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| Operation | Purpose | Object State | Expected Result |
| getTasksByDueDate() | Getting task by due date, when there is only 1 task | Task1-  courseNumber = "420-B31"  TaskType = "Lab"  TaskNumber = 1  Task Priority = 1  dateDue = new GregorianCalendar() | Task1 would be returned. |
| getTasksByDueDate() | Getting a task when there are multiple tasks with different dates | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016  Task2-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/7/2016 | Task1 should be returned followed by Task2 |
| getTasksByDueDate | Getting a task when there are multiple tasks with different dates and they are in the incorrect order | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016  Task2-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/8/2016  Task3-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/7/2016 | Task1 Task3 Task2 |
| getTasksByDueDate() | Getting multiple tasks and some of them have the same date as the other | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016  Task2-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/8/2016  Task3-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016 | Task1  Task3 Task2 |
| getTasksByDueDate() | Getting multiple tasks but they are all the same date | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016  Task2-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016  Task3-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016 | Task1 Task2 Task3  (Should be returned in the order of the task was added) |
| getTasksByDueDate() | There are no tasks at all | No tasks available | Return no tasks found |
| getHighPriorityTasksByDueDate() | There is only object where the priority 1. | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016 | Task 1 is returned |
| getHighPriorityTasksByDueDate() | There are Tasks but none of them are priority 1 | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 2  dateDue = 10/6/2016  Task2-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 4  dateDue = 10/6/2016 | No tasks are returned at all |
| getHighPriorityTasksByDueDate() | There are multiple tasks where they have priority 1 and they all have different dates and are in different orders | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016  Task2-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/8/2016  Task3-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/7/2016 | Task1 Task3 Task2 |
| getHighPriorityTasksByDueDate() | There are multiple tasks with priority 1 and there are some low priority Tasks as well. | Task1-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/6/2016  Task2-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/8/2016  Task3-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 3  dateDue = 10/7/2016 | Task1 Task2 |
| getHighPriorityTasksByDueDate() | There are high priority tasks but they all have the same date | Task21-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/8/2016  Task30-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/8/2016  Task80-  courseNumber = “420-B31”  TaskType = “Lab”  TaskNumber = 1  TaskPriority = 1  dateDue = 10/8/2016 | Task21 Task30 Task80 |
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