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Vision

UW Schedule Optimizer helps you find the best schedule in both the short and long term. It fills the gaps in functionality of the UW registration system and MyPlan. The existing system requires the user to run their own degree audit, decide which classes to take, and then find a schedule. This process takes into account fewer user preferences than the Schedule Optimizer.

The Schedule Optimizer would recommend courses to register for next quarter based on a degree audit and requirements the user decides they would like to satisfy this quarter (if any). Then it would build the best schedule for the user based on minimal walking distance, time of day preference, and whether or not the user prefers back-to-back classes or classes more spread throughout the day.

Software Architecture

The Schedule Optimizer will be a webapp that communicates with mainly two sources: the Student Web Service (SWS) API, and our own crowd-sourced database for course recommendations.

SWS provides student degree audit data that can be analyzed to provide recommendations as well as class section information such as SLNs and campus locations. We will crowd-source information about course paths that other students have chosen and they were happy with to fuel our recommendation system.

Challenges and Risks

It could be difficult to recommend classes, particularly for students who have taken few classes and still have lots of requirements to satisfy. Determining which classes are the best to recommend would be based on fewest number of unsatisfied prerequisites and crowd-sourced data of reportedly successful course paths.

Gathering enough course path data through surveys might prove to be difficult. To mitigate this risk, this data will not be key to the functionality of the Schedule Optimizer and this feature could be cut if necessary. People who use and like the Schedule Optimizer would also be encouraged to provide recommendations for future users.

Analyzing and transforming the crowd-sourced data into a format we can easily use to recommend courses will be a challenge. Potential ways to utilize the data could include using statistical information in course order to find the most optimal choice between two options where courses are not prerequisites of each other.

## UW NetID

[ ]

## Password

[ ]

[ Sign in ]

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## Recommend Courses

Degree Requirements:

- ☑ Writing
- ☐ VLPA
- ☑ Major Requirement

[ Build Schedule ]

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## Optimize Schedule

| Curriculum Abbreviation | Course Number | Section |
|---|---|---|
| [ ] | [ ] | [ ] |
| [ ] | [ ] | [ ] |
| [ ] | [ ] | [ ] |

No Earlier Than : [ 9:00 ▾ ]
No Later Than : [ 4:00 ▾ ]

[ GO ]

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## Your Optimal Schedule

| M | T | W | Th | F |
|---|---|---|---|---|
| 1 | | 1 | | 1 |
| 2 | 3 | 2 | 3 | 2 |

[ Register ]