Centennial College

COMP229 – Web Application Development

Midterm Test

Due: Week 7

Value 15%   **Maximum Mark: 15**

Overview: Using your knowledge of **Node.js, Express,** and the App Template provided, complete the **Used Car Store** backend app that you will share on GitHub and deploy on Render.com (or another cloud provider). The template already includes all the basic CRUD endpoints, and the **Cars model** is already done for you.

Your task is to complete/fix the code and test all the endpoints of the API.

Requirements:

1 - Project Setup (3 Marks):

1. Download the template project called COMP229.F2025.Midterm.Template.zip from the submission folder.
2. Create a GitHub repository called COMP229[sectionNumber]-F2025-MidTerm-[YourStudentID] (e.g. COMP229004-F2025-MidTerm-301016383) and publish it to GitHub.com. (2 marks)
    o   Note: If you make it private, remember to invite me as a collaborator (jazeved5@my.centennialcollege.ca).
3. Unzip the file downloaded from the step 1, copy the entire content to the folder of your new GitHub repository, commit and push as "Template Files".
4. Create a new MongoDB Database on **MongoDB Atlas** by changing the value of the **ConnectionString** variable in the ./**config/db.js** to point it to **your** cluster. (1 marks)
    o   Note: You are not allowed to use any database from the code class examples. (**Penalty of 20%**).

2 – Complete the missing code and fix the errors (5 Marks)

1. Create a new car. (2 marks)
2. Update a car. (1.5 marks)
3. Delete a car. (1.5 marks)

3 – Test the REST APIs above using Postman, Thunder client or any tool and provide the screenshot of the test. **(5 Marks)**

Methods	Urls	Actions (1 mark each)
GET	api/cars	get all cars
GET	api/cars/:id	get cars by id
POST	api/cars	add new car
PUT	api/cars/:id	update car by id
DELETE	api/cars/:id	remove car by id

4 – Publish the Backend API to a cloud provider of your choice (Render recommended) **(2 Marks)**.

SUBMITTING YOUR WORK

Your submission should include:
1. A zip archive of your **Project files**.
2. A link to your GitHub repository.
3. A link to your live site hosted with a Cloud provider (Render recommended).
4. A PDF file showing the screenshots of the tests.

This exam is weighted **15%** of your total mark for this course.

 Important:
- This is an open-book exam.
- Students may use the class examples and their own work.
- Students may also access course PowerPoint presentations, or the Textbook outlined in the Course Syllabus.
- However, the use of external code is **not** allowed for this exam. If you really need that, please email jazeved5@my.centennialcollege.ca in advance to be authorized to.