S2021 Project Descriptions

AU Problem Hotline

*The Problem:* Students notice problems with facilities, landscaping, lighting, as well as opportunities for improvement to the UHM campus all the time. While there is a campus hotline number that students could call to report these problems, this is old fashioned, time consuming, and feels like talking into a “black hole”. For all these reasons, students won’t typically use it.

*The solution*: Design a web app that, once a student logs in once, allows them to report a problem or enhancement idea in less than 10 seconds of effort. The page would have a pull-down list of possible problem types, the urgency of the request, the location, and a short field with which the student can provide a description.

In addition, the app provides a feed of recently reported problems. Students noticing the same problem can select a feed entry and augment the description with additional info. This also serves as a “vote” from the student to address the issue.

Each problem report would be time stamped and the administration can access the user’s email as a contact person for further information.

When facilities or other campus personnel respond to a problem, they can mark it as resolved. Students can reopen issues if they were not resolved to their satisfaction.

AU Textbook Exchange

*The problem:* Buying and selling books from the bookstore is tedious and expensive. Direct sales from students to students can “cut out the middleman” and result in both higher revenue for the seller and a cheaper price for the buyer. The issue, is there is not a good forum to connect interested sellers to interested buyers.

*The solution:* Create a web application that enables students to login into the site and indicate books they would like to sell. Sellers must supply the ISBN number (i.e. the unique ID) for each book, the asking price, the condition of the book (poor, fair, good or excellent, and comments about the book’s condition. Potential buyers can log into the system, search for books and check a book to indicate interest. When they check a book, the seller will receive the buyer’s email address so they can communicate. After a sale, the seller can mark the book ‘sold’ and can update the sales price. A seller can also ‘uncheck’ a sold book to be available again should there be an issue with the sale. Book’s listed more than 3 months, should be marked ‘stale’ and require the seller (if still interested in selling the book), to log in and reset the state.

In addition, buyers and sellers can rate each other, enabling users to build up confidence in each other over time. Admins can ban users for inappropriate behavior and list all the book sales in the most recent time period.

AU Lost And Found

*The problem:* AU police department currently keeps and excel spreadsheet of items found on campus. This means students must show up to the police department in the hope that their item was recovered rather than search online. It also means that AU Police need to rely on the accuracy of the spreadsheet for omissions and deletions and cannot get good reports about items.

*The solution:* Create a web application police staff login into the site and update the lost and found data. The AU police need to keep track of the item found, a location found, a detailed description and an overall general description. In addition, they need to log who found the item and their contact data. Students can login to see general categories found items. For example, a student might see that a set of keys were found on 1/23/21 on campus. We items are claimed, AU police need to record data about the person claiming the item, such as their AU ID and/or driver license number. In addition, the AU Police should record the approximate value of the item. Items with a higher value need extra identification before claiming.

AU CSC Student Enrollment Tracker

*The problem:* Each semester, the AU Web Advisor system keeps track of the different courses offered, the number of student who are taking the course and the number of students on the waiting list. We would like a way to preserve this data, so we can run reports on student enrollment trends.

*The solution:* Create a web application that can upload the web advisor data and track individual course enrollment. The system should allow an site Admin to upload web advisor data and parse out the data values. Once data is uploaded, CSC professors should be able to log in and produce various reports about the data. For example, we would like to know, the number of students enrolled in CSC1700 per year for the last 5 years or the number of people on the waiting list for CSC2650 per year. Ideally data would be available in both graphical and tabular format. The system should be extensible enough to allow different subject than CS to be included.