




Storyboard

Duke Registrar Recommender
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Epic 1

We want to develop a recommendation system to help guide current students in class selection based on classes past students in the same major took. 


Theme 1.1



We need to better understand classes that past students took, including major/minor/certificate requirements, prerequisites, graduation requirements, dropping/failing classes, and course load.

Story 1.1.1



We need to be able to determine major/minor/certificate requirements, prerequisites, and graduation requirements that were relevant in the past to be able to relate them to current requirements. 

Story 1.1.2

We can also find patterns in the order that students take certain classes to help determine course load.

Story 1.1.3

Using data on grades, we can identify certain classes where students often do well (relatively easy classes) or poorly (classes to avoid). We will find grade difference at major level and course level and find course combination patterns that result in higher or lower grade major-wise or term-wise.

Story 1.1.4

Relate past classes (pre-2012) to current class structure. Classes were renumbered in 2012 but patterns can potentially help link these two time frames.

Theme 1.2



Develop a recommendation engine based on past class completion and enrollment data and findings from Theme 1.1. This may be in the form of a more traditional recommendation engine or a dashboard that enables students to compare pathways within a majors.

Story 1.2.1

We can define the class route each student or each group of students are taking.

Story 1.2.2

We can define the potential pathways the students are taking beside their major. These pathways could involve all different kinds of interest.

**Story 1.2.3**

Combining the information of common course routes relating to majors as well as information of students' interested pathways, we will attempt a recommendation system to provide suggestions for students with similar major structures or pathways.

Story 1.2.4

We will create a user interface that allows undergraduate students to log into a dashboard that compares their academic pathway with the academic pathways of other students in particular majors who have already graduated.