



Login/log out:

User enters userId and correct password along with their user type which determines whether they are Admin or student. After successful authentication, they will be redirected to their respective homepages.

Search Course Sections:

Students are able to search a list of courses by course title/code

Returns list of courses with title that contains the input.

Displays list of sections along with information such as description, class timing and etc under the course when student select the course they want.

Bid a section:

Student selects preferred section and places bid.

If bid is valid, update bids, student edollar, inform that bid is successful.

Else inform that bid is unsuccessful.

View Bidding Results:

Bidding results is grabbed from bid table by userId, courseCode and SectionId and displayed to the user.

Drop a Bid:

The system displays a list of the courses and sections that he/she has bided for

Student selects the bid he or she wishes to drop and bid will be deleted from bidTable

Upon successful bid dropping, system displays a success message with the amount of e\$ returned.

Drop a Section:

The system displays a list of the courses and sections that he/she has successfully bided for

Student selects the section he or she wishes to drop and bid will be deleted from bidTable

Upon successful bid dropping, system displays a success message with the amount of e\$ returned.

Start and Clear Rounds:

Allows admin to start round. When round is started, students are allowed to place bids in the system.

Allows admin to stop round. When round is stopped, students are not allowed to bid.

Bids are processed, and status is updated. Refunds are processed for unsuccessful bids.

Bootstrap Data:

Admin uploads csv files containing necessary data.

Data is validated and updated in the database. Errors in the data are displayed to the admin.

Start round is automatically initialized after bootstrap.

Web Service:**Authenticate:**

Takes in username and password returns a token if login is valid, else an error message is returned.

Bootstrap:

Sends a POST request with a valid token as well as a zip file to the server

Validates tokens such as missing or blank token

The message will be returned regarding successful or unsuccessful bootstrapping

Dump Table

Allows an admin to get data from course, section, student, pre-requisite, completed-course, bid and section-student tables.

Dump Section

Dump Section is a function which will retrieve the information for a section for each round. After the end of round 1, this function would return the enrolled students which has bided successfully in bid 1. At the end of round 2, it will return a mixture of successful bids from round 1 and 2. This will cover possible checks of invalid course and section object.

Dump Bid

This functions contains all the relevant information of the Bid such as the user details and bidding details of different rounds.

Dump User

This function returns all the information of a user and does a possible checks of error such as trying to add a userID which does not exist.

Drop Section

Drop Section will return the eDollars amount bided by the students on any sections regardless on when the status is active or not. This function is only activated by admin.

Delete Bid

Delete bid will allow the users to drop their bid and get the e-dollars returned to them. However, it can only be dropped from round 2.

Update Bid

This function is called for the first time where a new bid will be created. Upon the 2nd attempt of bidding for the same course, it will update the existing bids with the necessary checks.

Stop Round

When the function is called, it allows the admin to stop the round where all bids which are successful will be enrolled into the sections.

Start Round

When start round is called, students are only able to place bids when admin start round.