User Stories

Requirements Technical Review Findings Report			
Reviewer Name: Spencer Plant			
Defects, Risk Areas, and Concerns			
No.	Severity	Location	Description
1	major	2.02	"With whatever information is needed" — This should really be specified once you get an idea about how the algorithms work
2	moderate	1.03	This should be cleared up or re-worded; it is hard to understand. Also, what is a pilot test in the context of this system?
3	moderate	1.06	When does the consulting happen? How often does it happen? Is this saying it will check all these locations bit by bit one single time? Or will it come back and check these locations to update keyword sets? Also, "material" might be too general.
4	moderate	1.07	When exactly? This could mean immediately, or after a small timeframe has passed. Also, it is unclear where the information is going to. Is it arriving in the database, triggering an update to the keywords in the UI? or is this information the return data, arriving on-screen after the user makes a query?
5	moderate	2.01	"go in and" inconsistent style with the US1.* "be able to". Grammar is off on this user story. What does "clobbered" mean? Find a better word. This user story could be misinterpreted as saying that keyword construction algorithms might get re-ran when you adjust a professors keywords
6	moderate	4.01	Grammar. Also, what does "professor's work" mean? It could be interpreted as a number of things, including publications, presentations, place of employment, etc.
7	minor	1.02	This is ambiguous in that it could be saying the different words in the phrase will be applied to the search together in an "AND" fashion, or it could mean the search will look for that phrase in its entirety.
8	minor	1.04	What does "simple" mean in this context? One boolean operator in a search?
9	minor	2.04	Specify that these algorithms are not running simultaneously.
10	minor	2.05	Here "keyword generations algorithms" are "approaches" if I'm not mistaken. A consistent naming scheme would alleviate confusion here. It's also confusing because it says it returns a set of professors and <i>keywords</i> . I believe those keywords are associated with the professor, but this user story doesn't imply that relationship.
11	minor	2.06	Specify file format.
12	minor	3.01	I think "set" would be a more fitting word. Using subset makes me think it only uses some of the approved URLs.
13	minor	3.03	This sounds like it might be out of your control.
14	minor	4.02	Should specify that it is generating keys. Also, this could be interpreted to mean it uses many generating approaches simultaneously. I don't think that's actually the case.
15	minor	5.03	When does the search engine want the index? Is it a sort of global thing, or does it get an index when a user makes a search?
16	minor	5.05	It isn't specified when this change in revealed approaches happens. What triggers it?
17	minor	General	"As a user" is too general. Specify.
18	minor	General	Number the "nice to have" user stories.
Statistics	3		
Number of major findings:			1
Number of moderate findings:			Ę
Number of minor findings:			12

Storyboards

In general with the storyboards, keep consistent arrow styles. For the Admin storyboards, arrows stem from clickable links. This isn't the case for the Search storyboards.

Also, grouping related sections of the storyboard (and subsequently labeling those sections) can help to make referencing them easier. This isn't necessary but it might be something worth thinking about.

Directly connecting storyboards to user stories would be a very good thing though.

Storyboard - Admin

"Admin Default Page":

- "Multi Keyword Algorithm" doesn't have much of a ring to it. I think something simpler and more concise would better convey what might be behind that link.
- Algorithm link and "Users" link are different enough to warrant separating them in the UI somewhat.

"Admin Interface Professor":

• The "Action" dropdown is not mentioned anywhere in the user stories for Admin. It is also unclear as to what would happen if I clicked "Go".

"Admin Add Professor":

- "Add User" on previous page links to "Add Professor". This should be made consistent.
- It's unclear if both orcID and Research ID are mandatory fields, or if they are optional.

"Admin Edit Professor":

See my notes for "Admin Add Professor"

"Admin Multiple Keyword Generation Algorithm":

- Like "Admin Interface Professor", the "Action" dropdown doesn't really make sense.
- What happens when I click an algorithm in the list?

· What happens when I click "Add Algorithm"?

"Admin Keyword Approach":

- The left side is *really* ugly.
- Make fields for both "keyword" and "approach" to better indicate that two things are expected, and to save the Admin the trouble of entering in punctuation.
- There is way too much dead space below the input pair on the left half.
- Headers for the return data on the right side would be helpful.
- If "Search" searches the results on the right half, placing it more in line with that section will make it more obvious that that is its purpose.

Storyboard - Search

In general, what happens when I click on one of the keywords in the results? Where does that take me, the user? Or, does it just input that/those keyword(s) into the search bar?

"Keyword search orcID & research ID":

- An average person using this wouldn't know what an orcld or rID is
- If a person does need these numbers, not everyone will think to hover their mouse over the keyword to get a tooltip. Maybe workshop other ways to deliver that information.

"Update Keywords":

 When does this update happen? If it is just when the user refreshes the page, I'm not sure this needs its own storyboard.

Architecture

In the UML for Data Ingester, it states that it processes "the JSON files", which isn't clear. I know that these are specified as "the data dumps provided to us by the forums" on your GitHub wiki, but also specifying directly on the UML would be good.

I noticed the Data Ingester is not connected to the API in the component diagram, which would mean it's not connected to the UI. I'm wondering about how data is fed to it for ingesting.

The biggest concern with the proposed architecture is the Key Generator. Obviously that needs to get solidified. As of right now, it is practically not even started, even though you say it will "[do] the bulk of the work in the system".

Project Planning

I like the story map diagram. It is relatively easy to understand and follow. It's good that it also has each of your initials on the User Stories, indicating who will be working on what. I have the following thoughts concerning the project plan itself:

- That's a pretty hefty looking Sprint 2. It can take a little while to "get up to speed" so
 be mindful of your velocity going forward. Using a burndown chart might be a good
 way to quantify your progress and give you a better sense as to where you should
 allocate your resources.
- I would start by working towards a minimum viable product, saving less necessary user stories for later. Specifically, US 1.01 (having queries spell checked). Although nice, it might not be worth your time at the beginning of the project.

General Statements

Various software quality aspects are unmentioned. You'll need to keep in mind other requirements like:

- Security needs (i.e. ensuring only Admins get the elevated privileges associated with them).
- Performance. Keep in mind what is an acceptable wait-time for search results to come in. There are many professors in the U of A and many more publications by them; that is a lot of data to sift through. The search algorithm(s) might turn out to be a bit slow — you'll want to make sure the system doesn't slow down with it.
- Maintainability. You'll want to make your code as maintainable as you can to allow for possible future additions to the system. Keep code coupling to a minimum.
- Operational things. Who will take control of the system at the end of the term?

Also, system feedback is important. It might go without saying, but having indicators and cues for users can make their lives much easier. A quick example of this would be after an Admin adds a new professor and hits any of the "save" buttons, some form of feedback saying "this professor was added" or "this professor was not added" saves the Admin from having to go all the way back to the list of professors to check.

There seems to be somewhat of a disconnect between the user stories and the storyboards. Directly linking storyboards with user stories might clear that up, but I feel as though the storyboards were made without much consideration for the user stories.

Other

Are there any issues regarding FOIP? If what the system returns is publicly available data then I don't think it should be an issue, but I would be mindful about these things, just to err on the side of caution.