CS602 Term Project

CS602 Project Broad Guidelines

- NodeJS centric using ExpressJS
- Project emphasis should be on server-side functionality as opposed to client-side
- Persistence of data (Node with Mongoose/MongoDB or Sequelize/RDB)
  - **Should incorporate one-to-many and/or many-to-many relationships**
- REST API endpoints of data for JSON format
- Support GraphQL endpoints
- Use PassportJS for authentication/authorization
- Can use React for front-end (Optional)

CS602 Project Grading Rubric

- Server-Side functionality – ExpressJS with Router (30 points)
- Persistence (15 points)
- REST API endpoints(15 points)
- GraphQL endpoints (15 points)
- PassportJS (10 points)
- Record the project demo and code walk through (15 points)

CS602 Sample Project

The following is the scope of a sample project. You can pick your own project on similar lines. In the latter case, please provide the project scope with details to your instructor (cc: your facilitator) for instructor's approval before the start of Module6.

Consider a shopping cart application for a merchant's website. The merchant has a list of products that they sell. Each product has a unique id, name, description, price, and quantity in stock. The application should be able to show the list of all products, search for the products by name/description.

The customer interface should allow the ordering of the products. The customer selects from the list of products and specifies the quantity of each they like to order.

Use PassportJS for customer registration and authentication. When the order is submitted, the available quantities should be updated. The customer should not be allowed to back order any product. The customer interface should have the capability to show the list of all their orders.

The admin interface should have the capability to add/update a product, and delete a product. The admin interface should have the capability to show the list of all customers, and when a customer is selected, show the list of that customer's orders. The admin should be allowed to delete or update the existing orders of a selected customer.

The application should support the REST APIs (JSON) and GraphQL endpoints for the list of products, products matching the specified name, and products within the specified price range.

Submission:

You need to upload the following two files individually for the submission.

1. **A PDF/Word file (CS602_Project_*lastName_firstName*.pdf) with the description of the project and the link to the recording.**
2. **Export the CS602_Project_*lastName_firstName* folder containing all the relevant files as a zip file and upload the zip file to the Assignment section. (Remove the node_modules folder before zipping the folder).**