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CIS 197

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CIS197 Fall2019 - Project Proposal

Overview

For my project, I aim to build an inventory system for my dance troupe on campus. We have tons of props and costumes that are currently managed by a Google Sheets. There are many issues with the current system such as the lack of pictures, accurate counts, and the ability to “checkout” items for use in show or practice. This puts a lot of burden on the treasurer in charge of making sure the sheets are up to date with the current status of the inventory. This new inventory system will allow troupe members to authenticate themselves, view current items in stock, and request to checkout items.

Features

* Authentication (via passport.js or possibly PennKey system?)
* Graphical view of items w/ pictures, short descriptions, quantity in stock, and locker location on campus
  + May also include link to previous show video for examples of how to use this prop/costume
* Checkout/shopping cart system to allow for bulk requesting of items
* Requests are sent to treasurer/executive board for physical retrieval
* Admin/executive account can approve/deny/fulfill requests
* Admins can manage what items are available for requesting, as well as add new items

Technologies

* Node/Express backend
* MongoDB OR PostgreSQL
* React front-end
  + Axios for HTTP management
* Redis/caching
* Authentication service
* Deployed on cloud service (AWS)

Milestones

* MS1:
  + Setup backend Node server w/ MongoDB or local PostgreSQL
  + Authentication service working
  + API endpoints working
* MS2: Basic React front-end view w/ API connections
  + Multiple pages working (i.e. login, catalog view, detailed view, checkout)
* MS3: Polishing front-end and add caching, if possible

GitHub

* <https://github.com/ericqzeng/padt-inventory>