[310-A6-presentation](https://docs.google.com/presentation/d/1K_9Crnm7n-7jZv9s6DFQ5UaLnEYATU6pVxTf-kwMT4E/edit?usp=sharing)

- Project overview (goals and motivation)

- Brief related work

- Key user research findings

- Prototype evolution – show the iterations and highlight what changed and why

- Key final user evaluation results

- Future work

- Conclusion highlighting contributions of the project

Reflection on project work:

a short write

-up (maximum 1000 words) on lessons learned from the project work –

what did

you learn new? What was surprising or unexpected? What worked well? What would you improve if you had more ti

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## Lessons learned

-Importance of user research: When making the proposal, we thought we had covered all the inconvenient features within the CRS. However, during the user interview in assignment 2, we discovered that although we caught the main problems, there are a lot more problems that we overlooked. The same thing happened during assignment 5 as well, though this time the users only pointed out some minor flaws in our prototype.

-managing time and workload: During assignment 1 and 2, all four of us would join a discord call and spend hours working on the same tasks. Since our group members are in different time zones, this was extremely inefficient and a huge waste of both time and effort, as members would do the “same” work twice or even thrice, and proceed to discuss what was already decided. Starting from assignment 3, we would split up the work and set internal deadlines, and meet up shortly to discuss and assign the next tasks. It has proven to be way more efficient.

-A new perspective: Since all of us are computer science majors (one has a combined degree with Stats), we have been studying algorithms and how computation works. This class served as an eye-opener, it showed us a new perspective of computer science, and made us realize that human-computer interaction is also a huge part in the industry, as well as in our daily lives.

## Surprises

The workload of the overall project had a far larger scope than any of us had anticipated. For the research interviews, we spent much time on planning the interview question and dividing tasks. Moreover, we found it somehow difficult to recruit participants due to the covid-19 social distancing rule. When we prepared for the usability testing, we were surprised by the amount of work we had to accomplish if we followed the steps we first planned for the sample prototype. As a result, we mainly focused on simplifying the functionality and only retained the core features of our sample, and this simplification in some way limits the user-freedom. However, our prototype received surprisingly little negative feedback from the users. Additionally, our users got used to the new interface really fast during the usability tests. Their questions had been significantly reduced after the first few tasks. These usability tests were an excellent way to proceed our project and achieve our objective.

## Things that worked well

We came up with the idea for user tasks, storyboard, low-fidelity and medium-fidelity prototypes. As the assignments progressed, we held meetings and discussions more frequently about how to make our interface more friendly and easy for users to use. Such practices made our work more efficient and productive each time. In addition, everyone tried their best to contribute to reconstruct the Uvic course registration system and we use the knowledge learned from the lectures to apply to the prototype. It is a good way to evaluate the prototype. Furthermore, the interviews went roughly like how we thought they would.

## Improvements that could have been made with more time

* **Balsamiq limitations**

We found that Balsamiq does not offer the most freedom of customization, as some of the font sizes and colors of text cannot be changed. We had to leave out the drag-and-drop features based on the existing functions of Balsamiq. In the remote usability test, some users said that the color scheme of our prototype is relatively single and looks very dull. If given more time, we would consider importing more of our design pictures as the background page to make the overall performance more colorful. In addition, we may survey to find out which font users prefer.

* **More freedom for user**

Because of the time limit, we could only make a limited web page design. Users could only choose a few courses, and they can only click the selected button on each page. In the follow-up improvement process, we will improve the user's freedom, design more pages, and implement more features that we had envisioned before.

* **More interview/test way for user**

Because of covid, we can only choose online tools for our user interviews and tests. It caused a lot of inconveniences and complications because we all faced the screen and problems took a lot longer to explain. In the explanation process, it was hard to avoid guiding the user to the next step of actual operation, which may increase the error of test results. With more time given, we would derive a more thorough prototype, and come up with a better explanation stage of the usability tests.

* **More interviewer**

In this test, we only had five participants, although they came from different grades and majors. However, the overall sample size is still too small. Our test results have a significant deviation. In the subsequent improvement process, we will develop test methods to increase the number of participants. For example, we would choose 15 to 20 people to complete the same task and then make five tasks. Because of the number of people, we will get the test results in the form of a questionnaire.

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**Aaron**

**Slide1:**

Hello everyone, This is team six from lab three. My name is Aaron, we have Zhanchi, Rui, and Junhong. Today, we will be talking about our redesign of the UVic course registration system, or CRS for short.

**Project overview:**

As all of you have experienced, the current CRS is outdated and poorly designed. There are a lot of bad things about it, but the most crucial thing is that you cannot see your timetable when planning or registering a semester. So our goal is to have a clearer interface with better visuals and make it more interactive.

**Brief related work:**

There are other existing tools like “schedule your courses”, as you can see. It has a big timetable that takes up half of the screen, and on the side you can manage your courses.

**Proposal sketch:**

This is our proposal sketch of the add or drop classes tool. We envisioned it to have a timetable on the top, a list of registered courses below it, and a search bar at the bottom. We initially planned for a drag-and-drop feature.

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**Participants:**

We have 5 participants for the interview, each of them from different years standing, and mostly different faculties as shown on the chart.

**Key user research findings:**

During the interviews, the majority of the participants expressed that all subjects and their corresponding courses are categorized well and they are easy to find. All of them complained that there is no visible timetable, and therefore they need to open multiple webpages while registering. In addition,They also have to memorize some CRN’s. And the timetable builder does not let them save the worked out schedules.

**Design requirements:**

From the findings, our prototype aims to:

Update or merge existing tools, reduce the amount of text in general, add tooltips that provide course general description and prerequisites, and we try to provide help functions for new users.

**Brainstorm Sketches:**

Based on the user’s needs we created the following sketches. The left is the ”add or drop classes tool”, the right is the CAPP form.

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Rui

**Medium fidelity:**

For our medium fidelity prototype, we used Balsamiq to create the different pages and objects, and we implemented the interactions using Invision studios.

**CAPP:**

In capp page, we split it into 5 sections, a summary and 1 for each year. Each year is also divided into program required and elective courses.

**Add or drop courses:**

This is the add or drop classes tool. We combined searching, adding and dropping courses on this page.

**Special indications:**

Here are some special indications for add or drop courses. (停顿2-3s)

**Weekly timetable:**

In the weekly timetable, users could review all courses after registering.

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**Final Evaluation with users:**

We used zoom to conduct our remote usability tests and interviews.

**Participants distribution:**

We interviewed five UVIC students, 3 of them are from previous research. They came from different faculties and year standings as pie chart shows.

**Task completion:**

We gave them 7 tasks to complete,3 of which are our main focus, and 4 are to introduce new features. The average overall time for completing these tasks was 10.2 min , as was the average number of times people asked for help was 6 and average mistakes they made was 3.6.

**Feedback**:

The feedback we got from users is consistently positive, they all said that it is simple and more convenient to use. We achieve an average of 8.92/10 which shows that our prototype is promising. However, we did observe some problems during the tests that were not mentioned in the interviews, such as: some users did not realize there were tooltips for the special indications and the CAPP needs more explanation.

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Rui

**Future work:**

In the future, we would first implement more help functions or a short tutorial to introduce the interface, and develop a better way to clarify each indication to help users progress, and have more warning & confirmation messages. We would spend time finishing the remaining function and conduct more research with different strategies to get more data.

**Conclusion**:

The current CRS is tough to use by over 70% of our survey examples. The users complain that the page is complex, and it isn't easy to find the available information. Our prototype provides clear information for each page and combines some features. Also, there are lots of tooltips for new users. We did a survey of our participants and 85% of them are satisfied our project brought direct benefit to the students.

**Q&A:**

This is all our presentation. Thank you, are there any questions?

**Thank you:**

Thank you