Take-home Coding Assignment

**Requirement:**

Candidate should have the appropriate IDE installed locally.

* For .Net position: Visual Studio 2019 or later (Windows), Visual Studio for Mac 2019 or later (MacOS)
* For Java position: Eclipse V4 or later, or NetBeans V13 or later
* For Python: Visual Studio Code latest version or PyCharm latest version

**Coding Assignment - 1**

Develop a very simple RESTful application that demonstrates the ability to

* Add new Tasks
* Update Tasks that already exist.

**Overall Requirements:**

* Visual Studio 2019 or Visual Studio 2022 should be used to build the application
* The application should be written as an ASP.Net Core Web API application (ASP.Net Core 3.1/5/OR 6)
* If a database is used, please use SQL Server 2017 or 2019
* Unit tests should be used to run the application (create or update)
* Deploy the Web API to Azure platform by using a free account or free tier services. The deployment should be able to support the demonstration of the scenarios like adding a task or updating an existing task.

**Task Requirements:**

* When creating a Task, the Due Date cannot be in the past
* The system should not have more than 100 High Priority tasks which have the same due date and are not finished yet at any time
* Domain should include the following:
* Id
* Name
* Description
* Due Date
* Start Date
* End Date
* Priority (High, Middle, Low)
* Status (New, In Progress, Finished)

**Concepts to Consider:**

* Test Driven Development (TDD)
* Dependency Injection (DI)
* Domain Driven Design (DDD)

**Submitting the Application:**

* Within 48 hours, please send a ZIP file back to us at [UWSExternalHiringIntake@geico.com](mailto:UWSExternalHiringIntake@geico.com)  which should contain the source code.  Please do not include object or bin folders.
* Please include a README file with the application that explains how to compile, configure, and run the application – including how to initialize the DB with SQL scripts if used.
* Once we receive the zip file and unzip, we should be able to open the solution with Visual Studio, compile and run unit tests.