Website Usability Critique – WebAdvisor



My impression of how most poorly designed UI's come into existence.

Audience Analysis – The users of WebAdvisor

I believe WebAdvisor was created by the University of Guelph to allow a less expensive, more convenient way of interacting with and administrating the university. For example, instead of having to go in person, and wait in line to apply to the university, because of WebAdvisor, you can now apply from anywhere if you simply have a computer.

Per WebAdvisor, the primary audience of WebAdvisor is broken into three main groups: applicants, students, and faculty.



When and why each of the above three groups would use WebAdvisor is straight forward:

- In general, **applicants** might use WebAdvisor to do things like: fill out applications, or obtain information about becoming a student at the university
- In general, students might use WebAdvisor to do things like: sign up for courses, or view grades
- In general, **faculty** might use WebAdvisor to do things like: view class schedules, or view / edit other info related to their employment at the university

So overall, what a user achieves when visiting WebAdvisor will usually fall into one of two categories, either:

- a) The user will obtain **information**, related to their account
- b) The user will **fill out a form**, that would have otherwise been required to be completed in person

Next I will introduce two user personas. After introducing these personas, I will create four use cases. Two use cases will be performed from the view of the first persona, and two use cases will be performed from the view of the second persona. Put into table form, it looks like the following:

Persona One – Inexperienced user

Use Case A: fill out a form (registering with the university)

Use Case B: obtain information (application status)

Persona Two – Experienced user

Use Case A: fill out a form (enroll in courses)

Use Case B: obtain information (their final grades)

Introducing the User Personas

These personas are entirely fictions; they are not meant to resemble real persons in anyway.

Persona One – Mr. Dump



The freshman: massively inexperienced, and overly cocky. When he fails a test, he claims the education system is rigged against him. English major, has the best words.

Mr. Dump is an applicant to the University with no experience using WebAdvisor:

- a) He wants to complete registration with the university
- b) He wants to view his registration status

Persona two – Mrs. Crapton

The sophomore: much more experienced, and clearly not being driven insane from recent stressful reoccurring events. Majoring in Security and Risk Analysis.

Mrs. Crapton is a second-year student of the university, with a good amount of experience using WebAdvisor:

- a) She wants to signup for courses for the next term
- b) She wants to view her grades from previous courses



I chose the above two user personas, because at some point, these are both experience levels I fit into. I believe most UoG students probably had a very similar journey with WebAdvisor as I did. I also specifically did not chose faculty as one of the user personas, as I have no experience with the faculty side of WebAdvisor. For all I know, the faculty side of WebAdvisor could be completely different. Onto the usability assessment through the eyes of these two personas.

Use Cases

Persona One – Use Case A

Mr. Dump would like to complete registration with the University

Mr. Dump has been accepted to the University of Guelph, and would like to begin the process of registering with the university.

Overview of tasks to complete this use case:

- 1. He needs to login to WebAdvisor for the first time, he does this by entering the username and password he received from the university in the mail.
- 2. Next he needs to find his way to the applicant's portion of the site, and then to the Documents portion. Despite Mr. Dump having the highest IQ and everyone else knowing it, he has trouble navigating the site, as it is his first time using it. After a while he manages to find the Documents portion.
- 3. Upon finding the relevant documents portion of WebAdvisor, he finds out he did not submit a required document to the university. He learns that he must print, fill out, and fax or mail the document. "Can you believe this folks", cries aloud Mr. Dump sitting alone in his room, "A website designed to help with student admissions, and yet all it does as act as a glorified display of potentially hackable emails. This is why we're losing to China". Mr. Dump fills out the form, and sends it in.

Persona One – Use Case B

Mr. Dump would like to view his registration status, and enroll in courses

Mr. Dump has completed all missing paper work and is now waiting to be enrolled at the university. He would like to check his enrollment status to see if the documents he sent in have been received yet. If they have been received, he would like to enroll in courses.

Overview to tasks to complete this issue

1. He logs into WebAdvisor, and finds his way back to the relevant documents page in the applicant's section of the site. Having now done this, he knows how to get to the Documents portion.

 He sees all the required documents have been received, and would now like to signup for courses. Staying within the applicant's section of the site, he begins to look for how to signup for courses.

- 3. Eventually Mr. Dump discovers that courses are called "sections" on WebAdvisor. He then tries to search for courses, receiving error messages along the away to fill out the correct number and combination of fields. Mr. Dump has discovered nothing is obvious on WebAdvisor the first time you use it.
- 4. Once Mr. Dump finds a course he'd like to take, he is unable to enroll in it. This, he discovers is because it is not possible to enroll in courses from the applicant's portion of the site, despite being able to search through them. Fed up with the whole process, and very recently having gone bankrupt again, Mr. Dump withdraws from enrollment at the University of Guelph. He decides to go to school in Mexico, where he heard the tuition is far cheaper, which makes sense, as they haven't had to pay for any multi-billion dollar walls in recent history.

Persona Two – Use Case A

Mrs. Crapton would like to sign up for courses for next term

Mrs. Crapton is part way through the summer, and would like to register for courses for next semester.

Overview of tasks to complete this use case

- 1. Being fairly experienced with WebAdvisor, Mrs. Crapton knows how to find what she's looking for. She quickly heads to the Students section of the site. Once there she chooses "search for sections", since knows WebAdvisor labels courses as sections.
- 2. She tries to search for an accounting elective she is interested in, and receives an error message "Term is required". She realizes she forgot to fill out the term, and enters the Fall term. She finds the course she wants to enroll in and realizes she can't because she is in the "search for sections", instead of "Search / Register for section" page. She backs out, and moves to the correct page, and starts over her search from scratch. Even with experience using the site, she finds it very easy to have little problems everywhere on WebAdvisor, she just can't seem to break away from having issues with technology.
- 3. Once Mrs. Crapton is on the correct page, and has found her accounting course, she attempts to add it, discovering that she cannot, as the course is restricted to Commerce students, the course was not visibly labeled restricted, and only was shown to be restricted upon trying to add the course. In this case, Mrs. Crapton cannot be held accountable for the poor handling of restricted information, as WebAdvisor was not being run on her personal server.

4. Because the course is restricted, she must get permission from a professor to enroll in the course. Without being told what professor to talk to, she takes off to google to take her best guess. She emails the wrong professor in the school of business and finance, and gets redirected to the correct professor. "This email ordeal sure is a pain" Mrs. Crapton thinks to herself.

5. She receives approval to enroll in the course, and now must take the approval to the registration office to be enrolled. She stands in line at the registration office during the busiest part of the year for over an hour, and finally gets to talk to a human. The person at the desk takes her form, fills out a handful of fields, and enrolls Mrs. Crapton in the accounting course.

Persona Two – Use Case B

Mrs. Crapton would like to view her grades from previous courses

Being part way through the summer, Mrs. Crapton has not yet viewed her final grades. Mrs. Crapton would like to view her grades from the last semester.

Overview of tasks needed to compete this use case

- 1. She logs into WebAdvisor and heads to the student portion of the site.
- 2. She chooses the Unofficial Transcript option, and having no idea what to put into the dropdown on the next page, leaves the drop down at its default setting, and presses submit.
- 3. Easy enough, however once viewing the grades, Mrs. Crapton learns that she had failed her email server security course, a course that is a prerequisite for nearly every other course in her program, and immensely import to someone in her line of work. Something she would later find out would have a dramatic effect on the rest of her foreseeable future.

Discussion of use cases

From the above four fictitious use cases, we've seen WebAdvisor to be functional, but at times unnecessarily frustrating. We've also seen in at least two cases that WebAdvisor fails to handle what it was created to improve. The cases where the personas were forced to fill out a paper form, and then mail it or deliver it personally to the university. We will now go through each of the four use cases, and evaluate what about WebAdvisor impeded usability.

The things that impeded WebAdvisor usability in this case were entirely born of the fact WebAdvisor provided entirely useless in this specific case. Mr. Dump went through the trouble of signing up with WebAdvisor using info provided in a letter sent by mail. Once signed up, he was told things they could have just told him directly in the that same letter, or better yet, just emailed him. In the end he had to print out the forms, fill them out, and email them to a person.

Evaluation - Persona One – Use Case B

Mr. Dump would like to view his registration status, and enroll in courses

The things that impeded WebAdvisor usability in this case are centered around the fact there is an awkward transition from being an applicant, to being a student. To view whether the required application documents have been received and accepted is in a different part of the website, from where you can enroll in courses. This and the fact that courses are unintuitively called "sections". The awkward transition from applicant to student pretty much guarantees to confuse anyone the first time they do it. This results in an *amazing* experience as, the only time you both need to check application documents, and sign up for "sections" is the first time you enroll at the university, guaranteeing you have no idea what you're doing.

All of this coupled with the fact that they have two pages: one called "Search for sections" and the other called "Search / Register for sections", and the fact that the "search / register for sections" page is hidden from applicants, who aren't even aware there is a difference yet.

Evaluation - Persona Two – Use Case A

Mrs. Crapton would like to sign up for courses for next term

The things that impeded WebAdvisors usability in this case is the fact that WebAdvisor is outright missing functionality to handle and solve this use case. The thing it fails to solve in this case, is making the university easier to administer, and preventing people from having to sit in line. Since Mrs. Crapton, had to get permission from a professor in an undirected manner, not only did it cause overhead for both her and that professor that could have been handled by WebAdvisor effortlessly, it caused overhead for the other professor she incorrectly emailed first, as well as for the other students waiting in line at admission services, and the office worker at admission services that had to manually put in the override to get her into that course. Since all of this had to be handled at the start of the semester, this only helped to make the most congested time of the semester for admission services even worse. None of these things prevented Mrs. Crapton from having to wait in line, or made the university easier to administer, a total failure of WebAdvisor goals.

On another note, even as a student with experience using WebAdvisor, using the students part of the site, it is easy to choose the "Search for Sections" page, look for courses you want, decide you want to add a course, and then realize you can't add it, or bring it over to the "Search / Register for sections". It gets to the point, where once you realize the difference between the "Search" page, and the "Search / Register", you never use the "Search" page, because it's unnecessary, stupid, and useless. The "Search / Register" page does everything the "Search" page does just as easily, but believe it or not,

the "Search / Register" page manages to be useful, as it does more than just allow you to view publicly available information you could look at from the magazine the university sent you in the mail.

Evaluation - Persona Two – Use Case B

Mrs. Crapton would like to view her grades from previous courses

The things that impeded WebAdvisors usability in this case is the fact that there is not an option to view associated information about the different transcripts when choosing and option from the drop down, which isn't that big of a deal, since you can guess which each of them mean. Even if you aren't able to guess, the default option is fine for undergrads, which means this use case gets a solid rating of "meh", it does what it needs to, it poops a table using html onto your screen. Honestly, first, slap some CSS on these related pages so it doesn't look like it was made in 2006, second, put those little question mark hover icons that provide information about the options that are presented to you, and there would be absolutely nothing to complain about in this use case.

Overall

Despite the impression that may have been given off above, I would say WebAdvisor handles its general use cases well enough. The three main problems I find with WebAdvisor are:

- 1. WebAdvisor has a learning curve to do very simple things, caused by unaffordable design choices,
- 2. WebAdvisor is outright missing functionality to handle less common usage cases,
- 3. WebAdvisor looks like a website from 2006, featuring a title bar that looks like it was made by the university presidents 16-year-old son after he learned to make a website in a high school class



 ${\it Ahhh Mr. President, I see your son is also in the Communications Technology course}$

Now none of these things are game breakers for a site like WebAdvisor. This isn't product on the market that has its survival based on its amount of polish, this is a tool you are forced to use to interact with the university. When the alternative is interacting with the university entirely through standing in line, clearly WebAdvisor is a superior choice of the two.

However, for a website that is heavily responsible for collecting those sweet sweet millions in student tuitions, there's no reason they can't do better than this. Honestly these issues should not be hard to fix, as they do not require changing core functionality, but rather require:

- 1. Extending functionality,
- 2. Reorganizing navigation into a more affordable layout.
- 3. Adding more context, and on page help
- 4. Modern CSS styling

Speaking of issues that should not be hard to fix, lets go into a bit more detail about the flaws of WebAdvisor, in the Usability Flaws section.

Usability Flaws

Seven usability flaws of WebAdvisor will have been selected:

- 1. WebAdvisor does not handle Restricted courses very well
- Include a picture of the relevant flaw:

Winter 2017	Open	MCS*3040*02 (1307) Business and Consumer Law	Guelph	LEC Wed 07:00PM - 09:50PM <u>MACN</u> , Room 113	L. Chiasson	1 / 125
Winter	Open	MCS*3040*DE (1308) Business and	Guelph		J.	13 / 275
2017		Consumer Law			Radocchia	

Image Above: Notice no indication of a class being restricted or not. The first class is restricted, whereas the second class is not. Also, note that whether the DE version of the class is restricted is different for each class, even in the same field of study.

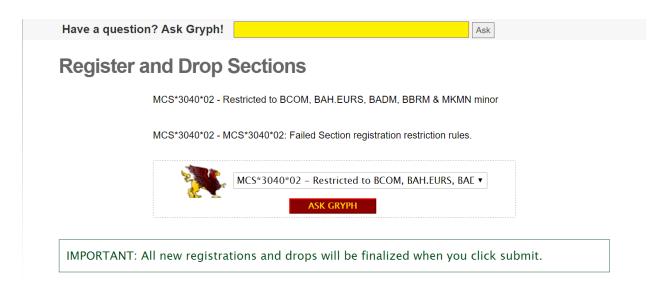


Image above: someone working toward an area of application, or who wants to take a course without the full minor, is required to email a professor for approval, and then stand in line at

admission services if they get approved. There should be a way for students who are not in the major / minor to enlist in a queue, that would automatically put them in the restricted course, if there is space sometime in the first week of class.

- Identify the relevant usability heuristic it violates: Match between system and real world (Also: Help and Documentation, and Error Prevention)
- Estimate the severity of the problem: moderate (Failure of WebAdvisor to solve the problem it was created to solve: make admission easier, and prevent people from standing in line. In other words a mismatch between what is needed of a fully featured admission solution, and what WebAdvisor actually does)

• Provide recommendation:

My recommendation would be to add an icon showing that the course is restricted to certain majors / minors. This way users would not try to add the course, and then learn that it is a restricted course by receiving and error.

Also, I would recommend some way of allowing students to request priority access in special circumstances (for example: when a student is doing an area of app, and not a minor), which would consist of a student being able to explain why they need in the course, and this explanation being directly shown to the affected professor. If the affected professor lets the student in, this approval shows up for admissions services through WebAdvisor, and nobody waits in line, or must email people during a very busy part of semester.

On top of the above, there should be a way for a student to put themselves in a queue for enrolling in a restricted course. Being in this queue would automatically enroll the student in the course during the first week if there is space available for them.

2. WebAdvisor does handle the submission of required documents for applicants

Include a picture of the relevant flaw

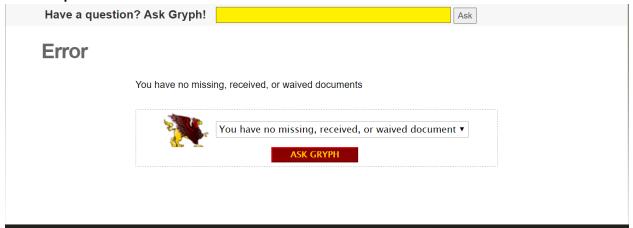


Image above: I don't have an image for this, as I'm not an applicant anymore. But this page would list documents that are missing, or need to be resubmitted. To submit a missing

document, or resubmit a document, you would have to print the document, more than likely sign the document, and then scan / email it, fax it, mail it, or hand it in at the university.

- Identify the relevant usability heuristic it violates: Match between system and real world
- Estimate the severity of the problem moderate (Failure of WebAdvisor to solve the problem it was created to solve: make admission easier, and prevent people from standing in line. In other words, a mismatch between what is needed of a fully featured admission solution, and what WebAdvisor does)
- Provide recommendation:

The documents section of WebAdvisor basically acts as a one-way email inbox. You receive messages, but can't respond to message through the tool. Having these messages emailed to you would be an improvement as then you could directly respond with the updated document.

My recommendation to solve this usability issue would be to make it so documents can be submitted through the documents portion of the site. For example, an applicant would look and see that they are missing a document, they'd click the link to get a pdf of the document. They'd come back to WebAdvisor and click: submit document, and choose the filled-out version of the document. Submitting the document would update WebAdvisor's status of the missing document, flagging for review by a human. Once a human has look at and verified the submission, the status would be updated again to reflect whether the document was correctly submitted, or if there were issues.

- 3. Required options are not highlighted, when a user must fill in a combination of optional fields
- Include a picture of the relevant flaw:

Search/Register for Sections



Image above: the message that shows up if a user does not fill in a term

- Identify the relevant usability heuristic it violates: Error prevention
- Estimate the severity of the problem: minor
- Provide recommendation:

Highlight the term field in red, and put a: *required beside it. Once the user enters a term, make the term field green, and remove the: *required. If a user trying to continue to the next page without filling out the term, show the above error as usual.

There are other cases where highlighting required fields would help with preventing user form errors.

4. "Search / Register for Sections" and "Register for Sections" is an unnecessary mess

Include a picture of the relevant flaw:

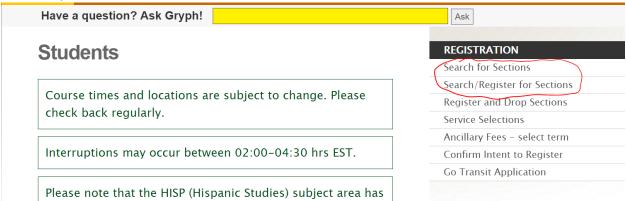


Image above: both the search and search / register options are available to students for no reason

- Identify the relevant usability heuristic it violates: Consistency and standards
- Estimate the severity of the problem: moderate
- Provide recommendation:

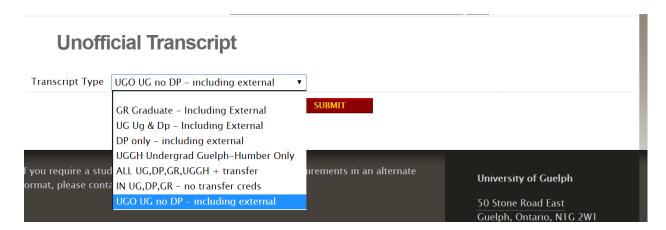
For students only make the **Search / Register for Sections** option available. The **Search / Register for Sections** does everything the **Search for Sections** option can do. For student the **Search for Sections** only serves as a useless, initially confusing option.

Not only for students, but also for applicants that are signed in, *only* make the **Search / Register for Section**s option available, and then add error messages that say something along the lines of: "You are not currently eligible to enroll in courses due to your admission status. HOWEVER feel free to search for courses." This way the initial confusion of the two sections is removed, since then there would then only be one option. Also the student section of the site would no longer be carrying baggage options that have no reason to be there.

The only reason the **Search for Sections** option should be shown, is for people who visit WebAdvisor, and are not signed in.

5. Missing contextual help for non-obvious options

• Include a picture of the relevant flaw:



- Identify the relevant usability heuristic it violates: Help and documentation
- Estimate the severity of the problem: minor
- Provide recommendation:

Add help icons beside options to provide the user with more contextual information. In the above image, you may be able to guess what each of the options are, but by adding a help icon that shows a short paragraph explaining what that option means would take guessing completely out of the equation, while not affecting users who already know what they're doing.

But by neglecting to provide this info, you increase the risk of creating herds of zombie users who never learn what they're doing, and just either stumble through the options until they find what they're looking for, or memorize what they need, without understanding any of it. Make the info relevant, easy to access, but out of the way.

6. The transition from being an applicant to being a student is rough

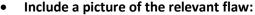




Image to the left: remove the manual selection of the three sections, merge applicants and students into one account-type to reduce pain of transitioning from applicant to student

- Identify the relevant usability heuristic it violates: Consistency and standards
- Estimate the severity of the problem: minor (really annoying going through the transition, but will probably only happen once to 99.5% of the users, if this were a commercial app it would drive away a lot of users)
- Provide recommendation:

First I would recommend removing the screen where a user must choose what account type to use. I would replace it by having WebAdvisor automatically go to the correct page based on your account type. If you are both a student and a faculty member, only then would you be asked where you'd like to go.

Next I recommend merging the applicant and the student profile types into a single profile type. This way applicants are immediately exposed to the options they will have as a student. Merging the applicant and student profile types, and outright removing "Search for Section" with "Search / Register for Sections" (previous usability flaw) should go a long way to make the transition from applicant to student much smoother.

The options that are relevant only to applicants would show up as temporary. For example, a header might read: "Applicant Admin Info", instead of its current text of "Admission Information". Once the applicant becomes a student, the "Applicant Admin Info" section would become hidden by default.

While the options related to applicants would only show up while a user is an applicant, the options related to students should show up, for both when the user is an applicant and a student. Context info explaining that applicants don't have access to all the features of student centric options should be shown, to prevent applicants from getting confused when first starting to use WebAdvisor. For example an applicant can search for courses with "Search / Register for Sections", but would receive an error

message if they actually try to enroll in a course, the moment they become a full student, they can do the same thing, and not get the error message.

Student centric options being shown to applicants could make the initial usage of WebAdvisor more confusing if not handled well, but is pretty much guaranteed to make the transition from applicant to student more smooth and natural.

7. Giant global list of options for navigating the site

• Include a picture of the relevant flaw:

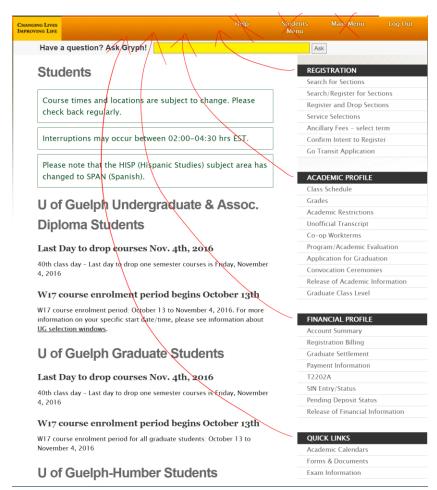


Image above: split the giant list of options up into separate pages, and have the sub list headers be the title bar button names.

- Identify the relevant usability heuristic it violates: Aesthetic and minimalist design, (Recognition rather than recall)
- Estimate the severity of the problem: moderate
- Provide recommendation:

I recommend instead of having every option a user can take in one giant list, take each sub list and put them onto their own page. Trying to find lesser used options from this list requires you to actually read through most the list until you recall what option it is.

By sectioning off the sub lists to their own page, recalling what page the option you are looking for is on should be easy, as each sub-list would be moved to a page that would have a look much more unique than a giant ball of options. The fact that the option is on a unique page, would make it more based around visual cues and title bar positioning, and less memorization, or "hunting".

Conclusion

All in all, when compared to some of the terrible sites out there, WebAdvisor is solid at the core, and rough around the edges. WebAdvisor does its job well enough, and while it could do more, and do other things better, its not horribly broken. I chose to critique WebAdvisor, instead of a random but much worse site, because WebAdvisor is easily one of the worst sites I personally use regularly. Web sites that don't have the cushion of their users having no choice but to use that site, tend to be much better polished and user experience driven.