Good (Truck) Driver Incentive Program

Fall 2019

Drivers:

- earn points for good driving behavior
- are affiliated with one sponsor company
- use their points to purchase products from their sponsor's product catalog
- points are added on a daily basis for good performance
- can use their points at any time for items in the sponsor's catalog

Sponsor Company:

- sponsor companies maintain a catalog of incentive products (G or PG only)
- the products are chosen via by one of 3 mechanisms (which the sponsoring company selects and can change at any time)
 - list of specific products
 - o general categories of products
 - rules for selecting products
- sponsors set the dollar value of the driver points, the default value is \$0.01 for each point.

Application Development Company (aka your team):

- all products are sold & delivered via a third party
- receives 1% of total dollar value of point redemptions each month

The incentive program app:

- uses an online API to produce the company specific catalog of incentive products (eBay and Amazon have them, although the eBay API is more readily accessible)
 - product availability
 - o price
 - description
 - o images of the product, offers, offer availability
 - o other relevant information
- uses the API to obtain the current product price before a product is added to the driver's purchase set
- the product catalogs are updated daily via the web API

Drivers can:

- can log in
- review/update their user profile and password
- browse products in their sponsor company's catalog
- "purchase" these products using their points
- review their point status
- review the status of their purchases
- cancel/update purchases

Sponsor Company store manager:

- can log in
- review/update relevant sponsor profiles
- there can be multiple logins per sponsor
- review the status of their participating drivers
- approve or reject driver applications
- register/update driver information, including points and personal information
- review/update their product catalog
- checkout items on behalf of a driver.
- update the rules for generating their product catalog

Admin:

- can log in
- review/update admin profile
- review/update the status of
 - o all sponsor companies
 - o all drivers
 - o specific companies
 - specific drivers
- add new admins, drivers and sponsors
- generates reports to track the fees and other operational parameters of the system

General:

The incentive program app must be a responsive and conform to the size of the user's display.

The sensitive data in the system (such as passwords) must be properly protected.

There should be a password reset system for the driver and sponsor users when they forget their password.

The system must be deployed to a publicly available server using a cloud hosting environment such as Azure, AWS or Google.

Showcase Skills:

The team must select an area to go deeper, outside the requirements specified above. This should highlight and extend skills and knowledge learned at Clemson. This can include any of the following:

- Database: use triggers, stored procedures, database jobs, user level access permissions
- Security: SSL, site hardening, penetration testing
- Testing: automated testing
- GUI/HCC: advanced HTML, CSS & javascript
- Accessibility: accessible site, accessibility testing
- Mobile app: <u>native</u> iOS or Android app
- Deployment: continuous deployment, automated push
- AWS: incorporate other AWS services

Your team's showcase area must be identified in your team summary.

Your team will need to provide a summary and artifacts to illustrate the team's showcase skills as part of the final project demo.