Assignment No 1

Important Note:

- For code, you will be using Visual Studio.
- To display all task, you will create a video which demonstrate each of the task and contains step by step instructions.
- Submission:
    - Folder naming format: k<Year><StudentID>_A1. Following files should be included:
        - A detailed Video with audio instructions. Your login name/student id should be visible in your video.
        - Repository link.
        - Code as zipped file
- Last Date for Submission: **As per Google Classroom**
- Assignment will be marked as 0 if:
    - Submitted late.
    - The submitted assignment does not open or file is corrupted.
    - Assignments submitted via any medium except for Google Classroom.
    - Copied amongst students or from another source

Scenario:

You will be creating a website using HTML / JavaScript / CSS. The website will have the following:

- Home Page: Displaying a small intro about yourself.
- Projects: List all of your projects which can be filtered by typing technology (C# / Java / Node.js etc.) in a textbox
- Education: Page which shows all of the courses that you have studied in since 9th grade.

Task # 1:

Using Azure Boards with Scrum Process as your process model, create different work items (Features / Product Backlog Item / Task) required for the mentioned scenario. You should fill in all the necessary details as well as the duration for each Task. You will use Product Backlog for Activities which will be broken into multiple tasks. Any Task which occupies more than 3 days should be spilt into multiple tasks. [Note: You should have at least 15 tasks].

Task # 2:

Create the website with the requirements mentioned previously using Visual Studio and push entire code into GitHub main /master branch using commands (you are not allowed to use UI based options).

Task # 3:

Using git commands, create a feature branch and modify your code from VS to include a new page called "Certifications" which will list your certifications.

Task # 4:

Implement Pull Request at Git level and Azure Branch Policies to make sure at least two reviewers are required to push code in the main / master branch.

Task # 5:

Implement Continuous Integration (CI) by using Self Hosted Agents. Merge your feature branch into main branch using commands which should trigger the CI and verify if the main branch can be built successfully or not.

Task # 6:

On your Azure DevOps Dashboard, add widgets for “Chart for Build History” and “Pull Request” and fulfill necessary requirements for these widgets. Display how these can be used.