

## IT5007: Software Engineering on Application Architecture

### Assignment-1: To Do List

Deadline: 12<sup>th</sup> Feb. 23:59 PM

Points: 20

You are tasked with creating a to-do list web application. This application must support adding new tasks, crossing-off (finishing) the completed tasks, and displaying the list of tasks (both completed and outstanding). Each task must have a serial number, description, priority, and deadline.

#### Guidelines and Assumptions

1. Our website will be hosted on our own laptop/desktop and does not need to be accessed from the internet. We will enable internet accessibility towards the end of the course.
2. We will be designing a SPA (Single Page Application), wherein all the functionality of the website is written within a single HTML file instead of having cross-references across HTML files.
3. The data (i.e., the list of tasks) will be maintained within the browser using HTML, JS constructs. Use of Databases is not allowed. One way to use this is to use Javascript cookies. Another way is to use the local storage provided by browsers. This wasn't taught in the lectures and needs some reading!
4. For the proof of concept, you just have to support a list of 10 tasks.
5. At the time of release of this assignment, Javascript has not been covered. It is recommended that you start coding the HTML part of this assignment first.
6. The data has the following format:

Serial No.	Task Name	Priority	Deadline
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#### The front-end needs to have the following functionality:

- 1) Design a landing page for the website and create navigation panes for each functionality (e.g., Add, Finish, etc.). [1 point]
- 2) **Add** a task. This task has the aforementioned attributes (e.g., priority, etc). It needs to be added to the outstanding tasks list. [4 points]
- 3) **Finish** the task by deleting from the outstanding tasks list and adding it to the completed tasks list. [4 points]
- 4) **Display** the contents of both the outstanding and completed tasks. [4 points]
- 5) Add sufficient messages to keep the user informed (e.g., error when an add is requested to an already full outstanding tasks list) [2 points]
- 6) Try to make the website look pretty by using stylesheets and navigation bar, similar to what was taught in the class. You can use the href attribute to point to the different sections of the webpage. [3 points]

- 7) To store data, if you use variables, they will disappear when you close and re-open the browser. To store data persistently, you must use something like JS cookies. If persistent storage is implemented, you get maximum of 2 points. Otherwise, 1 point. [2 points]

Submission details:

- 1) Submission is through Github Classroom. More instructions will be given soon. You will be given your own github repository for this assignment, where you can “git push” your code.
- 2) We will look at the git commit timestamp to determine if you have completed the assignment before the deadline.
- 3) You will be provided with skeleton code, where you can fill-in-the-blanks to get the code to work [allow 3-4 days for this to be available]. You can also write your own code from the scratch if you don't want to wait.