Angela Smiley

CS 6460: Educational Technology

Status Update: **omscs-advisor**

2015/10/10

*What progress has been made in the past week?*

This week I completed the metadata files for specializations and courses.  (If you’re curious, you can browse them at <https://github.com/Arkaaito/omscs-advisor/blob/master/advisor/static/course-metadata.js> and <https://github.com/Arkaaito/omscs-advisor/blob/master/advisor/static/specialization-metadata.js>.)  There are 10 items still flagged for verification (mainly the number and types of assignments in certain new and future courses), and the start dates for certain courses (in 2014) may not be correct.  Nonetheless, I think this is an excellent basis on which to build the advisor.  (The effect of listing a course as starting in Spring 2014 when it really didn't start until Fall 2014 is that it will appear as an option for users who are adding a course to their history for Spring 2014.  This is slightly inconvenient but not too bad.)

I also caught up on some tasks that I failed to complete last week.  (Yes… *before*the project officially started I was already behind.  Not my finest hour.)  Specifically, I completed the domain name registration and integrated bootstrap.css with my app.

*What challenges have been encountered in the past week?*

It turns out that Django does not have a plugin architecture of the sort that I’m used to getting from frameworks like Yii and Rails.  This meant that integrating bootstrap.css and creating a basic UI was a bit more involved than I anticipated.  (It involved learning to cull the wheat from the chaff on [https://www.djangopackages.com/](https://www.djangopackages.com/" \t "_blank) to figure out which Bootstrap package I should use.  I’m at least 30% sure I picked the right one.)

Oddly, this means that while this week’s deliverables were on time, *last* week’s deliverables were not.  But last week didn’t have an official status update, so I’m including this here.  
  
Creating the metadata was more interesting than expected - I discovered I needed to go through and correct a few minor discrepancies in the data pulled from the official site.  (I still need to notify them about those discrepancies, so they can correct the original pages - especially the ones related to Computer Vision.  Thankfully this shouldn't be time-consuming, since I annotated most of the required corrections where I made them in my JSON.)  This hasn't affected the schedule; it's merely an interesting side-note.

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

Only very minor changes (read: trivial ones that I’m probably not supposed to include here, but will just to be on the safe side).

Technically, one of the specific tutorials I followed ([https://www.jetbrains.com/pycharm/quickstart/django\_guide.html](https://www.jetbrains.com/pycharm/quickstart/django_guide.html" \t "_blank)) was different from the one I had originally identified.  However, they are substantially similar, and the only purpose of this deliverable was to get familiar with Django – none of the code I wrote for it will show up in the final product.

In addition to registering omscs-advisor.com, I also registered omscs.net.  I **may**change the planned web address of the project to advisor.omscs.net.  My thinking is that omscs.net could serve as a jumping-off point or directory for web apps related to the program (not just mine); my only concern with this is that it may mislead other students down the road into thinking it is some kind of official service.  I plan to post to the Piazza forum to ask about this (but I haven’t made the time to do so yet).  
  
I added a few items to the metadata specification, and may add another one (specifically an instructor/presenter distinction, to support drawing this distinction in the UI).  I also tweaked the formulation of course numbers for CS8803 ("Special Topics") courses: previously these matched the course numbers on the main site (CS8803-O01, CS8803-O02, etc.), but I changed them to use alphabetic suffixes (CS8803-AIR, CS8803-IOS, etc.) so that I don't need to guess the suffixes for future offerings (and then update them if I'm wrong).

*What progress has been made in the past week?*

I've created a page for the planner and written the core algorithm to suggest a sequence of courses for a particular specialization and timeframe which tries to match a given set of preferences/restrictions. I have the UI for displaying the plan itself basically done, though the UI for changing the plan is not complete. I've drafted an e-mail to pre-alpha users, though because of the many incomplete items (see #2) I haven't sent it yet.

*What challenges have been encountered in the past week?*

Most of the work I allocated for this week is still incomplete. The drag & drop interface for rearranging courses is only partially implemented. The "add course" and "delete course" functionality is not done. And the CSS for the preferences/restrictions UI is also not done.

I wish I had a great reason for this, or even a good reason, but I don't - I simply didn't allocate enough time to the project. (I was traveling the latter half of the week and ended up having zero time to work on it while away.)

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

I believe I can catch up and complete the missing UI elements in the next three days, but this is obviously not great because it puts me behind for the next week's tasks. Because the next week's tasks (saving plan & preferences) are so light, I \*think\* that this should be recoverable. I should know by mid-week (Wednesday). In the worst case scenario, I can remove the legacy review importer from the tail end of the project; however, this seems \*very\* undesirable because of the bootstrapping problem it leads to (without importing UCRSS reviews every course will start off with no review data).

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Status Update: **omscs-advisor**

2015/10/24

*What progress has been made in the past week?*

I've caught up with the items that I was so worried about last week – at least, the planner looks more palatable now. I found and fixed a number of distressing bugs in the planning algorithm itself, and introduced some weighting to guide it in the direction of the most important courses first.

I also reassessed my plan (see below) and came up with something which should allow me to capitalize on Phase I registration.

*What challenges have been encountered in the past week?*

I’ve found new items to worry about! There are more details on this in my progress report, but the summary version is, I realized this week that my original sequencing was not very smart. Most of the students I’ll be able to reach who might have an interest in trying omscs-advisor are returning students. However, if I’m not adding the add/review course flow until near the end of the project, the planner will be useless to those students because they already have courses completed (which it currently doesn’t know about). Argh!

(Somehow, this did not occur to me until I started thinking about my registration plans on Monday or Tuesday.)

Side note: Namecheap’s DNS servers have decided to go wonky – I think because I attempted to update my DNS records while they were having some kind of outage this evening. <http://advisor.omscs.net:8000/> is fine, but exactly the same page on <http://www.omscs-advisor.com/> sends me to the Namecheap camping pool. This is an annoyance more than a real challenge, but argh!

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

Yes. Everything will change!

I’m kidding, I hope – my goal is to preserve the original scope of the project. But I am going to drastically change the order in which I complete my remaining tasks. I’m not completely finalizing it until I see some of the peer feedback on my progress report, since I solicited comments there on what features my classmates felt were most urgent, but I will almost certainly stub out the profile UI, write the “add/review course” modal and store a user’s course history so that it can be used by the planner – with the goal of having all this done by *next Friday*.

Unfortunately that’s rather ambitious, but the payoff if I can do it will be significant.

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Status Update: **omscs-advisor**

2015/10/31

*What progress has been made in the past week?*

Virtually none. I spent some time figuring out how to adjust my plan for the project based on peer feedback on my status report. Then I spent a great deal of time writing all my schema updates and models for the next 5 deliverables up front rather than spacing them out. I’ve added the logic for user account management but still have a long way to go on both the review UI and the profile controls.

*What challenges have been encountered in the past week?*

I failed to take advantage of the opening of Phase I registration. In my last status update I alluded to my wish to get opinions from my classmates to guide my re-planning (read: defer the difficult decision making to a majority vote of my peer reviewers). Unfortunately, all my peer reviewers had different ideas! I ended up wasting a bunch of time agonizing over this, and then somewhat arbitrarily deciding to move forward with the course review UI.

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

I’m going to pitch out the importer [originally planned for the final week] altogether and focus on adding the social features [history, sharing plan, adding friends and seeing which are in your classes, etc.] that I had originally planned to do after the class was over.

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Status Update: **omscs-advisor**

2015/11/7

*What progress has been made in the past week?*

I finally finished a rudimentary review UI (whew!). I also ended up overhauling the way specialization and course metadata is handled, so that the planner only works at the level of individual offerings (i.e., “KBAI in Summer 2014” or “”) – previously it was somewhat inconsistent in trying to calculate offering info from course info on the fly, which led to a lot of unnecessary complexity. This also completes the connection between the aggregated user info in the database (ratings, effort estimates, and popularity) and the planner.

I’m still working on the profile UI, but hope to finish it in the next few days. (If I don’t, I’ll have some problems since I expect the video trailer will take me a lot of time to make!)

*What challenges have been encountered in the past week?*

The day I finished the review UI, another student announced another review-related project on Google+: <https://plus.google.com/u/0/+MehmetBajin/posts/AQKEUwhp7H1?cfem=1>. I am hopeful this is less of a challenge and more of an opportunity – maybe I can take advantage of some of the data processing work he has done to import the spreadsheet reviews, and reintroduce my importer plans!

However, the number of related projects I’ve found out about in the last couple of weeks \*does\* give me a sinking feeling that omscs-advisor may be more redundant than I hoped…

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

The importer may come back – this is actually more in line with the original plan, but it’s a reversal from last week, so I feel as though I should mention it and can’t think of where else to do so!

It’s still a bit up in the air – it depends on my progress, and perhaps on whether Mehmet is amenable to lending me his database (and whether that proves to be useful). I will have a firmer plan one way or the other next week.

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Status Update: **omscs-advisor**

2015/11/14

*What progress has been made in the past week?*

I added basic versions of the remaining course-related functionality – mainly browsing and viewing course details. I’ve recorded a “safety” trailer, which just does a walk-through of the system as it is now, shows how I might use it as a new user, and highlights the areas I still hope to improve/complete before the end of the term. However, since the deadline for the trailer has been extended to the end of Sunday, I’m hoping to finish the profile pages / a very basic version of the social features and permissions (probably just “friending” people and allowing them to view your plan / see which classes you’ll be in together) and record it again.

*What challenges have been encountered in the past week?*

After finding out about a new course review-related project last week, I was hoping I could recycle some of the work that student had done to import data from the UOCRSS. However, on finding out more I realized that it probably wasn’t a great fit; in particular, I didn’t like some of the assumptions that system made (like treating reviews which didn’t make an effort estimate as 0 hours/week!).

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

I think I’m back on track to have at least a minimal version of everything laid out in the proposal, which is a relief. (The planner algorithm is rather rudimentary, and the UI for the course details page has been simplified quite a bit – no distribution graphs, etc. But on the flip side, the social feature is new and wasn’t part of the original proposal. Overall I think it’s a worthwhile trade.)

The main challenge is that I completely blew my nicely-laid plans to go through a succession of pre-alpha/alpha/beta tests, and instead am going to have to cram all user testing into the last three weeks of the term and hope that there aren’t any major flaws that didn’t occur to me before now.

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2015/11/21

*What progress has been made in the past week?*

This week was all about permissions and reusable UI elements! I have added minimal support for privacy settings now. I also took a break to create some code that pulls the number of currently available seats in a course from OSCAR so it can be shown on the course detail page. Frivolous, but fun.

*What challenges have been encountered in the past week?*

I lost a lot of time to debugging - when introducing the history logic (i.e., accounting for courses a person’s already taken when suggesting a plan) I broke the logic around fundamental courses (i.e., the set of courses you have to complete two of within the first year). I eventually discovered that this week and had to invest some time in fixing it.

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

I’ve given up (again) on getting the importer done properly in the remaining time - there are too many UI fixes that still need to be made and little features that need to be added.

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2015/11/28

*What progress has been made in the past week?*

I mostly worked on UI tweaks and changes – adding the ability to add/remove individual courses to/from one’s plan, and the ability to friend users / view friends taking the same courses as you.

*What challenges have been encountered in the past week?*

Well, I discovered my apparent inability to distinguish between “submit” and “save”…

*Do you have any new expectations that your final project will differ from what was described in your proposal?*

I believe I’ve mentioned both of these before, but the importer will not be wrapped up during the term, and my user testing plans were scaled back pretty significantly. Aside from working on the video and final paper, this entire week will be more or less devoted to user solicitation – so I’ll have some feedback, but not as much as I’d like.