03. System layer (2023-2024-S015-S023)

Component diagram

The MouseMover tool is composed of the following components. The first is the computer on which the user is connected and uses the Teams application which 'tracks' the user's activity, whether they are available, idle or offline. Next, there is the mouse, which the user uses when working with the computer, and thus signals his availability. The MouseMover itself uses a continuous rotation servo to rotate the mouse and an Arduino to simulate mouse movement.

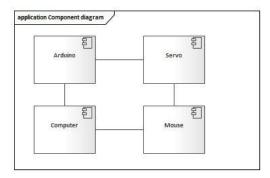


Figure 1. Component diagram

Use case diagram

User use cases with Mouse Mover are as follows:

- Attach Mouse Mover: To avoid appearing idle and potentially facing repercussions from their managers, one can attach MouseMover to its computer to simulate mouse activity and keep status available.
- Detach Mouse Mover: To reflect true status, one can detach MouseMover from its computer.
- Maintain Online Presence: When user needs to maintain an online presence on messaging platforms, collaborative tools, or other
 online services. This is check, if MouseMover keeps simulating mouse activity and keeping status available.

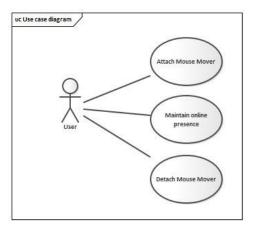


Figure 2. Use case diagram

Activity diagram

If it is necessary to step away from the computer, it is necessary to attach the MouseMover to the computer. It then starts simulating mouse movements until the user has completed the necessary things away from the computer. When the user returns to the computer, it is up to the user to decide whether he wants to continue using MouseMover or not. If yes, he finishes his things, and if no, he detaches MouseMover from the computer and continues his work on it.

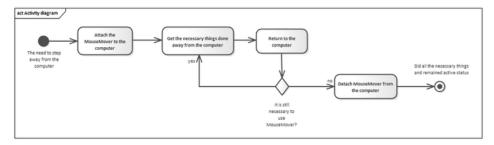


Figure 3. Activity diagram