

# Accessible Reddit

## Key Idea

Our project is a chrome extension that turns the popular content discovery platform into an accessible information site.

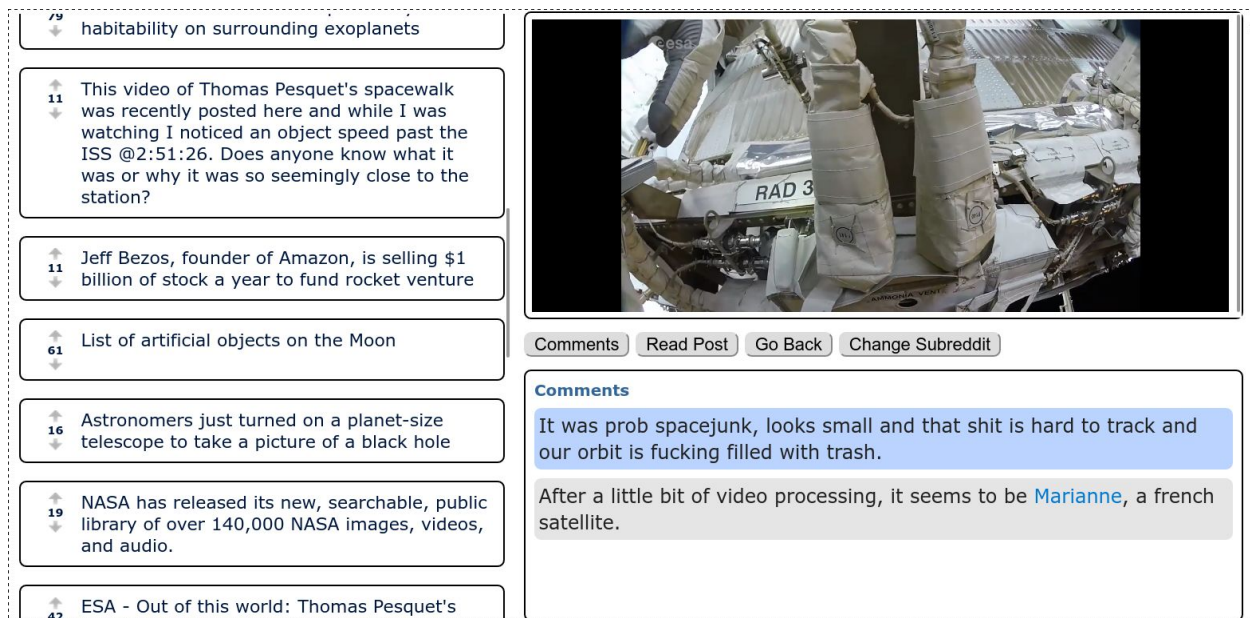
- Why Reddit? Because reddit has 234 million users in 800 thousand communities creating content and sharing news, data, and original creations. It is massive, self-curated, and dynamic.
- Why should it be accessible? Because we believe reddit is the perfect platform for allowing any person to find and browse content of *THEIR CHOOSING* at their pace without help.

Motivation: what happens to Tar Heel Reader users when they outgrow the site's content? What if we could make it *EASIER* for persons with disabilities to consume the same content as their peers?

## Target Users

- Adults and children (roughly 12+) with severe physical disabilities that prevent them from using the computer in a traditional way. This includes persons with fine motor skills impairments, severely limited range of motion, etc.
- The blind community, or those who would benefit from an audio interface to Reddit.

## Architecture Diagram



(current progress: this is /r/space)

Design philosophy: Accessible Reddit is taking a lot of cues from Tarheel Reader with respect to its switch-oriented interface, audio interface, etc.

- Popup Extension Menu:
  - enable / disable the extension
  - Edit available subreddits (caregiver)
  - Toggle speech (caregiver)
  - View tutorial
- Background application:
  - Responsible for maintaining application state.
- Content Script - injected into reddit page
  - Responsible for all the actual logic/implementation
  - Load link content asynchronously in content window.
  - Handle user interaction and update view accordingly

## Technologies and Hardware

Client Side:

- Chrome runtime etc.
- Text to speech (built into chrome)
- Javascript/jQuery
- Heavy modification of reddit's CSS styles to optimize readability and simplicity.

Server Side:

- This extension will require a feature-extending server that will load other site's content so that it can be fetched by the content script and loaded into the page view. This is the only way to get around Cross Origin Requests issues.
- Node server using the NPM "unfluff" library.

Distribution: our final product will be available on the chrome web store as a free install. We will have a simple website with information about the extension mostly for Search Engine Optimisation purposes, hosted on github pages.

Project Repository:

<https://github.com/suBDavis/redditAccessible>

Distribution link:

<https://chrome.google.com/webstore/detail/redditaccessible/dlpdmegojjibaghnccgdcaahlmcoiipp?hl=en-US&gl=US>

## Team Logistics

- Katherine Ham- kham13 - usability and tutorial content
- Hastings Greer- tgreer - backend article parsing server (node/unfluff)
- Brandon Davis- davisba - information relaying person, asynchronous content display.

We will be using GitHub to share code and facebook messenger for team communication.