German University in Cairo Media Engineering and Technology Prof. Dr. Slim Abdennadher Dr. Nourhan Ehab Dr. Ahmed Abdelfattah

> Computer Programming Lab, Spring 2023 The Last of Us - Legacy: Milestone 3

> > Deadline: Fri 26.5.2023 @ 23:59

In this milestone, you are required to implement the GUI to be able to play the game.

1 General Guidelines

- The effects of any action performed in the GUI should be reflected in the engine and vice versa.
- The player should be able to view all content at all times without the need to resize/minimize/maximize the window during runtime.
- The action that is currently happening in the game should always be clearly indicated in the GUI.
- Make sure to handle all exceptions and validations for any input or action performed. In case any exception implemented in the second milestone arises the player should be notified and the action should be prohibited and another action should be chosen by the player.
- The game should not be stopped/ terminated for any exception thrown.
- Using a window builder or any other automated GUI creator **is not allowed**. Submissions using a window builder will receive a **ZERO**.

2 Game clarification

- The player starts by selecting their starting character from the list of available heroes.
- After that the game should start and load correctly with the instances created, and the play view should be shown (see the requirements for details)
- The player should be allowed to select the hero they wish to take actions with (You can alternate heroes within the same turn) and perform the wanted actions.
- After every action taken by any player, you should be checking whether the game is over or not, and announcing whether the player has won or lost if needed.

• Exceptions should be handled appropriately and the user should be informed of the cause of the exceptions in order to avoid confusion.

3 GUI Requirements

The requirements that should be covered in the GUI are explained below. You will be graded based on the requirements detailed in the following checklist: