

# Spring 2023 CEG-4110 CEG-6110

## Introduction to Software Engineering

### Class Project Overview

#### Project Title:

- To Do List

#### Team Name:

- Go Team

#### Team Members:

1. Jay Stewart,
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3. Marwa Qureshi,
4. Austin Hwang,
5. Alyana Barrera

#### Project Synopsis:

Create a To Do List app to remind the user to complete their To Do list items, on android devices

#### Concept of Operation:

The To Do List app will provide a GUI interface to allow the user to visually add and keep track of their desired list items. Additionally, the app will support scheduling list items; where the user designates the time and date an item must be completed and the app sends a notification everyday the task has not been completed before the deadline.

This app will be compatible with all Android 12 and later devices

## Estimation of Effort:

### Task Description (TD)

Requirements, Design, Code & Unit Test (CUT), Integration and Test (I&T) anticipated components that make up the To Do List. The following identifies the anticipated components:

1. UI Creation
  - a. Home UI Fragment
  - b. User Input
  - c. Task actions (Mark task as complete, delete task, etc)
  - d. Notification scheduling
2. Backend Functionality
  - a. Save information to phone
  - b. Link UI components to backend

Write unit tests for app

## Basis Of Estimate (BOE)

Component	SLOC	Multiplication Factor	Total SLOC
UI Creation			
Home Fragment	200	1	200
User Input	30	1	30
Notification Scheduling	40	1	40
Task Actions	40	2	80
Backend			
Save information	40	1	50
Link UI components	20	10	200
		Total Code	570
Productivity Factor	10 SLOC/Hour	57 hours	

### Assumptions:

1. 10 SLOC per hour productivity factor due to most teammates being unfamiliar with android development
2. Unit Test code count is included in the estimate, but the time to develop unit test is included in the productivity factor.
3. Integration and Test time is included in the 10 SLOC per hour productivity factor.
4. Minimal design documentation is anticipated and included in the 10 SLOC estimate.
5. The code and any documentation will be reviewed only by the developer.
6. The code will be developed and tested using Android Studio on a Pixel 5 emulator