Semester.ly

Mid-Semester Presentation
What is Semester.ly?
The Problem
The Problem

- Advising is time-consuming for both students and advisors
  - 80% of students have some significant issue with the advising process

- Student's aren't receiving the support they need
  - 40% of students state that their advisors don't give them helpful advice or information
Our Findings - From Students

- Semester.ly can help streamline the advising process
  - 91.3% of students stated that they would like to easily share their schedules with their advisors via Semester.ly
  - 96% of students stated that they would like some type of degree planning feature on Semester.ly
  - 70% of students stated that they would like a chat or comment system with their advisors on Semester.ly
Our Findings - From Advisors

- “Students are not always proactive in lining up their course choices, or tracking their progress”
- “Students change their course selections after their advising meeting and [don’t check] with their advisor to make sure their new courses meet their requirements”
- “[Planning with] the advising spreadsheet and a lot of emails [is] very cumbersome”
The Solution
## Four Year Plan

### Year 1
- **Fall 2019**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

### Year 2
- **Fall 2020**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

### Year 3
- **Fall 2021**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

### Year 4
- **Fall 2022**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

### Interactions
- **Interession 2020**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

- **Interession 2021**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

- **Interession 2022**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

- **Interession 2023**
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience
  - AS.050.236 (1) Neuroscience

### Planned Four Year Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering (E)</td>
<td>29</td>
</tr>
<tr>
<td>Natural Sciences (N)</td>
<td>14</td>
</tr>
<tr>
<td>Quantitative Studies (Q)</td>
<td>24</td>
</tr>
<tr>
<td>Humanities (H)</td>
<td>27</td>
</tr>
<tr>
<td>Social &amp; Behavioral Sciences (S)</td>
<td>15</td>
</tr>
<tr>
<td>Writing Intensive</td>
<td>3</td>
</tr>
<tr>
<td>CS Core</td>
<td>17</td>
</tr>
<tr>
<td>CS Upper Level</td>
<td>12</td>
</tr>
<tr>
<td>CS Other</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>24</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>109</strong></td>
</tr>
</tbody>
</table>

Click into me to see the other views!
<table>
<thead>
<tr>
<th>Name</th>
<th>JHED</th>
<th>Major</th>
<th>Year</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>James S. Wang*</td>
<td>jwang380</td>
<td>Computer Science</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>James S. Wang*</td>
<td>jwang380</td>
<td>Computer Science</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>James S. Wang*</td>
<td>jwang380</td>
<td>Computer Science</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>James S. Wang*</td>
<td>jwang380</td>
<td>Computer Science</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>James S. Wang</td>
<td>jwang380</td>
<td>Computer Science</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>James S. Wang</td>
<td>jwang380</td>
<td>Computer Science</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td>James S. Wang</td>
<td>jwang380</td>
<td>Computer Science</td>
<td>2023</td>
<td></td>
</tr>
</tbody>
</table>
The Minimum Viable Product

- MVP Mock Up

(refer to other presentation slides on website)
Backend Design
API Design

- Have to pass the SIS ID in the HTTP request and get the information from there.
  - student info
  - non-primary major(s)
  - minor(s)
  - advisors’ info
  - all courses (including current and previous courses)

- It took a few iterations, but we finally arrived on this
  - Sample Student API Layout
Chat Feature

- Place for students and advisors to make comments on semester plans
  - Each semester plan has own unique chat transcript
- Chat App in Django Backend consists of:
  - Message Models
  - Message Serializers
  - Room Models
- Messages will be stored in PostgreSQL
- Originally wanted to use websockets, but now plan to do with models
Current Progress...
Chat Feature

- Rough flowchart for how the messaging system will work:
  - When someone sends a message, it needs to go to 2 places:
    - Backend for **storage**
    - Frontend for **display**
Issues so far...

- JHU Authentication
- Django 1.9.2
- Python 2.7
- Microsoft-Django-Auth 2.3.1
- Python-Social-Auth 0.2.19
  - Social-Core 3.4.0

- Was it necessary?
What’s Next?

- Get **Frontend** components ready
- Get **Chat Feature** working
- Get **SIS course data** displaying
- Finalize **JHED Authentication**
- Finalize **Notifications System** (i.e. emails and in-app)

- We still have many questions we need to answer
  - Ex. - How to differentiate signing up for Advisors vs. Students?
Thank You!