

Assignment 5

Task 2

a) The bubble cursor is particularly suitable for user interfaces with a high density of selectable targets, such as web browsers or productivity software like word processors and spreadsheets. In these scenarios, the bubble cursor's ability to dynamically resize its activation area to encompass only the closest target is a significant advantage. By maximizing the effective width of each target, the bubble cursor can greatly improve target acquisition times compared to a standard point cursor, even when the actual visual size of the targets is small. This is especially beneficial in crowded interfaces where targets are tightly packed together.

The key reason the bubble cursor excels in high-density target environments is that it solves the ambiguity problem faced by traditional area cursors. When an area cursor encompasses multiple targets, it becomes difficult for the user to isolate the intended target. The bubble cursor addresses this by ensuring there is always exactly one target within its activation area, allowing the user to reliably select the desired target.

b) The bubble cursor may be less suitable for user interfaces where users need to frequently click on empty space between targets, such as in a drawing or design application. In these scenarios, the bubble cursor's behavior of always snapping to the nearest target could be disruptive, as the user may want to click on a specific location in the void space rather than on a target.

The reason the bubble cursor is less suitable in these cases is that it was designed primarily to enhance target acquisition, not to provide general cursor functionality. When the user needs to interact with both targets and the empty space between them, the bubble cursor's specialized behavior may become a hindrance rather than a benefit. In such cases, a more traditional point cursor or a hybrid approach that allows switching between the bubble cursor and a standard cursor may be more appropriate.