Project #1

Your mission. To use Agile/Scrum development to design and implement a working tool to provide students and advisors with information on major completion. You may design this tool as you see fit to complete the project. You should, however, consider generalizability (don't just think about Augsburg, think about how this tool could be generalized to work for ANY school). The tool should be able to:

- Visit online catalogs (or be fed PDFs of catalogs) to obtain information on:
    - Major/Minor/Program requirements (Including General Education and University/College course/credit Requirements could be added, but don't start with those. General requirements should be considered LOW priority to start with)
    - Course lists
    - Perquisite chains
    - Exceptions (some programs have different paths for people with different transferred or work experience)..For instance, if you come in with Advanced Placement courses, what does that mean?
    - Grade requirements
    - Course offering semesters/time (if applicable)
    - Check partner institutions?
- Analyze Transcripts to determine what courses count toward progress in Major/Minor/Program
- Analyze course scheduling page for course semesters, times, dates, locations...(A lower priority task here would be to consider how to extrapolate course offerings for future semesters based on what was offered *recently*)
- Provide long and short term course recommendations:
    - You may wish to include weighted recommendations:
        - User-Defined (Advisor or Student)
        - Based on Course Level (100, 200, 300, 400, etc.)
        - Based on student's previous course grades... Examples:
            - If student has done well in previous ZZZ courses, program, suggest more ZZZ courses

            - If student has struggled in ZZZ courses, but still needs more ZZZ courses, limit to 1 ZZZ course per term
        - Have a display of how semester schedule will likely play out (meeting times and such)
        - Consider time conflicts
        - Consider restrictions… Examples:
            - No classes before 8AM
            - Limit TR classes
            - Etc.
        - Offer alternate plans like:
            - Soonest graduation date
            - Lightest course load while being a full-time student
- Allow students to compare possible plans from different institutions
- Course searching:
    - By Priority?
    - By Time?
    - Text based?
    - Fill in the blank?
- Suggest Majors/Minors/Programs student didn't list but could also do?

Delivery Dates and Associated Deliverables

Note that Deliverables listed here to give you an idea of what to expect and may change. The Deliverables noted on the individual project assignments are the "FINAL" versions of the Deliverables list and will also include point breakdowns.

- Friday, September 14, 2018 – Initial Setup
  - Setup your Scrum Board on https://tree.taiga.io [Public groups are free and have no team member limit]
  - Make sure to turn **Kanban** on.
  - Have all Group Members in the project
  - Add instructor as a stakeholder
  - Have a reasonable number of User Stories generated
  - Have each member assigned to a task (Tasks should be SHORT, break them up if they are too large!)
  - Have estimates for tasks
  - Have priorities for tasks
  - Have a notation about what you expect to accomplish during Major Sprint I

- Friday, September 21, 2018 – End of Major Sprint I
  - Updated Scrum Board – **On-Going**
  - Each student member must have 3 completed Use Case Diagrams (keep Use Cases SMALL) (Chapter 5.2, also https://www.lucidchart.com/pages/uml/use-case-diagram has good info as well)
  - Notes on AT LEAST 3 Scrum meetings
    - Key questions per student member:
      - What did you accomplish since last Scrum?
      - What will you do before the next Scrum?
      - What roadblocks are you encountering (and how can the team help)?
  - Current Code (ever student member should have SOME current code. It might not work/be complete)
  - Have a notation about what you expect to accomplish during Major Sprint II

- Friday, September 28, 2018 – End of Major Sprint II
    - Updated Scrum Board – **On-Going**
    - Each student member must have 1 completed Activity Diagram for a major activity (Chapter 5.1, also https://www.lucidchart.com/pages/uml-activity-diagram has good info as well)
    - Notes on AT LEAST 3 new Scrum meetings (include your End of Major Sprint I in this count)
        - Key questions per student member:
            - What did you accomplish since last Scrum?
            - What will you do before the next Scrum?
            - What roadblocks are you encountering (and how can the team help)?
    - Current Code – Kerlin expects each student to have code which does SOMETHING useful towards the project (no matter how small of a task)
    - Have a notation about what you expect to accomplish during Major Sprint III

- Friday, October 5, 2018 – End of Major Sprint III
    - Updated Scrum Board – **On-Going**
    - Each student member must have 1 completed Sequence Diagram for a major activity (Chapter 5.2, also https://www.lucidchart.com/pages/uml-sequence-diagram has good info as well)
    - Notes on AT LEAST 3 new Scrum meetings (include your End of Major Sprint II in this count)
        - Key questions per student member:
            - What did you accomplish since last Scrum?
            - What will you do before the next Scrum?
            - What roadblocks are you encountering (and how can the team help)?
    - Current Code – Kerlin expects each student to have code which is significant and for at least one other student member to have tested code which is complete (testing is a TASK too!)
    - Have a notation about what you expect to accomplish during Major Sprint IV

Friday, October 12, 2018 – End of Major Sprint IV

- Updated Scrum Board – On-Going
- Notes on AT LEAST 3 new Scrum meetings (include your End of Major Sprint III in this count)
  - Key questions per student member:
    - What did you accomplish since last Scrum?
    - What will you do before the next Scrum?
    - What roadblocks are you encountering (and how can the team help)?
- Current Code – Kerlin expects each student to have code which is significant and for at least one other student member to have tested code which is complete (testing is a TASK too!)
- Have a notation about what you expect to accomplish during Major Sprint V

Monday, October 15, 2018 – End of Major Sprint V

- Updated Scrum Board – On-Going
- Each student member must have Class Diagrams for any objects they built
- Current Code – Kerlin expects each student member to:
  - Have code which is significant
  - Have had all their completed code tested by at least 1 other student member
  - Have tested a fair portion of code developed by their other student members
- Present to the class (each student member should be part of the presentation):
  - Group Contributions:
    - What your group's overall design is, and Why
    - What priorities your group laid out, and Why
    - What you produced so far
  - Individual Contributions:
    - Contribution most proud of and Why
    - Biggest challenge so far and Why