VRSpace.org - Feature #86

universal text input

11/05/2021 01:47 PM - Josip Almasi

Status:	Closed	**Start date:**	11/05/2021
Priority:	Normal	**Due date:**	
Assignee:	Josip Almasi	**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:		**Spent time:**	0.00 hour

Description

PC, VR and mobiles are drastically different devices.
HTML text input element is useful on PC, less so but still useful on mobiles, and does not exist in VR.
Virtual keyboard in VR is barely useful.
Chrome has some speech recognition API.

Build a component that will use any one of these, and provide callback that can be used elsewhere.
Switch input upon entering/existing VR, but also provide function to control over input selection.

History

#1 - 04/05/2023 11:28 AM - Josip Almasi

- Status changed from New to In Progress

- Assignee set to Josip Almasi

#2 - 04/15/2023 04:44 PM - Josip Almasi

- Status changed from In Progress to Resolved

Form class with utility methods, including text input and voice recognition. Extended on SearchForm in world-editor.js.
Virtual keyboard is tricky: requires an additional AdvancedDynamicTexture, or significant resizing on the same texture used for text input. Enabled on SearchForm in XR only.
Voice recognition works in chrome and edge, but works different in edge - microsoft adds punctuation :) Also works on mobile android, but not in oculus browser.
Merged to master.

#3 - 04/16/2023 08:27 PM - Josip Almasi

Known issues with android speech recognition:

1) it just keeps restarting speech recognition, which causes endless beeping every two seconds:

https://bugs.chromium.org/p/chromium/issues/detail?id=679010&can=2&start=0&num=100&q=&colspec=ID%20Pri%20M%20Stars%20ReleaseBlock%20Component%20Status%20Owner%20Summary%20OS%20Modified&groupby=&sort=
https://github.com/TalAter/annyang/issues/194

Workaround implemented as starting speech recognition on touch, and restarting it until it ends with silence.

2) WebRTC streaming disables speech recognition: https://bugs.chromium.org/p/chromium/issues/detail?id=427567

Stopping the publisher does not help, it just doesn't work.

So speech recognition on Android can't be used in vrspace.

#4 - 04/20/2023 09:02 PM - Josip Almasi

... but gamepad turns out to be useful for mobile VR. HUD UI integrated with gamepad, including text input.

#5 - 09/11/2023 06:33 PM - Josip Almasi

- Status changed from Resolved to Closed