectures 6.1-3

Today I watched lectures 6.1-3 which is a more indepth description of the Agile process. We are moving on from the Waterfall process to the Agile process starting this week and I am interested in seeing how this works in a team environment because of all three processes, Agile is the only one I have heard of used in real life. Granted, it has mostly been in the context of grumbling friends/family over SCRUM, but I am approaching it with an open mind.:)

I like the slide in the lecture 6.1 that compares and contrasts the three processes. It gives a really easy to understand overview of when these are useful and why. It could be easy to assume these are all the same especially from a business perspective without seeing this kind of comparison. For example, a "suit" business professional might not care at first glance how software is created, but with information on what areas can be more costly or not, they can be more aware of how software is developed and what kind of time/money costs might be involved. This is good information to have as a software developer for both general knowledge and instructional purposes.

I liked the lecture on the involvement of the customer because it showed not only how to use the customer's wishes to create user stories and how these are involved in the process, but it also showed how vitally important the customer is to the entire process. After all, the customer is the reason any of this is being done and it can be easy to get lost in development and especially "The Code," and it is imperative to not forget that they are the most important reason and resource for the process. I can definitely see how something like estimates really come with experience in a lot of ways. As just knowing how long something took last time can inform the estimates, this is something that might take some time to be able to reliably "pin down." However, spikes are really useful as well for a more inexperienced developer, though I can see how even that might take experience and a junior developer could take a lot of time just to do a spike whereas a senior developer could do one quickly.

Tuesday 11/7/17 - Team Meeting 10

Our team met this evening a bit earlier than normal to go over homework 5 more indepth. This is our last homework before implementation (finally!). For this homework, we are planning what we will be implementing next week. We have our user stories already based on what our customer wants, and we have communicated with him via email to decide what he finds most important. For this meeting we made a spreadsheet of all of the user stories, indicated what priority the customer wanted, and laid out how difficult they were going to be to fulfill, what is unrealistic,

and what needs to be completed first (namely setting up the database, node/express, github, and the other "bones" of the structure before anything else can be implemented. We also did time estimates for how long we think each task will take.

Saturday 11/11/17 - Project Progress - HW 5

Today we met again to go over our homework and make sure everything is good to go. With the help of the customer, we picked the three user stories that we would implement for next week: User can look up a list of elections by location, user can create an account, and user can request text/email reminders. I volunteered to implement the account creation with my pair programming partner Kierin and am hoping to get started soon on this implementation to be sure that we have plenty of time to finish before next week in case we run into any surprises.

Sunday 11/12/17 – Team Meeting 11

We had just a brief and informal meeting over Slack today just to wrap up our document and make sure we had all of our ducks in a row. I started to look into what is needed for Kierin and my part of the implementation today, but will be looking more heavily early next week.

Week 8

Monday 11/13/17 - Lectures 7.1-4

Lectures 7.1-4 were more lectures regarding the Agile process. They were mostly about scheduling, testing, and refactoring. Good timing with the upcoming homework! I really enjoyed the effort overview and scheduling lectures (7.1-2) because it put me in the shoes of a real development team when it comes to creating a schedule and "hiring" developers for a project. There is definitely a sweet spot in scheduling, amount of people involved, and cost. I imagine that for people who really enjoy this kind of thing they truly would enjoy this process. As an analytical person, I can see how this could be quite enjoyable (but stressful) in practice. I am torn between being a programmer who wants to hide and code all day and an organizer who makes these kinds of decisions. I love to code all day, but something always makes me end up gravitating towards scheduling, organizing, and making excessive spreadsheets and flowcharts.

Naively, I was surprised by the Testing lecture and how extensive and thorough testing really is. Perhaps because I am used to only testing small "baby" programs, I did not account for how important testing it within a larger development project. They are very important not just to keeping the customer happy, preventing catastrophic failures and embarrassing crashes, but the can truly save lives and are absolutely necessary. At the same time, you can't iteratively test for every single thing, so learning to pick the correct tests is also very important.

The refactoring lecture brings us back down to coding which I was happy to see as well. It is important for good, simple code to continually refactor early and often to make sure you have the best possible code and program. I have done a lot of this sort of thing already in previous

classes, but it was interesting to see it from a software development perspective and how it can save time and money.

Tuesday 11/14/17 - Project Progress - HW 6

Today I started working on the implementation of the user registration process. Kierin and I are working together for this portion of the pair programming week. I took the wheel for the UI portion and created the registration page. I also realized during this process that we need a login page as well (of course!). I created the UIs for both the login and registration pages and implemented error checking (e.g. required fields). I also got node/express setup with the help of Peter and got all of the pages connected correctly.

Thursday 11/16/17 - Team Meeting 12

We met at our usual time this week to review our status and how everyone is doing with the implementation. We also discussed what will be implemented for next week and discussed who will be doing what. Peter and I will be working on updating the account information for the user next week. This ties in well with what I am working on this week so I am hopeful that it will not be too difficult to implement after this week's implementation is complete.

Saturday 11/18/17 - Project Progress - HW 6

Kierin took the week for the latter part of pair programming this week. He setup the user database and we were able to implement the registration and login pages with the database. These will need a little bit of work, but for now have some hard-coded data for testing. Next week, I will be focusing on doing the update account information pages and will also continue to work to be sure that the login page is working correctly as well. We ran out of time this week to debug the remaining issues unfortunately. However, we met our task goals and only registration was a user story that our customer asked for this week.

Sunday 11/19/17 – Team Meeting 13

Per usual, we met informally on Slack today to make sure that our document had everything needed and to add a few diagrams before submission. We also checked in with each other to make sure we were on track and to schedule our next meeting which will be a bit later due to the holiday weekend coming up. We submitted our document and agreed to meet next Saturday.

Week 9

Monday 11/20/17 - Lecture 8

Last lecture today! Today's lecture is on Professionalism. I thought that this being the last lecture really wrapped up the course well and illustrated that it really is not all about the code or even the business side of things. There is an overarching part to why we do any of this as professionals. We want to make the world a better place, and there are guidelines and standards of ethics to make sure everyone abides by this "code." As someone who came from

the "soft sciences" and liberal arts, it was really neat to be reminded that as software developers and computer scientists, our profession is something bigger than ourselves that we must strive to make better in our everyday lives and to ensure that we are doing the best we can.

Saturday 11/25/17 - Team Meeting 14 / Project Progress - HW 7

Today I spent the majority of the day working on the final implementation of the project. I worked on implementing the "update user account information" user story. Peter and I pair programmed to do this task. I took the wheel for the main UI portion and getting the database working. I realized while testing that our user database wasn't working quite as intended and connecting correctly, so I fixed this part in the registration and user login portions. After that, it was easy to add the update account information UI page and lines of code to update the user database.

We had a brief team meeting today as well as our normal Thursday meeting was pushed back due to Thanksgiving. We made sure everyone was on track and knew what task they were completing. Thankfully we are on good track for our implementation.

Sunday 11/26/17 – Team Meeting 15

As usual, our team met up on Sunday with an informal meeting via Slack. Our final homework is not due until 12/1, but we checked in with each other's progress and helped each other out with some questions as well as some informal code review. Next week we will focus on wrapping up our final implementation.

Week 10

Monday 11/27/17 - Project Progress - HW 7

Today was more working on the project. Peter took the wheel when it came to node/express and user authentication/sessions. He is much better at this sort of thing so it was helpful to see his changes and to make everything work together. We were able to get everything working with login, registration, and updating account information in regards to connecting the pages together, connecting and correctly adding/updating to the database, and login/logout. We ran manual unit tests and what would be user acceptance tests (from the user perspective) to see that everything is working as intended and expected and this portion of the project is complete!

Friday 12/1/17 - Team Meeting 16

Our project is complete finally as of yesterday, and this evening we met up briefly to finish putting our document together and to be completely sure that we have everything finished. We worked together over our group chat and Google Docs to add what was missing from our document and finally submitted. We said our final goodbyes and good lucks and went back to studying!

Overall, I enjoyed the Agile process. Connecting and doing proper pair programming was a bit difficult with everyone in different time zones and on different schedules, but it was not

impossible. Mostly the "driver" would share their screen over google chat and the "copilot" would observe and give their input as they felt. I feel like this is a great way to implement code quickly that builds on itself (as the lecture states!) and it was great to see it in practice, even if it was a bit stressful at times.

Saturday 12/2/17 – Studying / Final Reflections

Yesterday I spent the majority of the day studying and making flashcards for the exam. With my other life and school commitments it wasn't possible, but I wish that I had had a bit more time to study during the quarter so that I didn't feel like I was cramming. That is more on me though. :) Compared to other classes, I actually thought that the lectures and information was solid and laid out well and usefully. If I could change anything, I would have regular weekly example questions or even quizzes to test our knowledge throughout. I really liked the two lectures that gave example questions of when to use what design, though there were not answers provided in the lecture and I would have found that useful. I believe I got most of them correct, but I was stumped on a couple. Again, I know that the professor offered multiple times throughout to go over that information in a meeting, and I wish I had been able to have time for that. On me once again, but the answers would have been helpful in studying. :)

This morning I took the final and was pleasantly surprised with how well I felt I did. The score was muted unfortunately, but hopefully my score reflects my feelings. You never know with the true/false and multiple choice. If you miss just a few your grade can suffer a good deal. I felt the exam had no surprises and was very fair. I went in very worried with the lack of exam review material, but I felt in the end the professor was right - if you review everything and know it beyond rote memorization you should do well.

Overall I enjoyed this class and appreciated the effort and interest that the professor took in the students. I felt like if I needed something that I could ask and he would be more than willing to meet with me or answer questions via email. I believe that is more his style (and granted, much more of an experience you would have at a brick-and-mortar school), but I do think Piazza might have been nice for regular questions and student interaction outside of our groups. And as I said before, practice questions or quizzes throughout the quarter would have been nice, but other than that I felt the class was structured well and I felt like I learned a lot. I was fortunate to have a good group, though I could see how a group of slackers would make the project quite painful. Thank you for a great class!