**Task Management Application**

***Introduction***

The purpose of this software design document is to provide a description of functionality for a Task Manager application that implements a graphical user interface. This Task Manager is designed specifically for college students by providing an easy-to-use environment for building and maintaining a task list for different courses. This interface will display proficiency in using the Java programming language in order to create buttons, textboxes, menus, scroll bars, graphics, check boxes, radio buttons, and combo boxes.

***Core Features***

To explain the overall idea of this design, this graphical user interface will provide a single user-friendly environment in which a user will click buttons that are designed to intuitively convey the ideas relating to handling tasks in a list. When the application is started, there will be two components displayed to the user in a single frame. One of them is a title box positioned at the top of that frame. A user will be prompted to provide their name which will then be added to the title. The second component of the initial frame will be a single button positioned under the title that contains a green addition symbol positioned in the center. This button, when clicked, will create a new task list environment for a specific course.

This newly created course specific task list will be composed of a title, tasks, and subtasks which will be managed much like the initial window. After the title of the panel is specified, a user may add tasks by interacting with the same friendly green add button. When a new task is created though, there will be a check box that appears to the left of the task which will represent the status of a task. An unchecked box will represent an uncompleted task, and a completed task when checked. Along with the status box, a blue addition button will also be introduced to the user that will be displayed to the right side of the familiar green add button. The blue add button will create a new subtask for the task a user specifies.

In order to complete the idea of managing tasks, this task manager provides the user with the option of editing and deleting tasks when so desired by making all text in the list clickable. When selected by the mouse, a small array of two elements will appear on the right side of the text. This array will be compiled of a small pencil conveying the idea of being able to edit the text of the task, and secondly a small trash which will delete a task from the list.

***Data Design***