**NextGen Training Model**

Project 1 Skeleton Outline

Overview:

Associates will be working on an ERS system that is a P0/P1 hybrid. This project skeleton should allow them to implement key methods that assess their understanding of the required technologies. Red/Green tests will be written to ensure the implementation meets the requirement criteria. Ideally, this skeleton construct will be utilized by the trainer to have each associate run the tests and accurately gauge their progress with Project 1.

This outline will document the structure of the Project 1 skeleton and provide clarity for the areas by which the testing covers. The outline is formatted in a weekly structure to map directly parallel with the Foundation Curriculum.

ERS Features to be tested - Backend

Login

* Needs to check for existing users with username/email provided.
  + Must return error if user does not exist.
  + Must compare password provided and stored password for that user.
  + Should return an error if the passwords do not match.
* Must return user object if the user logs in successfully.

Registration

* Should ensure that the username/email provided is unique.
  + Must return an error if the username/email is not unique.
* \*Should persist the user object upon successful registration.
* Must return an error if registration is unsuccessful.

Reimbursement Request Submission

* Should ensure that the user is logged in
  + Must return an error if user is not logged in
  + Must return an error if the logged in user is not the same as the author of the Reimbursement Request
* Should ensure that reimbursement request has a description and monetary value
  + Must return an error if the request does not have a description and monetary value
* \*Should persist the reimbursement request with appropriate reimbursement status and submitter information
  + Must return an error if persistence is unsuccessful
* Should be able to upload images with submission (stretch goal)
  + S3 with creds to meet industry standards

Approve/Deny Reimbursement Request

* Should ensure that the user is logged in as a Finance Manager
  + Must return an error if user is not logged in as a Finance Manager
* Should ensure that the reimbursement request exists
  + Must return an error if the reimbursement request is not found
* \*Should persist the updated reimbursement status with resolver information
  + Must return an error if persistence is unsuccessful

Feedback/Confirmation??? (Probably stretch goal)

* Should return feedback and confirmation of an approved request
  + Must return a receipt of the transaction if approved
* Should return feedback of a denied request

Analytics/Metrics?

* Should return previous reimbursement request submissions
  + Ideally, with the ability to filter by status

Week 1

Java

JUnit

Week 2

AWS

SQL

JDBC

Maven

Week 3

HTTP

HTML

CSS

Java Servlets

REST

Week 4

JavaScript

* This is project is Individual Project
* Follow TDD approach (Test Driven Development approach)
* Create front end code using HTML/CSS/JS and Servlets
* Create back end Code using Java, Maven
* For Unit Testing use Junit
* The skeleton for the project is available in the below github repo <https://github.com/revature-coe/ERS-P1-Skeleton>
* Project dead line is – 9th June 2022
* Everyday you can spend minimum of 1 hour in the afternoon for project work
* You may get assistance from Trainer/Your batch members
* There will be project presentation at 9th June 2022 with QC Team.
* Each associate will get 5 minutes for their project presentation & Q.A session