**Purpose:**

The purpose of my To-Do list application is to effectively assist the user with task visualization and organization. The aim is to enhance time efficiency and overall ensure no task is forgotten. By including important options such as high priority and listing by due date, users will be able to optimally streamline their work.

**App design:**

The app will have a user-friendly design and have a cohesive, non-obnoxious color scheme. The main screen will display a list of user-entered tasks in order of due dates. Tasks marked as ‘high priority’ will appear at the top and in a louder color until they are marked as complete. There will also be sidebar which the user can use to navigate to options such as “add task”, “edit task”, or “look ahead”.

**Classes:**

1. Task Manager Class: responsible for overall functionality of the application, contains methods for adding, editing, and deleting tasks.
2. Task Class: represents an individual task, includes title, description, due date, priority, and completion fields, contains methods for editing task fields and marking complete.
3. Category Class: represents type of task ,fields include category name(fax, schedule surgery, call in meds, phone call, etc.), color, and list of tasks within each category, and contains methods for adding/deleting/retrieving tasks within the same category.

**Relationships:**

Task Manager Class: Parent class, has composition relationship with task & category classes.

Task Class: Child class of Task Manager Class, belongs to a Category, stores details of each individual class.

Category Class: Child class of Task Manager Class, contains list of Task, organizes each task based on category.

**Fields within Classes:**

Task Manager Class:

1. Task List
2. Category List

Task Class:

1. Task title
2. Task description
3. Due Date
4. Priority Level
5. Completion Status

Category Class:

1. Category Name
2. Category Color
3. List of Tasks within Category