# Challenge No.8 - Specification

Objects, scope and context in JavaScript

**Description**
After the presentation of the challenge and receiving the starter files, each student is required to complete the assignment within the given deadline. The solution should be uploaded to GitLab, with the assessor added as a maintainer to the repository. Additionally, the student is instructed to add the solution link to the learning platform.

**Description**
Create a simple day planner application to display tasks to be done during the day after being entered by the user. The application will allow the users to enter task name and time. You may use JavaScript objects and classes for this challenge. Refer to the screenshots and demo video for the visual layout of the application. Use starter files to complete the challenge.

## Level 1: Beginner

Student should know the basics of HTML and CSS to understand the structure and style of the application.
Student should know th fundamental JavaScript syntax and operations, including variables, data types, and basic functions.
Student should have a basic understanding of the Document Object Model (DOM) for manipulating webpage content (e.g., document.getElementById).
Student should know about creating and appending DOM elements (e.g., creating a list item to display tasks).
Student should know about handling user input from form elements like input fields and buttons.
Student should know about displaying the current date using JavaScript's Date object.

## Level 2: Intermediate

Student should have an intermediate understanding of JavaScript, including event handling (e.g., addEventListener for task addition and removal).
Student should have know about more advanced DOM manipulation techniques, such as dynamically updating the content based on user interactions (adding or removing tasks).
Student should know about implementing conditional logic to manage the application's state and UI changes.
Student should have basic knowledge of CSS for dynamic styling changes (e.g., highlighting tasks).

## Level 3: Advanced

Student should know advanced JavaScript, including the use of objects and classes for organizing and managing tasks.
Student should know about utilizing localStorage to save, retrieve, and manage tasks persistently across browser sessions.
Student should know about implementing more complex logic to handle date and time comparison to highlight tasks matching the current time.
Student should know about advanced DOM techniques, such as event delegation for managing events on dynamically created elements.
Student should know how to refactor and optimize code for efficiency, maintainability, and scalability.

**Exercise 01**
Create a function to get from the user input the task name and time and add the task to the list. Display the current date on top of the screen as visual info for the user. Display an alert if the user tries to add a task without filling in the task name or task time or task date.

**Exercise 02**
Create a function to remove a task from the list after clicking a button.

**Exercise 03**
Create a function that highlights the task/s whose current date to be done matches the current date of the user's computer. Use the CSS class 'highlight-current-date' that is in the starter file.

**Exercise 04 (BONUS)**

Save the task list in localStorage so that it persists on browser refresh.

**Evaluation system**

| ***Criteria*** | Excellent 2.5p | Proficient 2.0p | Good 1.5p | Fair 1.0p | Poor 0.5p |
|---|---|---|---|---|---|
| Solution Correctness | *The solution is flawless, meeting all requirements and functionalities.* | *The solution is correct for the most part, with minor errors that do not significantly impact the functionality.* | *The solution is mostly correct, but there are some major errors affecting the overall functionality.* | *The solution has several major errors, making it partially functional, but shows a basic understanding of the problem.* | *The solution is incorrect, incomplete and lacks understanding of the problem.* |
| Code Quality | *Code is exceptionally well-organized, follows best practices, and demonstrates a deep understanding of all required concepts.* | *Code is mostly clear and well-organized and follows good practices, with only minor improvements needed.* | *Code is mostly organized, but there are notable areas that could be improved for better readability and maintainability.* | *Code lacks organization, readability, and structure, and could be significantly improved.* | *Code is messy, unreadable, poorly organized, and does not adhere to coding standards.* |
| Adherence to Specifications | *The solution precisely follows all specified challenge requirements.* | *The solution mostly adheres to the specifications, with only minor deviations or oversights.* | *The solution deviates from specifications in some aspects but still fulfills the main requirements.* | *The solution deviates significantly from the specifications, but some elements are implemented correctly.* | *The solution disregards most or all of the specified requirements.* |

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| Documentation, Comments, Cleanliness | *The code is well-documented, clear and exceptionally clean. Comments explain the logic behind any complex parts.* | *Good documentation and comments. Code is generally clean with a few areas for improvement.* | *Basic documentation and comments, with room for improvement in clarity. Code cleanliness is acceptable but needs improvement.* | *Limited documentation and comments. Code lacks clarity and cleanliness and is not well-organized.* | *No documentation or comments. Code is disorganized and challenging to understand.* |

**Deadline**
1 week after its presentation, at 23:59 (end of the day).

**Assessment Rules**

- Fair Assessment: ethical considerations
  - Assessors should ensure that the assessments are conducted in a fair and ethical manner, respecting the principles of academic integrity and honesty.
- Reliability and Validity: enabling consistency
  - Assessments should be consistent and reliable, meaning that they yield consistent results when applied repeatedly to the same task or performance.
  - Assessments must accurately gauge the knowledge, skills, or abilities they are intended to evaluate, ensuring their validity as indicators.
- Feedback: as a method for continuous improvement
  - Assessors should offer constructive feedback that identifies strengths and areas for improvement. The Feedback should be specific and actionable, it should include thought provoking guides and should challenge the student to become better at a specific task.
- Late Submission Policy: assessing assignments after their deadline
  - Students should be allowed a grace period of 3 days (72 hours) to make a late submission on any assignment, with the notice that they will be deducted 20% from the total possible points.
- Plagiarism Policy: assessing assignments with matching solutions
  - In the event of suspected plagiarism, the assessor is required to promptly collaborate with the Student Experience Coordinator/Team as the initial step. Together, they will draft a notice to remind students of the strict prohibition against plagiarism, with potential repercussions for recurrent violations. The following actions will be considered in cases of repeated plagiarism:
    - If a submitted solution exhibits substantial similarity, exceeding 60%, with another student's work (individually or within a group), the respective challenge will incur a 50% reduction from the maximum points attainable.
    - In cases where a solution is identified as more than 90% identical to another student's work (individually or within a group), the challenge in question will receive a score of 0 points.
  - The use of generative AI is encouraged as a learning tool in our educational programs; however, students must engage with the material and contribute with original thought. Reliance on AI for complete content generation is strictly prohibited and will result in point deductions, official warning, or other academic penalties.
  - Upon completion of the assessment process for each challenge/project, the assessor is tasked with selecting the most complete, optimal, and creative solution and to showcase it by publishing it on the platform together with the assessment results
- Timeliness: timeframe for delivering results and feedback to students
  - Feedback on challenges should be provided within 7 days after the deadline

has passed.