**Objective:**

Over the course of my time at West Point I have witnessed many cadets recycling the textbooks that are regularly used in our courses. With so many general education classes that all cadets take, there is a large number of textbooks that can be reused semester to semester. However, with the book money stipend that we all receive, many cadets opt to buy their textbooks new each year, thus creating an unnecessary surplus of the same books floating around the school. For instance in my own company collaboration room, the bookshelf is full of history, DIRT, and math textbooks for classes that all plebes and yuks take. My objective is to create a program that streamlines the process or recycling these textbooks to avoid monetary and physical waste. This product will keep track of which cadets own which books and allow other cadets to browse for the books they need and easily connect the two parties to facilitate the exchange.

**Situation:**

The system will contain a catalog of listings of books that are available for trade. Each listing is created by the cadet who currently owns the book. Each listing will contain a listing ID, the book, date of listing, “selling” cadet name, email address, and company. Each book within the listing will contain the book ISBN, book name, author, edition, and associated course. Each Course will have the course ID, and the course name.

Each cadet at West Point will be able to make an account. Once you create an account you can browse for books that you need, create listings, and add books to the database. There will be an initial set of commonly used books, however as cadets add books that they own, they will be able to add those books with the associated information, and then add that book to the database. Each cadet will have their Cadet Number, first name, last name, WP email address, graduation year, and company. As cadets create an account they will be stored in the database as users, with an associated username and password that will be securely stored using Djangos built in authentication. With this there will be a user table, with a one-to-one relationship with cadets to store the information securely and efficiently.