

IDEALvr

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Client: Mohamed Magdy

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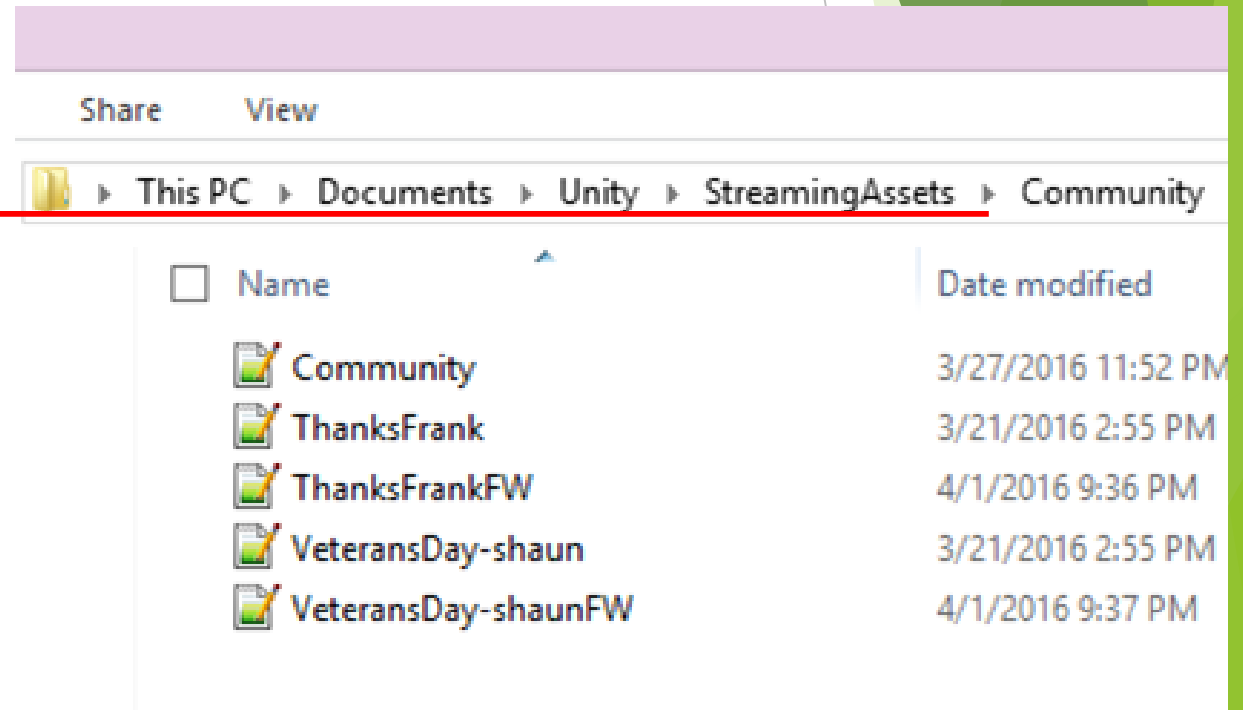
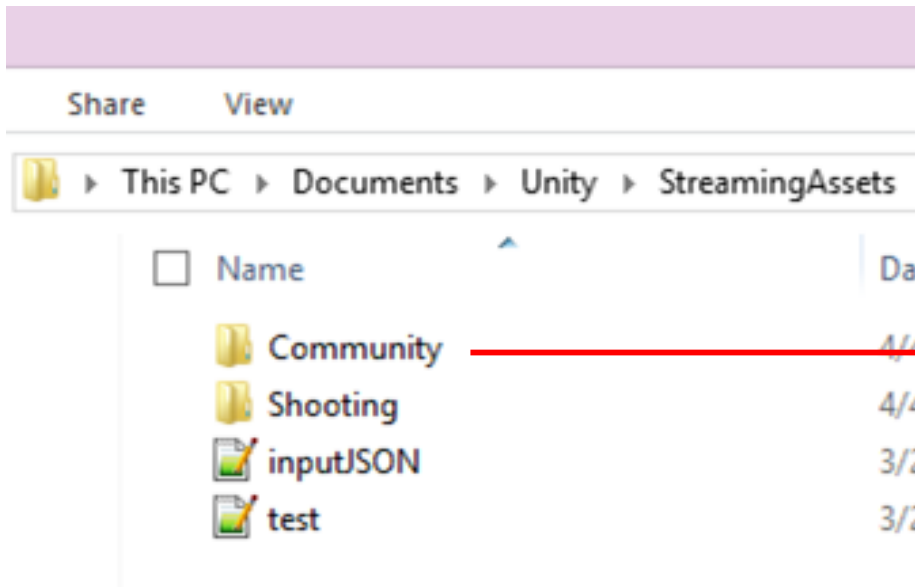
Overview

- IDEAL tweet collection virtual reality visualization
- Android phone with Google Cardboard

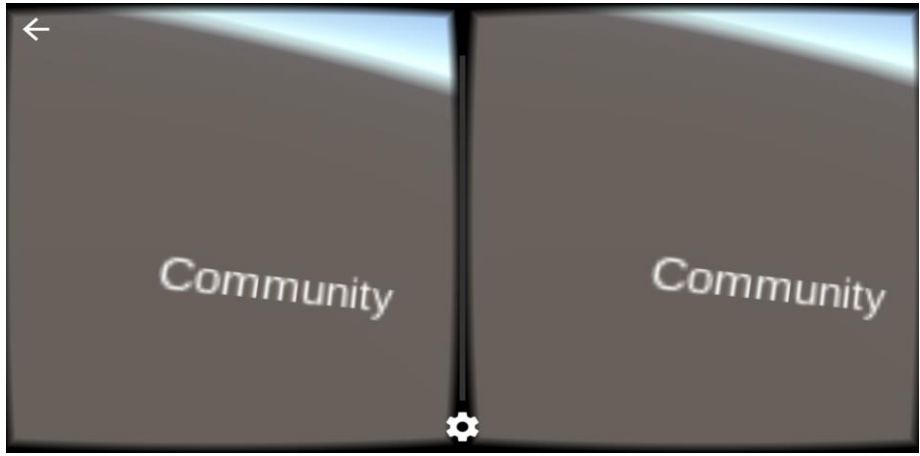
- Parsing into hierarchical structure of collections
 - Word Cloud display
 - Frequent word analysis

- Category <-> Collections <-> Frequent Words

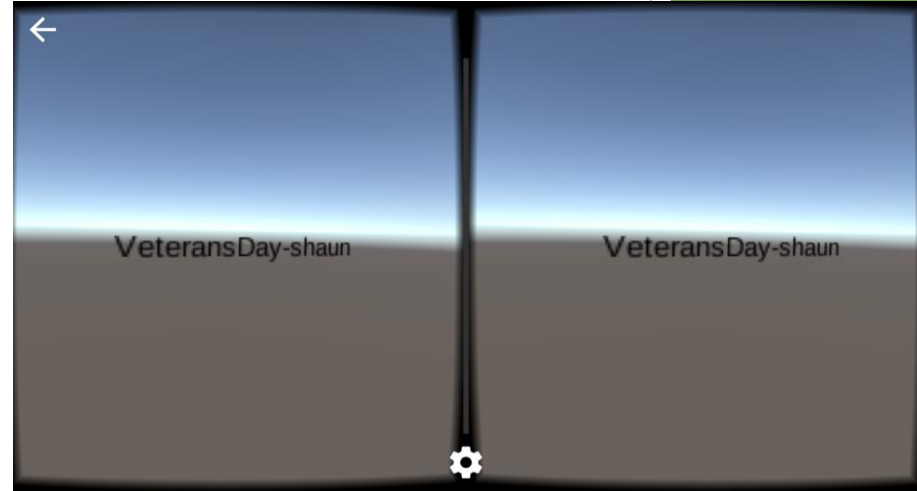
Hierarchy Structure



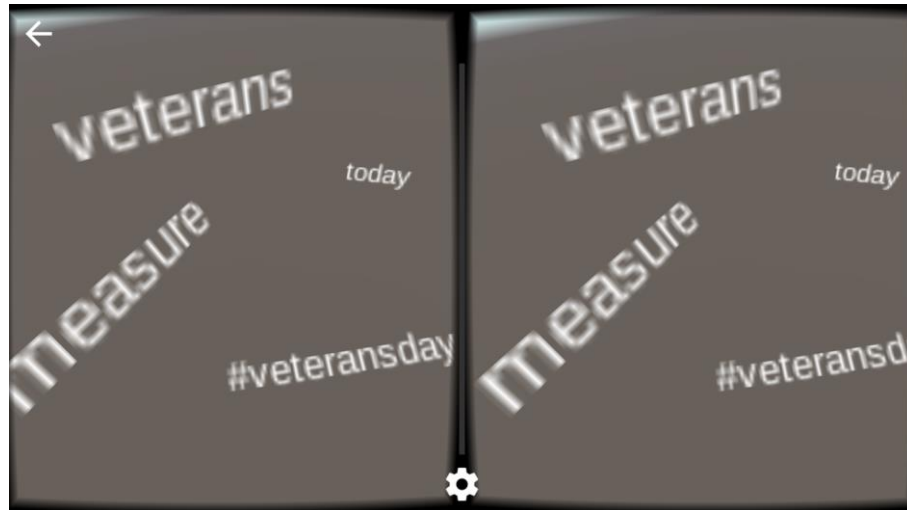
Interaction Flow



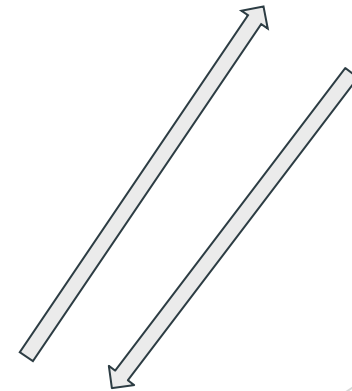
Categories



Collections



Frequent Words



Problems

Solutions

JSON Local Storage Not Accessible	StreamingAssets for Android Locality
Temporal Date Cloud Filter Does not affect cognitive functionality	Ignored Implementation of Date Cloud
Tweets are difficult to read	From Tweet Visualization to Frequent Words
Arrangement of Words Crowded	Limited space because of amount of Objects
Calculating Specific Positioning In Word Cloud	Requires better algorithm for organized display

Future Work

- Work to make the display of tweets beneficial
- Use of other metadata of collections
- Porting the Application to any device (web/mobile)
- Differentiate Organization of data by view
- Fix inconsistent output during parsing
- Improve usability

Acknowledgements

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Client: Mohamed Magdy and Edward A. Fox

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iOS and Android developer researching experimental virtual reality technologies

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References

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2. Laha, Bireswar, et al. "Effects Of Immersion On Visual Analysis Of Volume Data." *IEEE Transactions On Visualization & Computer Graphics* 18.4 (2012): 597-606. *Computers & Applied Sciences Complete*. Web. 15 Feb. 2016.
3. "A VR Word Cloud in Unity." Medium. Andrew Sage, 07 Oct. 2015. Web. 29 Feb. 2016.
<<https://medium.com/@SymboticaAndrew/a-vr-word-cloud-in-unity-f7cb8cf17b6b#.nr9s96obv>>.