**Participant Summary**

We had a total of 5 participants, and all are students from the University of Victoria. We asked each student a series of questions related to the current course registration system (CRS). We divided these five students into two groups: those with 1st or 2nd year standing (group 1) and those who have 3rd or 4th year standing (group 2). Group 1 reveals more urgent and upfront difficulties towards the CRS, while group 2 reveals the underlying design flaws of the CRS. These problems help us define the priorities and requirements of our CRS.

**Research Methods**

We collected all data using Zoom meetings. The interviews were conducted in this way for an easier way to interact with each participant and follow social distance guidelines.

We defined the CRS and the interview scope during the interviews, including the "registration" section of student tools and all actions around it. Then we asked several questions which help us understand features that are liked and disliked. Our purpose is to improve the simplicity and reduce the time spent by students planning and registering for courses.

### **Summary of Findings from Verbal Interviews**

Most students have the experience of registering for courses at other schools. Compared to the course registration system of other institutions, UVic's CRS classification of courses is precise. All subjects and their corresponding courses are categorized and are easy to find.

The majority of interviewees find the CRS to be inconvenient:

* Tools like "view active registration" and "detailed timetable" are not used frequently since either their functionalities are covered by other tools, or they are designed poorly.
* For getting information alone, it requires the presence of multiple tabs, namely timetable and/or program planning worksheet, undergraduate calendar.
* "add or drop classes" requires writing down or memorizing course numbers (CRN's).
* "Timetable builder" does not support saving a worksheet.
* While browsing the sessions of a course, a second window pops up by clicking on the CRN. The content inside offers no practical description or course prerequisite.

All participants had a negative first-time experience with the CRS. Finding their program planning worksheet (PPW) was troublesome by itself. It was overwhelming and tiresome to gather necessary course information besides planning and resolving time conflicts.

Newer students do not have adequate tools, or exposure to those tools, to manage the planning.

Long-term course planning is also quite challenging for those who have no access to Curriculum Advising and Program Planning (CAPP) form. Even for those with access to the CAPP form, planning is still annoying since the CAPP form does not provide credit calculation for upper-level courses.

**Task Descriptions**

Alex is a new student who is excited to begin their journey at UVic. They navigate to the CRS, without knowing the existence of the program planning sheets or the academic calendar, they struggle to register for five classes that seemed interesting to them. Luckily, their roommate informs them about the program planning sheet and helps them to plan out their first semester.

Ben is a first-year student who has been studying at UVic for one year. He just decided to rent a house off the campus. Therefore, he wants to arrange the courses together, then checks the schedule and struggles with course time conflicts. After several attempts, he eventually satisfies the plan.

Jack is a uvic student who is quite familiar with the CRS, and he gradually got used to it. His problems mainly focus on the prerequisites of courses, so he still needs to take time to go through each course requirement.

Deacon knows they are close to graduating, so he checked his Curriculum, Advising, and Program Planning (CAPP) form to plan out his last semester. Although program-required courses are easy to track, the number of electives he needs is not straightforward. After spending some time calculating, he figures out the number of remaining upper-level electives and plans out last semester.

**Journey Maps**

**Design Requirements**

**Must be met:**

* Update tools: "timetable builder" worksheets are savable and can be registered immediately once registration starts. "add or drop classes", "look up classes" and "timetable builder" must have clearly visualized timetables.
* Easy-to-understand user interface: "add or drop classes", "look up classes" and "timetable builder" must have less text in general and a more straightforward way of presenting the information.
* Easy access to helpful information: course information must include general description and prerequisites,
* New user friendly: the CRS must provide information regarding PPW or CAPP. There must be a tutorial or help function for new users.

**Should be met:**

* Merge similar tools: "detailed timetable" should be incorporated into "weekly timetable", as a tooltip instead of another window.
* PPW and/or CAPP integration: the CRS should integrate the PPW or CAPP to reduce confusion.

**Could be met:**

* Optimize the CAPP form: it could have a more straightforward and organized structure, which improves the representation of credit standing and helps long-term planning.、
* Dividing CAPP form into two parts shows the required courses' information. The other part offers elective courses.